Chapter 6
General Public

The individuals listed in Table 6-1 submitted comments on the Draft EIS. These comments and responses to those comments are presented after the table. Master responses were developed to address commonly raised comments and are presented in Chapter 2, *Comment Themes and Master Responses*.

The responses refer to the Draft EIS unless information has been revised, in which case the Final EIS is specified.

Table 6-1. Comment Letters Submitted by Individuals

Number	Name
GP-1	Abramson, Mary
GP-2	Abramson, Mary
GP-3	Ackerman, Laura
GP-4	Adams, Bill
GP-5	Albert, Donna
GP-6	Albert, Donna
GP-7	Albert, Donna
GP-8	Albert, Donna
GP-9	Albert, Donna
GP-10	Albert, Donna
GP-11	Albert, Donna
GP-12	Albert, Donna
GP-13	Albert, Donna
GP-14	Albert, Donna
GP-15	Albert, Donna
GP-16	Albert, Donna
GP-17	Albert, Donna
GP-18	Albert, Donna
GP-19	Albert, Donna
GP-20	Albert, Donna
GP-21	Albert, Donna
GP-22	Albert, Donna
GP-23	Albert, Donna
GP-24	Albert, Donna
GP-25	Albert, Donna
GP-26	Albert, Donna
GP-27	Alderton, Janet
GP-28	Allee, Pamela
GP-29	Alwood, David
GP-30	Ammann, Harriet

Number	Name
GP-31	Anderson, Denise
GP-32	Anderson, Gary
GP-33	Anderson, Glen
GP-34	Anderson, Glen
GP-35	Andrews, Susan
GP-36	Armley, Jeff
GP-37	Armley, Jeffrey
GP-38	Armstrong, Jude
GP-39	Ashby, Crandall
GP-40	Ashby, Dan
GP-41	Ashby, Dave
GP-42	Ashby, Ken
GP-43	Ashby, Nicholas
GP-44	Ashby, Steve
GP-45	Atkinson, Kim
GP-46	Attermann, Rein
GP-47	Autrey-Schell, Yovonne
GP-48	Avery, Jean
GP-49	Avery, Jean
GP-50	Avery, Jean
GP-51	Avery, Jean
GP-52	Avery, Jean
GP-53	Avery, Jean
GP-54	Avery, Jean
GP-55	Avery, Jean M.
GP-56	Bachelder, Karen
GP-57	Baker, Brandon
GP-58	Ballo, Dennis and Julie
GP-59	Ballo, Kristi
GP-60	Ballo, Mark
GP-61	Ballo, Mark
GP-62	Barkhurst, Ross
GP-63	Barkhurst, Ross
GP-64	Bassett, Beverly
GP-65	Bayer, John
GP-66	Beattie, Will
GP-67	Beckley, Diane
GP-68	Bedall, Frank H.
GP-69	Bell, Sherri
GP-70	Bellamy, Patricia
GP-71	Berger, David
GP-72	Berman, Lowen

Number	Name
GP-73	Bernard, Judith
GP-74	Beugli, David
GP-75	Bigelow, Bill
GP-76	Black, Barbara Jean
GP-77	Blackbird, Marles
GP-78	Bo, Bri
GP-79	Boatsman, Carolyn
GP-80	Bock, Christian
GP-81	Bock, Christian
GP-82	Bodding, Jim
GP-83	Boland, Brice
GP-84	Bold, Molly
GP-85	Boonstra, John
GP-86	Borso, Pam
GP-87	Bossard, Pat
GP-88	Bossard, Pat
GP-89	Bougher, Thomas
GP-90	Bougher, Thomas
GP-91	Bougher, Tom
GP-92	Bougher, Tom
GP-93	Brake, William
GP-94	Brake, William
GP-95	Brake, William
GP-96	Brake, William
GP-97	Brake, William
GP-98	Brake, William
GP-99	Brake, William
GP-100	Brake, William
GP-101	Branshaw, Jon
GP-102	Brantner, Maren
GP-103	Bray, Karen
GP-104	Breuer, Sandra
GP-105	Broadus, Jerry
GP-106	Brockway, Abby
GP-107	Brooke, Phillip
GP-108	Brosman, Wes
GP-109	Brosman, Wes
GP-110	Brown, Keith and Teresa Robbins
GP-111	Brown, Ray
GP-112	Brown, Ray
GP-113	Brown, Ray
GP-114	Brownell, Basilia

Number	Name
GP-115	Browning, Linda
GP-116	Bruton, Peggy
GP-117	Bruton, Peggy
GP-118	Burgoon, Susan
GP-119	Burke, Denise
GP-120	Burnes, Thomas
GP-121	Burns, Daniel
GP-122	Bussmann, Krissy
GP-123	Butler, Quinn
GP-124	Callos, Duane
GP-125	Campbell, Kevin
GP-126	Campbell, Rebecca
GP-127	Campbell, Rebecca
GP-128	Cannady, David
GP-129	Canny, Maureen
GP-130	Capozzelli, J
GP-131	Carlson, Joel
GP-132	Carlson, Joel
GP-133	Carol
GP-134	Carter, Al
GP-135	Carter, Albert
GP-136	Carter, Judy
GP-137	Cates, Eddy
GP-138	Chapin, David
GP-139	Chappell, Lisa
GP-140	Chappell, Lisa
GP-141	Chappell, Lisa
GP-142	Chappell, Lisa
GP-143	Chappell, Lisa
GP-144	Chappell, Lisa
GP-145	Chappell, Lisa
GP-146	Chappell, Lisa
GP-147	Chappell, Lisa
GP-148	Chappell, Lisa
GP-149	Cheatham, North
GP-150	Christ, Peter
GP-151	Chudy, Cathryn
GP-152	Clark, Dan
GP-153	Clark, Sharon
GP-154	Clark, Sheri
GP-155	Clarkson, Jim
GP-156	Clendenin, The Rev. Evan Graham

Number	Name
GP-157	Clifford, Margaret
GP-158	Cochran, Julia
GP-159	Cole, Robert
GP-160	Connally, Patricia
GP-161	Connor, Robert
GP-162	Cool, Debbie
GP-163	Cornelison, Peter
GP-164	Corr, Nancy
GP-165	Covert-Bowlds, Chris
GP-166	Cozzetto, Bonnie
GP-167	Crawford, Dennis
GP-168	Crawford, Dennis PhD
GP-169	Culhane, Tom
GP-170	Cummings, Roger
GP-171	Cunningham, Lynda
GP-172	Curry, Stephen
GP-173	Curtz, Thad
GP-174	D, Dave
GP-175	Dahlquist, Brynn
GP-176	Dahlquist, Daeuthen
GP-177	Dale, Garry
GP-178	Dale, Garry
GP-179	Dale, Garry
GP-180	Damike, Tammy
GP-181	Davis, Edith
GP-182	Davis, Kelley
GP-183	Davis, Major Tom E.
GP-184	Davis, Tom
GP-185	Dawning, Desdra
GP-186	Day, John
GP-187	Dayton, Gary
GP-188	Deakin, Dave
GP-189	Denison, Marcia
GP-190	Dennehy, Casey
GP-191	Dennehy, Casey
GP-192	Dickason, Pat
GP-193	Dickerson, Michael
GP-194	Dickerson, Michael
GP-195	Dietz, Kimberly
GP-196	Dilsaver, Erin
GP-197	Dilworth, Erin
GP-198	Dolph, Phyllis

Number	Name
GP-199	Domike, Tammy
GP-200	Doull, Bryan
GP-201	Downing, Beulah
GP-202	Drumheller, Susan
GP-203	Dunlap, Fredric
GP-204	Durr, Becky
GP-205	Durr, Rebecca
GP-206	Durr, Rebecca
GP-207	Dye, Jessie
GP-208	Dye, Jessie
GP-209	Eachus, Ann
GP-210	Eddington, Marianne
GP-211	Edwards, David
GP-212	Edwards, Karen
GP-213	Edwards, Rose
GP-214	Ellingboe, Linda
GP-215	Ellis, E.
GP-216	Ellis, Liz
GP-217	Engel, Kim
GP-218	Engvall, Brady
GP-219	Engvall, Brady
GP-220	Engvall, Brady
GP-221	Engvall, Korry
GP-222	Engvall, Luella
GP-223	Estalilla, Francis
GP-224	Estalilla, Francis
GP-225	Evans, Susan
GP-226	Fargo, Rich
GP-227	Farra, Jackie
GP-228	Farrell, Jenny
GP-229	Feltham, Wendy
GP-230	Ferguson, Ken
GP-231	Ferguson, Ken
GP-232	Ferra, Jackie
GP-233	Ferraro, Natalie
GP-234	Ferraro, Natalie
GP-235	Figlan-Barnes, Jarred
GP-236	Figlar-Barnes, Jarred
GP-237	Figlar-Barnes, Kim
GP-238	Figlar-Barnes, Ron
GP-239	Figlar-Barnes, Ron
GP-240	Finke, Jeanne

Number	Name
GP-241	Finke, Jeanne
GP-242	Fjachie, Craig
GP-243	Ford, Robert
GP-244	Ford, Robert
GP-245	Forster, Charles
GP-246	Francy, Joshua
GP-247	Franklin, Teri
GP-248	Franklin, Teri J.
GP-249	Freiberg, Pat
GP-250	Freiberg, Pat
GP-251	Freiberg, Patricia
GP-252	Freund, Sylvia
GP-253	Fuquay, Anita
GP-254	Garnett, Kathryn
GP-255	Gere, Susan
GP-256	Gervais, Anthony
GP-257	Gesseit, Kate
GP-258	Gibbs, Virginia
GP-259	Giddings, Roxy
GP-260	Giddings, Roxy
GP-261	Giesler, Sheila
GP-262	Gilmore, Thomas
GP-263	Goldberg, R. David
GP-264	Goldberg, R. David
GP-265	Goldberg, R. David
GP-266	Goldberg, R. David
GP-267	Goldberg, R. David
GP-268	Goldberg, R. David
GP-269	Golde, Hellmut and Marcy
GP-270	Golde, Hellmut and Marcy
GP-271	Golding, Will
GP-272	Gooding, David
GP-273	Gordon, Diana
GP-274	Gordon, Diana
GP-275	Gordon, Diana
GP-276	Gordon, Diana
GP-277	Gordon, Diana
GP-278	Gordon, Diana
GP-279	Gordon, Diana
GP-280	Gordon, Diana
GP-281	Gordon, Don
GP-282	Gordon, Frank

Number	Name
GP-283	Gordon, Frank
GP-284	Gordon, Frank
GP-285	Gordon, Pat
GP-286	Gordon, Thomas
GP-287	Gordon, Thomas
GP-288	Gordon, Thomas
GP-289	Gordon, Thomas
GP-290	Gordon, Thomas
GP-291	Gordon, Thomas
GP-292	Gordon, Thomas
GP-293	Grace, Lise
GP-294	Graham, Bill
GP-295	Graham, Bill
GP-296	Graham, William
GP-297	Graham, William
GP-298	Grant, Brenda
GP-299	Graser-Lindsey, Elizabeth
GP-300	Greef, Fred
GP-301	Green, Richard
GP-302	Greenridge, Connie
GP-303	Greenridge, Connie
GP-304	Greenridge, Frederick
GP-305	Grellier, Penny
GP-306	Grossman, Zoltan
GP-307	Grossman, Zoltan
GP-308	Grundbaum, Arthur
GP-309	Grundbaum, Arthur
GP-310	Grundbaum, Arthur
GP-311	Hale, Dave
GP-312	Hamilton, Tim
GP-313	Hancock, Ray
GP-314	Hansen, Elizabeth
GP-315	Hardesty, Alice
GP-316	Hargrove, Bourtai
GP-317	Hargrove, Bourtai
GP-318	Hargrove, Bourtai
GP-319	Harlan
GP-320	Harlan
GP-321	Harris, Clairmonde
GP-322	Harris, Maury
GP-323	Hartwell, Beth
GP-324	Harty, Florence

Number	Name
GP-325	Hatley, Dave
GP-326	Hauck, Robert
GP-327	Havrilak, George
GP-328	Hayes, Glenna
GP-329	Haywood, Susan
GP-330	Haywood, Susan
GP-331	Helen
GP-332	Hepp, Helen
GP-333	Hepp, Helen
GP-334	Herbert, Emily
GP-335	Hesse, Ilsa
GP-336	Heverly, Craig
GP-337	Hightower, Michael
GP-338	Hightower, Mike
GP-339	Hildreth, Joan
GP-340	Hilke, Deborah
GP-341	Hoeft, Bruce
GP-342	Hoeft, Bruce
GP-343	Holcomb, Peter
GP-344	Holden, Madronna
GP-345	Holder, Lehman
GP-346	Holder, Mary
GP-347	Holm, Patricia
GP-348	Holz, Thomas
GP-349	Howe, David
GP-350	Hughes, Nelson
GP-351	Humphrey, John
GP-352	Hunter, Rhonda
GP-353	Hunter, Rhonda
GP-354	Hunter, Rhonda
GP-355	Inskeep, Terry
GP-356	Isaacson, Tom
GP-357	Jackson, Aria
GP-358	Jacobson, Don
GP-359	Jaeger, Michael
GP-360	Jamison, Robert
GP-361	Johnson, Ali
GP-362	Johnson, Marjorie
GP-363	Johnson, Mary K.
GP-364	Johnston, Robert.
GP-365	Jordan, Janet
GP-366	Jordan, Janet

Number	Name
GP-367	Jordan, Janet
GP-368	Jordan, Yvonne
GP-369	Julius, Theressa
GP-370	Justis, Bill
GP-371	Kachman, Kati
GP-372	Kaiyala, Julie
GP-373	Kaplan, Robert B.
GP-374	Keefe, George
GP-375	Keefe, George
GP-376	Kempfer, Wes
GP-377	Kenney, Pat
GP-378	Kersting, John
GP-379	Kersting, John
GP-380	Kipnis, Hinda
GP-381	Kircher, Marjorie
GP-382	Kircher, Marjorie
GP-383	Kirk, Ruth
GP-384	Kocer, Dianne
GP-385	Kocer, Dianne
GP-386	Kocer, Dianne
GP-387	Kolberg, Dave
GP-388	Krueger, Katherine
GP-389	Lacefield, Lily
GP-390	LaDuca, Kimberly
GP-391	LaDuca, Kimberly
GP-392	Langley, Veronica
GP-393	Lanz, James
GP-394	Lanz, James
GP-395	Larson, Carrie
GP-396	Larson, Don
GP-397	Larson, Donald A.
GP-398	Larson, Erik
GP-399	Larson, John
GP-400	Larson, Ralph
GP-401	Leed, Mark
GP-402	Lenigan, Rosemary
GP-403	Leon, Carmen
GP-404	Levy, Cindy
GP-405	Levy, Cindy
GP-406	Lewis, Twila
GP-407	Liebaum, Ellen
GP-408	Linn, David

Number	Name
GP-409	Linn, David
GP-410	Linnell, Kathy
GP-411	Lish, Christopher
GP-412	Livella, Therese
GP-413	Livella, Therese
GP-414	Livella, Therese
GP-415	Livella, Therese
GP-416	Livella, Therese
GP-417	Longley, A
GP-418	Lucas, Betty
GP-419	Luck, Vickie
GP-420	Lybarger, Lisa
GP-421	Lyons, Mary
GP-422	MacLeod, Paul
GP-423	MacLeod, Paul
GP-424	Majar, Mary Ann
GP-425	Mallard, Tom
GP-426	Mann, Cherri
GP-427	Mann, Cherri
GP-428	Marks, Griffith
GP-429	Maron-Oliver, Dani
GP-430	Marthaller, John
GP-431	Martin, Arnie
GP-432	Martin, Arnie
GP-433	Martin, Arnie
GP-434	Martin, Arnie
GP-435	Martin, Arnie
GP-436	Martin, Meredith
GP-437	Mascarenas, David
GP-438	Mascarenas, David
GP-439	Mather, Linda
GP-440	Mayton, Leona
GP-441	McCarthy, Sally
GP-442	McCrummen, JB
GP-443	McCuen, Annie
GP-444	McKinlay, Bonnie
GP-445	McLachlan, Pat
GP-446	McLachlan, Pat
GP-447	McLachlan, Pat
GP-448	McManus, Tony
GP-449	McMurray, Maureen
GP-450	McVaugh, Skyler

Number	Name
GP-451	Meacham, Michael
GP-452	Megargle, Paul
GP-453	Mergler, Gerald
GP-454	Mergler, Gerald
GP-455	Mergler, Gerald
GP-456	Mergler, Gerald
GP-457	Mergler, Gerald
GP-458	Messmer, Louis
GP-459	Messmer, Louis
GP-460	Messmer, Louis
GP-461	Messmer, Louis
GP-462	Messmer, Louis
GP-463	Meyer, Bonnie
GP-464	Meyer, John
GP-465	Meyer, Jon
GP-466	Meyer, Jon
GP-467	Meyer, William
GP-468	Michslek, David
GP-469	Milholland, David M.
GP-470	Miller, Bev
GP-471	Miller, Dave
GP-472	Miller, Sharon
GP-473	Miller, Sharon
GP-474	Miller, Sharon
GP-475	Miller, Sharon
GP-476	Miller, Sharon
GP-477	Mintkeski, Walt
GP-478	Mizutani, Patricia
GP-479	Mohr, Brian
GP-480	Moore, Dianna
GP-481	Moore, Julia
GP-482	Moore, Julia
GP-483	Moore, Robin
GP-484	Moore, Robin
GP-485	Moore, Robin
GP-486	Moore, Robin
GP-487	Moore, Robin
GP-488	Moore, Robin
GP-489	Moore, Robin
GP-490	Moore, Robin
GP-491	Moore, Robin
GP-492	Moore, Robin

Number	Name
GP-493	Moore, Robin
GP-494	Moore, Robin
GP-495	Moore, Robin
GP-496	Moore, Robin
GP-497	Moore, Robin
GP-498	Morabito, Joan
GP-499	Mossett, Kandi
GP-500	Murphy, Donna
GP-501	Murr, Bobbee
GP-502	Murrell, Gary
GP-503	Murrell, Gary
GP-504	Myhre, Rebecca
GP-505	Newsome, Dave
GP-506	Nickell, Aaron
GP-507	Nightingale, Terry
GP-508	Nobles, Carrie
GP-509	Norgren, Tim
GP-510	Norton, Sonya
GP-511	Nugent, Virginia
GP-512	O'Connor, Jenny
GP-513	O'Hanley, Kelly
GP-514	Olson, Jean
GP-515	Opfer, Warren
GP-516	Opfer, Warren
GP-517	Orgel, Linda
GP-518	Orgel, Linda
GP-519	Orgel, Linda
GP-520	Parker, Camille
GP-521	Parks, Carrie
GP-522	Parks, Carrie
GP-523	Parks, Carrie
GP-524	Patton, Kathleen
GP-525	Patton, Kathleen
GP-526	Paulson, Lauri
GP-527	Paynter, Mary
GP-528	Paynter, Mary
GP-529	Pelly, Mike
GP-530	Pelo, Ann
GP-531	Pennant, Sandie
GP-532	Penry, Marlene
GP-533	Penry, Marlene
GP-534	Penry, Marlene

Number	Name
GP-535	Penry, Marlene
GP-536	Penry, Marlene
GP-537	Penry, Marlene
GP-538	Penry, Marlene
GP-539	Penry, Marlene
GP-540	Penry, Marlene
GP-541	Penry, Marlene
GP-542	Penry, Marlene
GP-543	Penry, Marlene
GP-544	Penry, Marlene
GP-545	Penry, Marlene
GP-546	Penry, Marlene
GP-547	Penry, Marlene
GP-548	Penry, Marlene
GP-549	Penry, Marlene
GP-550	Penry, Marlene
GP-551	Penry, Marlene
GP-552	Penry, Marlene
GP-553	Penry, Marlene
GP-554	Penry, Marlene
GP-555	Penry, Marlene
GP-556	Penry, Marlene
GP-557	Penry, Marlene
GP-558	Penry, Marlene
GP-559	Perk, David
GP-560	Perk, David
GP-561	Perk, David
GP-562	Perk, David
GP-563	Perk, David
GP-564	Perk, David
GP-565	Perk, David
GP-566	Perrotti, Edward
GP-567	Perrotti, Edward
GP-568	Perrotti, Edward
GP-569	Perrotti, Edward
GP-570	Perry, C.E.
GP-571	Pfeiler, Ben
GP-572	Pfeiler, Nancy
GP-573	Pickering, Karen
GP-574	Plackett, Mark
GP-575	Plunkett, Jim
GP-576	Pokorny, Tamara

Number	Name
GP-577	Pout, Rozanne
GP-578	Powell, Mark
GP-579	Prentiss, Alex
GP-580	Prentiss, Geoff
GP-581	Proctor, Gary
GP-582	Quigg, John
GP-583	Rabaglia, Melanie
GP-584	Ramos, Jean
GP-585	Rapp, Fred
GP-586	Rast, Darrel
GP-587	Rathbone, Lora
GP-588	Rattie, Marcella
GP-589	Ray
GP-590	Ray, Barbara
GP-591	Reames, S & J
GP-592	Regan, Danna
GP-593	Rhodes, Dusty
GP-594	Rhodes, Dusty
GP-595	Rhodes, Dusty
GP-596	Rhodes, Dusty
GP-597	Rhodes, Dusty
GP-598	Richrod, Alan
GP-599	Richrod, Alan
GP-600	Rickman, Sharon
GP-601	Riley, Mary
GP-602	Ritter, John
GP-603	Ritter, John
GP-604	Robertson, Joelle
GP-605	Robinson, Cheryl, BSN, RN
GP-606	Robinson, Joelle
GP-607	Robinson, Michael
GP-608	Rolf, Margo
GP-609	Roos, Tedine
GP-610	Rose, Carol
GP-611	Rose, Shawn
GP-612	Rosen, David
GP-613	Ross, Elizabeth
GP-614	Rouse-Wilson, Bonnie
GP-615	Ruth, Maria
GP-616	Ruth, Maria
GP-617	Ruyle, Susan
GP-618	Sakai, Eugene

Number	Name
GP-619	Sandwell, Susan
GP-620	Sandwell, Susan
GP-621	Scavezze, Barb
GP-622	Scavezze, Barbara
GP-623	Schaeffer, Kathleen
GP-624	Schaeffer, Kathleen
GP-625	Schaeffer, Kathy
GP-626	Schaeffer, Kathy
GP-627	Schmid, Alice Marie
GP-628	Scholzen, R.
GP-629	Schramm, Richard
GP-630	Schultz, Chuck
GP-631	Schultz, Nancy
GP-632	Schumacker, Joe
GP-633	Schwartz, Susan
GP-634	Schwarzenback, Marian
GP-635	Schwickerath, Dean
GP-636	Seaman, Carol
GP-637	Seaman, Carol
GP-638	Seaman, Carol
GP-639	Seaman, Carol
GP-640	Seaman, Carol
GP-641	Seaman, Carol
GP-642	Segretti, Fiona
GP-643	Seiler, David
GP-644	Seiler, David
GP-645	Seiler, Katherine and David
GP-646	Seiler, Kathy
GP-647	Serres, Dan
GP-648	Serres, Dan
GP-649	Serres, Dan
GP-650	Shafer, Sarah
GP-651	Shaleen
GP-652	Shapiro, Alice
GP-653	Shapiro, Howard
GP-654	Shapiro, Howard
GP-655	Sharpe, Elaine
GP-656	Sheats, Melanie
GP-657	Shelman, Dave
GP-658	Sherdahl, Eric
GP-659	Sherdahl, Judy
GP-660	Sherman, Rhonda

Number	Name
GP-661	Sherman, Russell
GP-662	Sherman-Peterson, Ronald
GP-663	Shillinger, Barb
GP-664	Shillinger, Lamont
GP-665	Shober, Harlan
GP-666	Shubert, Stephen
GP-667	Simone, Dorthea
GP-668	Sims, Kimberly
GP-669	Sinclair, Sheri
GP-670	Skinner, Cate
GP-671	Skinner, Kate
GP-672	Skinner, Wayne
GP-673	Smith, Al
GP-674	Smith, Al
GP-675	Smith, Jeff
GP-676	Smith, Joyce
GP-677	Smith, Joyce
GP-678	Snyder, Jeff
GP-679	Soares, Jared
GP-680	Soden, Mary
GP-681	Solomon, Laurie
GP-682	Soman, Michael
GP-683	Sommers, Louis
GP-684	Sowers, Jeff
GP-685	Spalding, Shelly
GP-686	Speltz, Greg
GP-687	Spike, Wilma
GP-688	Stanoway, Ed
GP-689	Stearns, Christopher
GP-690	Steege, Theodore
GP-691	Steinke, Alana
GP-692	Steinke, Alona
GP-693	Steinke, Don
GP-694	Steinke, Don
GP-695	Steinke, Don
GP-696	Steinke, Don
GP-697	Steinke, Don
GP-698	Steinke, Don
GP-699	Steinke, Don
GP-700	Steinke, Don
GP-701	Steinke, Don
GP-702	Steinke, Don

Number	Name
GP-703	Steinke, Don
GP-704	Steinke, Don
GP-705	Steinke, Don
GP-706	Steinke, Don
GP-707	Steinke, Don
GP-708	Steinke, Don
GP-709	Steinke, Don
GP-710	Steinke, Don
GP-711	Steinke, Don
GP-712	Steinke, Don
GP-713	Steinke, Don
GP-714	Steinke, Don
GP-715	Steinke, Don
GP-716	Steinke, Don
GP-717	Steinke, Don
GP-718	Steinke, Don
GP-719	Steinke, Don
GP-720	Steinke, Don
GP-721	Steinke, Don
GP-722	Steinke, Don
GP-723	Steinke, Don
GP-724	Steinke, Don
GP-725	Steinke, Don
GP-726	Steinke, Don
GP-727	Steinke, Don
GP-728	Steitz, Jim
GP-729	Stenger, Joseph
GP-730	Stepp, Patricia Joy
GP-731	Sterr, William
GP-732	Stokam
GP-733	Stonington, Louise
GP-734	Stormo, Paul
GP-735	Street, Nancy
GP-736	Street, Nancy
GP-737	Street, Nancy
GP-738	Street, Nancy
GP-739	Streiffert, Dan
GP-740	Strid, Eric
GP-741	Strid, Eric
GP-742	Strong, Janet
GP-743	Strong, Janet
GP-744	Strump, Larry

Number	Name
GP-745	Stuckert, Ben
GP-746	Sturdivant, Lee
GP-747	Sunde, Carol
GP-748	Sunshine, Susan
GP-749	Sunshine, Susan
GP-750	Sunshine, Susan
GP-751	Suter, Alice
GP-752	Swanson, Steve
GP-753	Swartz, Marilyn
GP-754	Swett, Michael
GP-755	Sword, Carol
GP-756	Sword, Carol
GP-757	Taylor, Robert
GP-758	Teneau, Peter
GP-759	Tharp, Rod
GP-760	Tharp, Rod
GP-761	Tharp, Rod
GP-762	Tharp, Rod
GP-763	Tharp, Rod
GP-764	Tharp, Rod
GP-765	Thevik, Karen Olivia
GP-766	Thevik, Karen Olivia
GP-767	Thevik, Karen Rae
GP-768	Thevik, Karen Rae
GP-769	Thevik, Maxwell
GP-770	Thomas, Anita
GP-771	Thomas, Jan
GP-772	Thompson, Carey
GP-773	Thompson, Sherrie
GP-774	Thrun, Nina
GP-775	Thrun, Nina
GP-776	Thurman, Mickey
GP-777	Tibbets, Ron
GP-778	Tieger, Joseph
GP-779	Tim
GP-780	Tinnerstet, Darryl
GP-781	Tinnerstet, Darryl
GP-782	Tlustos, Margaret
GP-783	Tomlinson, Marc R.
GP-784	Treadway, Carolyn
GP-785	Treadway, Roy
GP-786	Treat, Lynn

Number	Name
GP-787	Troyer, Stena
GP-788	Tuepker, Anais
GP-789	Tuyls, Gar
GP-790	Tuyls, Gar
GP-791	Tuyls, Gar
GP-792	Upenieks, Roland
GP-793	Van Doorninck, Anneka
GP-794	Vanderpool, Nancy
GP-795	Vassilakis, Noemie
GP-796	Vicki
GP-797	Vicki
GP-798	Vidal-Hallett, Emilia
GP-799	Vogel, Sally
GP-800	Voget, Connie
GP-801	Voget, Connie
GP-802	Voget, Richard
GP-803	Voget, Richard
GP-804	Vogt, Max
GP-805	Walberg, Patrick
GP-806	Waldorf, Elizabeth
GP-807	Waley, Valerie
GP-808	Walker, R.P.
GP-809	Wallace, Nadine
GP-810	Walsh, Rebecca
GP-811	Wang, Art
GP-812	Ward, Marian
GP-813	Warren, Richard
GP-814	Warren, Richard
GP-815	Water, Mary
GP-816	Watkins, Eric
GP-817	Watson, Mik
GP-818	Webb, Marty
GP-819	Webb, Mike
GP-820	West, Ashley
GP-821	Wetter, Margaret
GP-822	Wetzel, Paul
GP-823	Wichar, Den Mark
GP-824	Wichar, Den Mark
GP-825	Wilbert, Ed C.
GP-826	Wild, Noah
GP-827	Williams, Donald
GP-828	Williams, Imogene

Number	Name
GP-829	Williams, Imogene
GP-830	Williams, Imogene
GP-831	Williams, Steve
GP-832	Willis, Jeffrey
GP-833	Wilmering, Kathy
GP-834	Wilson, David
GP-835	Wilson, Don
GP-836	Wilson, Richard L.
GP-837	Winn, Diane
GP-838	Wireman, Ginger
GP-839	Wolfe, Diane
GP-840	Wolfe, Diane
GP-841	Wolfe, Diane
GP-842	Wolfe, Diane
GP-843	Wolfe, John
GP-844	Wolff, Virginia
GP-845	Wolff, Virginia
GP-846	Wonhoff, Taylor
GP-847	Wood, John and Polly
GP-848	Wood, Sandy
GP-849	Wood, Sandy
GP-850	Woods, Keith
GP-851	Woodward-Rice, Claudia
GP-852	Woodward-Rice, Claudia
GP-853	Young, Robert
GP-854	Young, Saphronia
GP-855	Yun, Christine
GP-856	Zeigler, Bob
GP-857	Zeigler, Bob
GP-858	Zeigler, Bob
GP-859	Zeigler, Bob
GP-860	Zeller, Nick
GP-861	Ziggy
GP-862	Ziggy
GP-863	Zimmer, Doug
GP-864	Zimmer, Doug
GP-865	Zimmerman, Robert
GP-866	Zora, Craig
GP-867	Zora, Craig
GP-868	Zora, Craig
GP-869	Zora, Craig
GP-870	Anonymous

Number	Name
GP-871	Anonymous
GP-872	Anonymous
GP-873	Anonymous
GP-874	Anonymous
GP-875	Anonymous
GP-876	Anonymous
GP-877	Anonymous
GP-878	Anonymous
GP-879	Anonymous
GP-880	Anonymous
GP-881	Anonymous
GP-882	Anonymous
GP-883	Anonymous
GP-884	Anonymous
GP-885	Anonymous
GP-886	Anonymous
GP-887	Anonymous
GP-888	Anonymous
GP-889	Anonymous
GP-890	Anonymous
GP-891	Anonymous
GP-892	Anonymous
GP-893	Anonymous
GP-894	Anonymous
GP-895	Anonymous
GP-896	Anonymous
GP-897	Anonymous
GP-898	Anonymous
GP-899	Anonymous
GP-900	Anonymous
GP-901	Anonymous
GP-902	Anonymous

GP1, **Abramson, Mary**

Comment GP1-1

How can you minigate if the children at Horizon Elem. are incinerated! The State gov. is to protect our 'right to life' and make sure we are 'safe' and 'happy'. This state should have called a moratorium on any shipments of the volatile Bakken oil through our state when 47 people were incinerated in Quebec. Who amongst you will speak out to the governor and others who are 'pushing' this insanity into our state!

Response GP1-1

Comment acknowledged.

GP2, Abramson, Mary

Comment GP2-1

[Attachment: Letter to Governor Inslee]

Response GP2-1

Comment acknowledged. All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP3, Ackerman, Laura

Comment GP3-1

Good evening. Thank you for this opportunity to speak. I'm Laura Ackerman. I'm from Spokane. And my office is in downtown Spokane. It's 500 of my steps to the tracks, which is in the U.S. DOT blast zone.

These trains to the Grays Harbor facility will come through the Spokane area. We get all of the rail traffic for Grays Harbor. Not only, like I said, just Grays Harbor, but we get it for all of the post facilities and the refineries. And the DEIS needs to look at the rail transportation holistically and not just facility by facility when it comes to the impacts in the Spokane area.

And the facilities that I am commenting on, and these are for both projects, create unmitigatable risks for Spokane and our river. We have declining need of rent-bound trout, we have a lot of populations, including the Spokane tribe, several others who live sustainably from the river. We have an EPA sole source drinking aquifer that intermingles in the river. It's recharged in part from Lakes Coeur d'Alene and Pend Oreille. And a spill in the Pend Oreille into the lake would impact our aquifer. It's all connected.

And a spill and fire would devastate Spokane's downtown, the Spokane Valley, and it would virtually wipe out the city of Cheney.

Response GP3-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

Comment GP3-2

We had a brutal year in Eastern Washington with all the fires, and I mean brutal. It was unbearable to live in Eastern Washington in August. The dryest and hottest summer on record in Eastern Washington.

Does the DEIS take into consideration climate change that results from fossil fuel transportation? Eastern Washington is only getting dryer and crisper. More trains, just the shear number of them, are going to increase our chances for brush fires, and one likely to start a 100-acre fire is just seven miles to my home.

So the impacts of these facilities must be included in the Environmental Impact Statement.

Response GP3-2

Final EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively. Section 6.5.1.2, *Cumulative Impacts*, *Climate Change*, describes the projected impacts of climate change in the Pacific Northwest.

GP4, **Adams, Bill**

Comment GP4-1

Thank you for giving me the opportunity of testifying tonight. My name is Bill Adams. I'm from the city of Des Moines, Washington, which is also on salt water. Getting right to the point, if the expansion of the two facilities is permitted, additional oil rail car traffic will be required to support their increased capacities.

And more oil car traffic means proportionately higher risk of accidents, derailments, and oil spills. Based on past and recent history, such as the Gulf Oil BP disaster, it's not a question of if these spills will occur, but when they will occur. And when they do occur, jobs will be lost, most likely in excess of the 45 estimated that will be added based on the expansion.

Tourism and recreation income will diminish. Also commercial and recreational fishing, crabbing and shellfish harvesting will suffer. And commercial fishing includes our Native American tribes, such as the Quinault Nation. Their culture and heritage is based on fishing which, by the way, is treaty protected.

So do the right thing and deny this application. And by doing so, it would be benefitting the Grays Harbor community, the state of Washington, and the West Coast.

Thank you.

Response GP4-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP5, Albert, Donna

Comment GP5-1

COMMENT 1 Page S-1, Westway DEIS. There is potential that tar sands crude oil will be shipped overseas from Canada. The DEIS fails to quantify the impacts of this tar sands crude oil. All impacts must be quantified and stated in the DEIS, including greenhouse gas emissions that will be emitted by this tar sands oil when it is used, regardless of where in the world those emissions occur. Emissions that occur anywhere cause ocean acidification and climate change here in the Pacific Northwest. Please also apply this comment to the Imperium DEIS.

Response GP5-1

The Draft EIS considers the crude oils most likely to be handled, stored, and transported under the proposed action: Bakken crude oil and diluted bitumen. Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively. The combustion estimates are based on conservative assumptions, including that total maximum throughput of crude oil is diluted bitumen from Canadian oil sands because it has higher greenhouse gas emissions when combusted. The Final EIS has been updated to include estimated emissions from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion more information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

Draft EIS Section 6.5.1.2 describes the projected impacts of climate change in the Pacific Northwest.

GP6, Albert, Donna

Comment GP6-1

COMMENT 2 Westway DEIS. In addition to the tar sands oil that would be shipped through the Port of Grays Harbor, the DEIS must also recognize and quantify the emissions that will be released from tar sands deposits that would not be extracted if the lack of rail shipment options were to shut down extraction due to economic stress. Here is a quote from a Sightline article, and a link to the Oil Change International paper on this topic: "Last week, President Obama rejected the Keystone XL pipeline, a strong stand for climate protection. Yet a new report shows that the oil industry still intends to use massive oil-by-rail terminals proposed in the Pacific Northwest to move their product to market. In fact, in the absence of new pipelines serving the Canadian oil sands fields, the fiercely debated Northwest rail terminals would be the sole driver of new extraction there. That's according to a new Sightline-commissioned analysis by independent research group Oil Change International (OCI)." — from NORTHWEST OIL TRAIN TERMINALS COULD GROW TAR SANDS EVEN WITHOUT KEYSTONE, by Eric de Place, Sightline article online, downloaded Nov 26, 2015, at http://www.sightline.org/research_item/tracking-emissions/ From TRACKING EMISSIONS: THE CLIMATE IMPACT OF THE PROPOSED CRUDE-BY-RAIL TERMINALS IN THE PACIFIC NORTHWEST, report commissioned by Sightline from Oil Change International, which is found at the link above: "In Tracking Emissions: The Climate Impacts of the Proposed Crude-by-Rail Terminals in the Pacific Northwest, OCI deploys the oil industry's own forecasting and modeling tools together with a

detailed examination of the Northwest facilities' configurations. Key findings in the report concern: 1. Propping up Canadian tar sands: In the absence of new pipelines, Northwest rail terminals would be the sole driver of new growth in Canadian tar sands oil. 2. Multiplying oil extraction and climate pollution: Oil train facilities in the Northwest could unlock as much as 382,000 barrels per day of new tar sands production that would otherwise not be extracted. The resulting greenhouse gas pollution from extra tar sands production could be as much as 106 million metric tons per year of carbon dioxide—the equivalent of doubling the total greenhouse gas pollution of Washington state. 3. Feeding the Bakken beast: Northwest oil train terminals could also lead to more oil drilling in the Bakken formation, as much as 114,000 barrels per day beyond what would be produced without the terminals. The resulting greenhouse gas pollution from this extra production could be as much as 30 million tons per year of carbon dioxide—the equivalent of doubling the number of cars on the road in Oregon and Washington." In addition to the tar sands oil that would be shipped through the Port of Grays Harbor, the DEIS must also recognize and quantify the emissions that will be released from tar sands deposits that would not be extracted if the lack of rail shipment options were to shut down extraction. Please also apply this comment to the Imperium DEIS.

Response GP6-1

Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

GP7, **Albert, Donna**

Comment GP7-1

COMMENT 3 Westway DEIS. I urge Department of Ecology not to discount studies which do not come from the established oil industry experts or from academia that gets funding from the oil industry. An example is TRACKING EMISSIONS: THE CLIMATE IMPACT OF THE PROPOSED CRUDE-BY-RAIL TERMINALS IN THE PACIFIC NORTHWEST, report commissioned by Sightline from Oil Change International. The claims in this study are not difficult to grasp or evaluate, but no one dependent on the oil industry for funding will recognize them. You must take your role as lead agency seriously. You cannot rely on consultants alone. Note that this DEIS which consultants provided is missing significant and obvious impacts, which unpaid concerned citizens are pointing out to you. You can't rely on the consultants alone. You must take the time to understand all of these issues which are pointed out to you in comments on the DEIS. Find the study at this link: http://www.sightline.org/research_item/tracking-emissions/ Do not discount studies from outside the established oil industry experts or academia. Give every comment serious consideration. Apply this principle to all the comments you receive. Please also apply this comment to the Imperium DEIS.

Response GP7-1

Comment acknowledged.

GP8, Albert, Donna

Comment GP8-1

COMMENT 4 Westway DEIS. You must fully evaluate unmitigatable impacts even if they are difficult to measure or include some uncertainty. The scale of some of the impacts pointed out in the comments you are receiving is so great, that you must find a way to quantify them and fully explain and consider them in the EIS. One example of this is destruction of the ecosystems in Willapa Bay (which contains uncertainty, but would be unthinkable if it happened). Another example is the very large greenhouse gas emissions due to using the transported crude oil, and that the oil terminals enable not only transportation but also future extraction that may find other routes of transport — these greenhouse gas emissions are certain, but you have not quantified them in the DEIS. These are both examples of unmitigatable impacts which the DEIS has not included because they are difficult to measure or include some uncertainty. You must fully evaluate unmitigatable impacts even if they are difficult to measure or include some uncertainty. Apply this principle to all the comments you receive. Please also apply this comment to the Imperium DEIS.

Response GP8-1

As discussed in the Master Response for Oil Spill Modeling Methods, Draft EIS Appendix N, *Oil Spill Modeling*, acknowledges the limitations of the selected modeling tool to depict the movement of oil outside of Grays Harbor. Attachment A of Appendix N discusses two previous large spills, (including the Nestucca off the Washington State coastline) to illustrate the directions that oil can migrate offshore depending on seasonal conditions. Final EIS Chapter 4, Section 4.4, *Environmental Health Risks—Terminal (Onsite)* has been revised to clarify the potential for spilled oil to move outside of Grays Harbor up or down the coast, depending on the specific conditions. Section 4.7, *Impacts on Resources,* discusses impacts on resources, including shellfish, in general terms for the reasons discussed in the Master Response for Environmental Health and Safety Analysis. As such, the impacts can be similarly applied to the extended study area.

Regarding greenhouse gas emissions, Final EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, have been revised to include emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

GP9, Albert, Donna

Comment GP9-1

COMMENT 5 Page S-3, Westway DEIS. 498 comments were labeled “unique” while 21,755 were labeled as form letters because they contained copied language from talking points or email messages. Please review the 21,755 “form letter” responses. Every single one of those comments represents a person who took the time to send it. Because of the technical nature of oil transport safety and environmental issues, many people did not know what to write. People struggled to express their personal concerns. People without a technical background saw that this project threatened their safety and quality of life. They used the language they found in talking points or mass emails to express their own concerns. You cannot discount or ignore comments that contain

shared phrases, even if only a few words vary. Those unique words come directly from individuals. Look at each of these "form letters" for the unique words and phrases that people took the time to send. Do not ignore or discount comments because they contain shared language. The people most affected by this project have local knowledge of how this project will affect them. You must fully consider each unique word or phrase in comments, even if the comments consist of mostly copied language or phrases. Those unique words represent the concerns and local knowledge of real people. The time or expense required for this review is no excuse to avoid it. You would not need to do this review if few people were negatively affected by this project. The volume of responses itself has meaning. This project negatively affects many people. Each comment submitted deserves full consideration. Apply this principle to all the comments you receive. Please also apply this comment to the Imperium DEIS.

Response GP9-1

The commenter references text from the Draft *Summary* regarding comments received during the scoping period for the EIS. The co-leads reviewed and considered all scoping comments. Final EIS Appendix A, *Scoping Comments*, provides a catalog of all comments received during the formal scoping period.

Every submission received during the comment period for the Draft EIS—whether in writing, oral testimony, or via the web portal—was entered into a comment processing software and reviewed, and each individual comment within each submission was responded to. All comments were considered in updating the Final EIS.

GP10, **Albert, Donna**

Comment GP10-1

COMMENT 6 Westway DEIS. The DEIS fails to quantify the greatest impact of this crude oil, which is the greenhouse gas it will emit when it is used. THIS IMPACT CANNOT BE MITIGATED. The total greenhouse gas emissions of the three proposed oil terminals must be considered together. You cannot separate the impacts of the three projects, in order to make them appear to be less. THE STATE OF WASHINGTON SHOULD BE CONSIDERING THE CUMULATIVE GREENHOUSE GAS EMISSIONS IMPACTS OF ALL PROPOSED NEW FOSSIL FUEL INFRASTRUCTURE PROJECTS TOGETHER (LNG, COAL, OIL) DUE TO VERY LARGE GLOBAL CLIMATE IMPACTS OF CUMULATIVE PROJECT LIFETIME EMISSIONS AND ENABLED EXTRACTION. Assumptions: One barrel of oil produces 317 kg of CO2 when used 64,249,208 barrels of crude/year are shipped through three proposed oil terminals at Port of Grays Harbor Impact: Greenhouse gas emissions due to crude oil shipped through the three proposed oil terminals at Port of Grays Harbor will exceed 20MMTCO2 The size of these emissions compared to annual greenhouse gas emissions due to burning fossil fuels in Washington State will grow rapidly over the proposed life of the storage tanks. 20MMTCO2 represents about 20% of 2011 fossil fuel CO2 emissions in Washington State. This percentage grows to about 60% in 2050, due to greenhouse gas limits in RCW 70.235.020. Ironically, the limits in RCW 70.235.020 have not been updated as Department of Ecology is required to do in RCW 70.235.020, and recently ordered to do by a judge. Experts are now saying industrialized countries must be approaching zero fossil fuel use between 2030 and 2050 (depending on the expert), in order to avoid exceeding 2 degrees of warming. Dept of Ecology was recently sued successfully for failing to update greenhouse gas emissions reduction goals to reflect current science. If Washington State is to

"do its part to reach global climate stabilization levels," our state should be transitioned completely off of fossil fuels before 2050. 2050 is only 35 years from now, well within the lifetime of the proposed oil storage tanks. The percentage of emissions created by oil shipped through Grays Harbor vs. 0 fossil fuels emissions in our State in 2050, is infinity, a number too large to write. This project makes absolutely no logical sense if we are serious about leading the world in reducing greenhouse gas emissions. THIS IMPACT CANNOT BE MITIGATED. Please also apply this comment to the Imperium DEIS.

Response GP10-1

Refer to Response to Comment GP5-1.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP11, Albert, Donna

Comment GP11-1

COMMENT 7 Page S-5, Westway DEIS. Rail impacts are only considered between Centralia and the Port of Grays Harbor. This is a failure to include all the people along the tracks between the oil fields and the Port of Grays Harbor in the EIS process. You must have scoping meetings that include every location affected by this project. There were no scoping hearings for the majority of the towns and cities affected by this project due to proximity to the proposed railway route the crude oil will travel. Please also apply this comment to the Imperium DEIS.

Response GP11-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS.

GP12, Albert, Donna

Comment GP12-1

COMMENT 8 Page S-5, Westway DEIS. This DEIS fails to recognize that rail impacts affect people in other States. How can the Washington State EIS process be adequate for a project that clearly also impacts people in other States? This EIS process is not adequate to address the impacts of rail transport to people in other States. Please also apply this comment to the Imperium DEIS.

Response GP12-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

GP13, Albert, Donna

Comment GP13-1

COMMENT 9 Page S-5, Westway DEIS. The DEIS fails to recognize that significantly large greenhouse gas emissions affect people in other States. How can the State EIS process be adequate when this project impacts other States? This EIS process is not adequate to address the impacts of greenhouse gas emissions to people in other States. This impact to people in other States cannot be mitigated. Please also apply this comment to the Imperium DEIS.

Response GP13-1

Refer to Response to Comment GP5-1.

GP14, Albert, Donna

Comment GP14-1

COMMENT 10 Page S-5, Westway DEIS. Large greenhouse gas impacts affect people outside the United States. What legal environmental evaluation process considers the global impacts of this project? The global impacts of tar sands extraction are measurable, and cannot be mitigated. Please also apply this comment to the Imperium DEIS.

Response GP14-1

Greenhouse gas emissions estimates are presented in the context of state, national, and global emission inventories and reduction goals. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources. Also refer to the Master Response for Purpose and Focus of the EIS.

GP15, Albert, Donna

Comment GP15-1

This project impacts people in other States, both due to rail transport and due to greenhouse gas emissions. The greenhouse gas emissions of the oil transported by this project cannot be mitigated. Please also apply this comment to the Imperium DEIS.

Response GP15-1

Refer to Response to Comment GP5-1.

Comment GP15-2

COMMENT 11 Westway DEIS. Under the Clean Water Act, did this project apply to the Army Corps of Engineers for a 404 permit?

Response GP15-2

As stated in Draft EIS Chapter 3, Section 3.3 *Water*, no dredge or fill material would be placed in any surface water or wetland and no in-water work would be required for the proposed action. Therefore, a U.S. Army Corps of Engineers Section 404 Clean Water Act permit is not required.

Comment GP15-3

Why was no environmental assessment done for NEPA? How was it determined that this project is consistent with the Coastal Zone Management Act? What other federal licenses will be required for this project? Please address the complete federal permitting requirements in the EIS.

Response GP15-3

The proposed action would not require federal permits; therefore, it is not subject to NEPA review.

GP16, **Albert, Donna**

Comment GP16-1

COMMENT 12 On page S-5, Westway DEIS. The actual risks are not clearly stated. Building to code will not prevent rupture in case of a large Cascade subduction zone earthquake. Pilings will not stabilize the storage tank area in case of a large Cascade subduction zone earthquake. Code construction will not withstand a tsunami. Closing valves will make absolutely no difference the case of a large Cascade subduction zone earthquake, because the tanks will rupture. There is no way to mitigate for the largest quakes and tsunamis which are expected at the proposed tank location. This risk cannot be mitigated. Clearly state the actual consequences of a large Cascade subduction zone earthquake, and that this risk and the results of such an event cannot be mitigated. Please also apply this comment to the Imperium DEIS.

Response GP16-1

Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events. Final EIS Chapter 3, Section 3.1.8, *Would the proposed action have unavoidable and significant adverse impacts on earth resources and conditions?* clarifies the potential for significant and unavoidable impacts.

GP17, **Albert, Donna**

Comment GP17-1

COMMENT 13 On page S-6, Westway DEIS. A tsunami evacuation plan would not reduce the impact of a major tsunami. State that clearly in the EIS. Tsunami-proof construction, or moving the tanks to

a location not subject to a tsunami, must be required mitigation. Please also apply this comment to the Imperium DEIS.

Response GP17-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

GP18, Albert, Donna

Comment GP18-1

COMMENT 14 Page S-19, Westway DEIS. "What are the environmental, health, and safety risks of oil spills, fires and explosions?" — title Please also apply this comment to the Imperium DEIS.

COMMENT 15 Page S-19, Westway DEIS. The document needs another category. What are the environmental impacts of using the oil? Calculate and quantify the greenhouse gas emissions. Include tar sands oil, and enabling future extraction. See my more detailed comment on this topic. Add to this table for clarity in the Executive Summary. Please also apply this comment to the Imperium DEIS.

Response GP18-1

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively. The estimates are based on conservative assumptions, including that total maximum throughput of crude oil is diluted bitumen from Canadian oil sands, because it has higher greenhouse gas emissions when combusted. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

GP19, Albert, Donna

Comment GP19-1

COMMENT 16 Page S-27, Westway DEIS. Under AIR, the greenhouse gas emissions shown in the DEIS are operational only. Move these quantities to the operational section. Instead, you should show total emissions due to the use of the crude oil. This is a much larger quantity, which is globally significant. See my other comments on this topic: In the total emissions, include emissions from anticipated tar sands oil to be transported through the terminals, and enabled future tar sands extraction. Please also apply this comment to the Imperium DEIS.

Response GP19-1

Refer to Response to Comments GP5-1 and GP18-1.

GP20, Albert, Donna

Comment GP20-1

COMMENT 17 Page S-27, Westway DEIS. Change "climate change would affect" to "climate change will effect" Washington State (it is already affecting us now). Change "climate change could contribute" to "climate change will contribute" to sea level rise. Change "no flooding from sea level rise is predicted at the project site" to "flooding from sea level rise is predicted at the project site" and quantify the range of expected sea level rise in future years. Uplifting delays the effect here for some time, but you have old information if you think there will be no sea level rise at the site within the life of the proposed tanks. Accelerating global sea level rise has been reported in 2015. It takes time for reports to go through the academic publishing process so go directly to experts in this field to apply up to date sea level rise predictions to this site. Apply the principles of this comment throughout the EIS. Climate change is affecting our State now. The emissions from the oil that would go through these proposed terminals causes climate change. This is an impact that cannot be mitigated. Make the direct and certain connection between this fossil fuel use and climate change in Washington State throughout the EIS. Use current climate science. Please also apply this comment to the Imperium DEIS.

Response GP20-1

Final EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts, Climate Change*, and Final EIS *Summary* clarify predictions of sea level change in the project area, potential for flooding at the project site, and the ongoing nature of climate change. With sea level in the study area predicted to rise 1.57 feet by 2050, the project site would remain approximately 5 feet higher than the projected high tide and would not be subject to flooding even during extreme storm events.

GP21, Albert, Donna

Comment GP21-1

COMMENT 18 On page S-28, Westway DEIS. Under tribal resources no climate change impacts are listed. Events this summer showed that reduced runoff from glaciers at the right time of the year, in combination with drought conditions, increases the water temperature in streams and rivers. The drought and reduced runoff from glaciers are due to the current elevated levels of CO2 in the atmosphere, and will be exacerbated by future fossil fuel emissions. This year, some salmon died in waters that were too warm. Emissions from the crude oil which is proposed to be shipped through these oil terminals will cause additional warming. This is not the only impact of climate change which should be listed here. Other impacts to tribal resources in Washington State include ocean acidification, sea level rise, drought, and fires. Add to this table all known impacts of climate change to tribal resources throughout the State of Washington. Seek information on these impacts from tribes throughout the State of Washington. Scoping hearings should include all tribes affected by climate change in Washington State. Please also apply this comment to the Imperium DEIS.

Response GP21-1

Draft EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, *Climate Change*, describes the projected impacts of climate change in the Pacific Northwest.

GP22, **Albert, Donna**

Comment GP22-1

COMMENT 19 On page S-32, Westway DEIS. The boundaries of the costs and benefit analysis are inconsistent. The line items are not in the same units. Not all the costs are listed. Risks are not quantified in a way that allows comparison. Labor income does not accrue to the city. People living in the city of Hoquiam may benefit from the tax revenue that goes to the city. People outside the city of Hoquiam will not benefit from that tax revenue. Make clear geographical boundaries for the table or tables. You probably need a cost/benefit table for the city of Hoquiam, a cost/benefit table for Grays Harbor County, and a cost/benefit table for the entire geographical area affected by the project in the State of Washington (all towns along the tracks, and people affected nearby). Show all costs and benefits in the same terms. For instance, show per person or per trip costs in the detail, but in the table show the total annual cost/benefit to the community for each item listed, and use the sum of the items listed to compute the cost to benefit ratio. The scope of the contents of the table in the DEIS is incomplete. For instance, property losses are expected along the tracks in towns across the State. This belongs in the "all affected communities in Washington State" cost/benefit table. Calculate the property losses for all the communities on the proposed rail route, and add them up, to create one line item for "property value losses." Other impacts that belong on the communities cost/benefit table include losses due delays in getting crops to market due to the oil monopolizing the tracks, tourism losses due to fumes, aesthetics, traffic gridlock and lost passenger rail, health problems due to chemical exposure along the tracks and fumes from the terminals, risk of losses due to spills (tourism, fishing, quality of life), death or injury due to delays to emergency response (e.g. city of Elma), and risk of death or injury due to accidents and explosions. Include all the costs from all the comments which have been sent to you, in this table, to make the table complete. I don't know how you will quantify items in the table which contain uncertainty such as risk of spills, but every cost or benefit must be shown in the table for it to be a good representation of actual conditions. Include lost job opportunities and risk of lost jobs all along the tracks as a cost. Please also apply this comment to the Imperium DEIS.

Response GP22-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP23, Albert, Donna

Comment GP23-1

COMMENT 20 On page S-34, Westway DEIS. "Unavoidable and significant adverse impacts" — title. Under Tribal Resource, greenhouse gas impacts are not listed.

Response GP23-1

The Draft EIS does not identify greenhouse gas emissions as an unavoidable and significant adverse impact of the proposed action but rather presents estimated emissions from construction and proposed operations.

Refer to Final EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, greenhouse gas emission estimates from onsite operations, offsite transport from the likely source of crude oil to the furthest likely refinery destination, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively.

Comment GP23-2

Under Environmental Health and Safety, delete "likely" — the large spill or related incident would result in unavoidable and significant adverse environmental impacts. Take out "completely" twice — no mitigation measures would eliminate the possibility of a large spill or related fire or explosion, or the adverse consequences of such incidents. Take out "contribute to" — the impact of the proposed action has significant adverse environmental cumulative impacts on these resources. Please also apply this comment to the Imperium DEIS.

Response GP23-2

The Final EIS reflects clarification of conclusions of significant and unavoidable adverse impacts related to environmental health and safety.

GP24, Albert, Donna

Comment GP24-1

COMMENT 21 A general comment about the ineffectiveness of the SEPA process in implementing the SEPA law: In scoping hearings, I made the comment that greenhouse gas emissions due to the use of the crude oil (NOT just emissions due to transporting it by rail) MUST be quantified in the Environmental Impact Statement. I heard many other people make this comment in the hearings. Either these comments were ignored, or the Department of Ecology staff did not understand what we were saying. The greenhouse emissions due to the use of the crude oil transported over the life of the oil terminals are NOT quantified in this Draft EIS. This is a very, very large impact which CANNOT BE MITIGATED.

Response GP24-1

Refer to Response to Comments GP5-1 and GP18-1.

Comment GP24-2

Another huge omission in this DEIS is the impacts to waterways, towns and people along the tracks between the oil fields and some arbitrary point a short distance from the Port of Grays Harbor. No scoping hearing was held anywhere near these places. Consider that professionals with time and experience are paid to promote this project, while to a large extent unpaid individuals are taking their own time at home to point out the many problems with the DEIS and the project. The Department of Ecology must step up efforts to protect the public from harmful projects like this one. You must ensure that your processes fully implement the SEPA law. Please re-examine a process that relies so much on the efforts of volunteers to stop bad projects. Department of Ecology must fulfill the role of Lead Agency, in the interest of the public. Please review the Department of Ecology processes that implement the SEPA law, and correct it so the law is implemented effectively.

Response GP24-2

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS.

GP25, **Albert, Donna**

Comment GP25-1

COMMENT 22 The Department of Ecology has failed to update greenhouse gas emissions reduction goals for the State of Washington, and failed to understand that even the existing goals are incompatible with any new fossil fuel infrastructure. These two failures indicate that the Department of Ecology does not understand what we must do to avoid exceeding 2 degrees of warming. Understanding that we cannot stay below 2 degrees of warming and build more fossil fuel infrastructure is essential to evaluating fossil fuel infrastructure projects like this one. Please apply this comment to both the Westway and Imperium DEIS.

Response GP25-1

Refer to the Master Response for Purpose and Focus of the EIS.

GP26, **Albert, Donna**

Comment GP26-1

I'm Donna Albert. I live in Montesano, Washington. I object to this project on moral grounds as a licensed physician, as a Catholic, and as a grandmother. The EIS fails to quantify the greatest impact of this crude oil, which is greenhouse gas. This impact cannot be mitigated.

The DEIS assumes if we don't ship this through Grays Harbor it will be shipped somewhere else. Not so. Port after port is saying no to crude oil. It is morally wrong to enable this oil to be extracted, shipped, and burned.

The oil shipped annually to the three proposed terminals is equivalent to emissions from about 20 percent of all fossil fuels burned in Washington state in 2011.

Washington state statute limits emissions in 2015. This oil will create about 60 percent of emissions of the entire state of Washington that year. Many experts are telling us the world has to stop burning fossil fuels by 2050.

In fact, the Department of Ecology was sued because they had failed to update the greenhouse gas limit. If nobody is burning fossil fuels 35 years from now these tanks will be abandoned.

For these soon to be obsolete tanks project, we are taking too much risks to our community so someone else can make money and this oil can be burned somewhere else.

Our oceans are acidic, our forests are burning, our glaciers are melting, our salmon are dying in streams that are too hot. This project is morally wrong.

Time is running out. We are tearing apart our home. Irreversible harm is done to the ecosystem. And behind all this pain, death, and destruction, there's a stench of an unfettered pursuit of money. The service of the common good is put at risk, our common home, mother earth.

Response GP26-1

Refer to the Master Response for Purpose and Focus of the EIS.

GP27, Alderton, Janet

Comment GP27-1

The findings in the DEISs for Westway and Imperium oil terminal proposals show that the risks of oil spills, train accidents, increased train and oil tanker traffic, air pollution, noise, harmful impacts on tribal culture and resources, and vehicle delay at railroad crossings cannot be fully mitigated and the environmental damage could be significant.

Response GP27-1

Final EIS Chapter 3, Section 3.2, *Air*, has been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analysis predict lower emissions; the updated level of increased risk is not considered significant. Therefore, the Final EIS concludes no potential unavoidable and significant adverse impacts on air quality.

Comment GP27-2

The alarming safety record of oil trains means an explosive oil train derailment is a question of when, not if. Less dramatic but equally concerning is the air pollution, spill risks, and traffic delays oil trains would bring to communities along the rail line from Aberdeen to Chehalis and all the way to the source of the oil in North Dakota and beyond.

Response GP27-2

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action

could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*, which presents a detailed analysis of potential impacts on air quality, water quality, and traffic, in the study area related to routine operation of the proposed action.

Comment GP27-3

The proposed oil shipping terminals and the dirty, dangerous oil trains, storage tanks, tankers and barges that would come with them puts the health and safety of people, the local economy, and our ocean and coastlines at risk. Grays Harbor is the wrong place for oil terminals: The narrow, shallow shipping channel and strong currents put Grays Harbor at high risk of an oil spill. A single major oil spill could devastate the area's maritime economy, productive fisheries, tribal cultures and economies, and spectacular coastal waters. There is no way to mitigate the risks and dangers of these crude oil terminals.

Grays Harbor communities would take on the risk, oil companies would reap the profits, and Grays Harbor would become a throughway for oil going elsewhere to places like California and even overseas should the ban on crude oil export be lifted.

Westway and Imperium, two of three proposed oil terminals for Grays Harbor between Aberdeen and Hoquiam would have the combined capacity to handle nearly 127,000 barrels, or more than 5 million gallons of oil daily (one barrel = 42 gallons). The terminals would be fed by about sixteen loaded oil train deliveries every week (on average more than two per day).

If both terminals are built as many as 319 oil-laden tankers and barges would need to traverse Grays Harbor every year. The twenty-mile long Grays Harbor shipping channel is narrow, shallow, subject to strong currents and has limited staging area for ships and tugs. Up to an additional 319 trips through the Harbor by empty tankers and barges would only add to congestion and collision risk.

The largest Panamax class tankers that would carry oil through Grays Harbor can hold nearly 17 million gallons and are nearly three football fields in length. The Exxon Valdez disaster in Alaska in 1989 spilled about 11 million gallons.

The Washington State Department of Fish and Wildlife stated "Grays Harbor is an area particularly sensitive to the adverse effects of oil spills." A major oil spill could devastate marine resource jobs which support more than 30% of Grays Harbor's workforce according to a 2013 study by the University of Washington. An economic study commissioned by the Quinault Indian Nation found that a major oil spill could put more than 150 tribal commercial fishermen out of a job, resulting in a direct loss of as much as $20 million in wages and up to $70 million in revenue for affected businesses.

In 2014 Washington residents took an estimated 4.1 million trips to the Washington Coast spending $481 million. More than one-third of those visits were to Grays Harbor County to enjoy its spectacular and productive coastal and ocean waters.

Grays Harbor and the region are no strangers to oil spills. The Northwest has experienced two dozen spills and near misses over the last two decades. In 1988, the Nestucca barge holed off Grays Harbor spilling 231,000 gallons of marine bunker oil, killing or injuring an estimated 56,000 seabirds. The oil sheen was seen from Oregon to the Strait of Juan De Fuca.

If built the two terminals together could store 72 million gallons of crude, or the equivalent of 2526 oil tank cars.

Response GP27-3

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for more information.

Comment GP27-4

Grays Harbor sits in a major earthquake and tsunami zone. Geologists say the odds of a “big” Cascadia earthquake happening in the next 50 years are approximately one in three. The odds of the “very big” one are roughly one in 10. According to the U.S. Geological survey the overdue earthquake could produce waves from 20 feet to more than 100 feet high. We can expect that wall of water would topple storage tanks washing away all the oil which could possibly ignite.

Response GP27-4

Refer to Master Response for Earthquake Probabilities for an explanation of how the probabilities of strong earthquakes reported in the Draft EIS relate to those identified in recent studies. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP27-5

Oil train fires, explosions and derailments

At least 10 crude oil trains have exploded recently in North America, including in July 2013 when an oil train accident in the province of Quebec killed 47 people. Between June 2011 and December

2013 a freight train derailed on average every 3.5 days in the Northwest region. There is no safe way to move oil by train: The tank cars that split open and burst into flames in Illinois in March 2015 were retrofitted to meet a higher safety standard than federal law requires according to railroad officials. The oil cars that derailed in West Virginia in February 2015, leaking oil into the Kanahwa River and burning down a house, were the newer 1232 cars that were supposed to be safer than the older DOT-111 models blamed for previous accidents.

Response GP27-5

Draft EIS Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* acknowledges the voluntary applicant measure for all new rail cars to meet or exceed the U.S. Department of Transportation Specification 117 design or performance criteria and the retrofitting of all existing tank cars in accordance with the U.S. Department of Transportation-prescribed retrofit design or performance standard (80 *Federal Register* 26643). However, as noted in Section 4.5.4, *Would the proposed action result in unavoidable and significant adverse environmental impacts related to rail transport*? the risks cannot be completely eliminated.

Comment GP27-6

Air pollution, spills and traffic from oil trains

Oil train spills hit record levels in 2014. In 2013 more oil spilled from trains into rivers, lakes, and marine waters than in the previous forty years combined. Increased rail traffic would almost double the emissions of pollutants from rail transport in the county. Parks and some homes near the project site could be exposed to higher levels of diesel particulate pollution shown to increase the risk of cancer, asthma and other respiratory ailments. Most of that diesel pollution from oil trains would be emitted near homes and businesses on a small section of tracks between Poyner Yard and the Westway and Imperium sites.

Response GP27-6

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of emissions related to onsite operation and rail and vessel transport of the proposed action and cumulative projects, respectively. The Final EIS sections reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analyses predict lower emissions of diesel particulate matter; the level of increased risk is not considered significant.

Comment GP27-7

In the City of Aberdeen, slow moving trains could block many streets at once, eliminating detour routes for first responders. Delays at Olympic Gateway Plaza could increase from between 49 and 70 minutes a day to between 96 to 112 minutes a day for the Westway project, and 108 to 138 minutes a day for the Imperium project.

Sources:

https://washington.surfrider.org/surfrider-releases-recreational-use-study-for-the-washington-coast/

http://daily.sightline.org/2015/02/23/grays-harbor-ship-traffic-the-impact-of-oil-plans/

http://thedailyworld.com/opinion/columnist/crude-oil-and-quakes-what-are-our-elected-officials-thinking

http://www.seattletimes.com/opinion/grays-harbor-oil-terminal-would-threaten-quinault-indian-identity/

http://www.psr.org/chapters/washington/enviro-health/climate-change/position-statement-on-crude-oil-transport.html

http://daily.sightline.org/2015/05/06/oil-train-explosions-a-timeline-in-pictures/

http://www.ecy.wa.gov/geographic/graysharbor/terminals.html

http://www.theolympian.com/opinion/opn-columns-blogs/article31730856.html

http://www.ecy.wa.gov/programs/spills/incidents/Nestucca/NestuccaHistory.pdf

http://www.standuptooil.org/

Response GP27-7

Final EIS Chapter 3, Section 3.16.8, *Would the proposed action have unavoidable and significant adverse impacts on vehicle traffic and safety?* clarifies that while implementation of proposed mitigation could reduce impacts on vehicle traffic, average and peak hour vehicle delays at the following grade crossings in Aberdeen would remain significant.

- Average hour: East Heron Street and Newell Street (Olympic Gateway Plaza area).
- Peak hour: Washington Street (Port of Grays Harbor area).

Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

Comment GP27-8

There are better way to meet our energy needs. Washington State is rapidly moving away from fossil fuels and towards clean, renewable sources to meet our energy needs and respond to global warming. I have invested in four solar photovoltaic systems for my family houses. I recently purchased an electric car. Building more, big infrastructure for yesterday's energy is the wrong path to meet today's energy needs and a big economic gamble for Grays Harbor.

I support protection of Grays Harbor and its people and urge you to reject the proposed Westway and Imperium oil terminals.

Response GP27-8

Comment acknowledged.

GP28, Allee, Pamela

Comment GP28-1

My name is Pamela Allee and I'm from Portland—I live in Portland. I'm also a grandmother and a former maritime engineer, mostly on tankers.

My comment is that no EIS is complete until it extends from source to usage and everything in between, which, of course, would be transportation. The burning flares of the Bakken and the total desolation of the tar sands extraction fields speak to assaults on the planet as incomprehensible as nuclear war, in my opinion, of course.

Those who assist in these hurts are as guilty as the initial perpetrators. No one can claim ignorance or innocence.

These assaults are criminal and the crime is both murder and suicide. Climate changes alone affect water, farming, fishing and disease. Rather than extending our invaluable human resources, we could be using these, our brains, our imagination, to implement creative ways to give good jobs that do not exhibit extreme stupidity and appalling greed.

Listen to the people, not the corporate line.

Thank you.

Response GP28-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

GP29, Alwood, David (H2Oasis, Inc.)

Comment GP29-1

I'm in favor of allowing expansion of facilities to transfer oil products through G.H., given the size of reserves, we as citizens would be remiss if we failed to take advantage of such a financial windfall.

Response GP29-1

Comment acknowledged.

GP30, Ammann, Harriet

Comment GP30-1

Thank you. My name is Harriet Ammann. I'm a toxicologist, and I've been an air pollution scientist since 1984 when I worked at EPA in the office of (inaudible) Health on background to the criteria of pollutants. I have worked for the State Departments of Health, and I work for the Department of Ecology Air Quality Program, and was the primary author of the Diesel Health Document.

So, my concerns is air pollution related to train and vessel traffic. And it is true that Grays Harbor community as a large entity does not violate the standards currently, but I'm talking about the local impact.

So nitrogen oxides are predicted in the EIS to come close to violating the one-hour standard. Where does nitrogen oxide come from? Diesel combustion is a high temperature combustion that combines the nitrogen and oxygen from the air. Nitrogen oxide affects the immune system and it affects the mechanical defense system of the lung. It is an atrament to allergens and increases the risk of asthma. That's just nitrogen oxide.

But nitrogen oxide also combined with particulate matter from diesel exhaust, particulate matter in itself, the Clean Air Act regulates it on the basis of premature mortality. Let's not use the technical term, that's premature death. We allow a certain number of premature deaths. This is not acceptable.

So diesel exhaust also is an atrament to allergens and it increases the risk of asthma. Let me go back for a minute to the people who die prematurely. It is primarily people who have heart problems and respiratory problems. From a public health point of view the heart problem are more important because there are more patients who have heart problems than have respiratory problems.

So I urge you that we have not really seen what is going to happen when the modeling turns out not to be true.

Response GP30-1

Draft EIS Appendix D, *Air Data*, Table 5, reports onsite emissions of criteria and air toxic pollutants, including those from onsite rail operations and vessel hoteling. Table 7 reports emissions of these pollutants from offsite rail and vessel transport in the study area.

As described in Draft EIS Chapter 3, Section 3.2, *Air*, the proposed action is subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping for onsite stationary sources. Refer to the Draft EIS for a list of permit conditions and proposed applicant mitigation that would reduce potential impacts on air quality.

GP31, **Anderson, Denise**

Comment GP31-1

My opposition is for the following reasons: 1. The financial impacts to the Cities of Hoq. & Ab as well as Grays Harbor county in lost B&O taxes and revenue to the business' located on the other side of the tracks cannot be mitigated and will negatively impact the quality of services to the residents of GH County. The potential loss of wages and employment to the employees and business' due to the long waits behind the trains also cannot be mitigated and will negatively impact the employment in these cities. The number of vessel calls to the Port will negatively impact the Tribal fisheries as well as the commercial and recreational fishing and crabbing in the Harbor and the Ocean due to the limits of water access during the time it takes these vessels to come and go through the Harbor.

Response GP31-1

Draft EIS Chapter 7, *Economics*, *Social Policy*, *and Cost-Benefit Analysis,* addresses economic considerations, social policy implications, and the costs and benefits associated with the proposed action. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7.

Draft EIS Chapter 3, Section 3.10, Recreation, Section 3.12, *Tribal Resources*, and Section 3.17, *Vessel Traffic*, describe potential impacts on recreational, tribal, and commercial fishing from construction and routine operation of the proposed action.

Comment GP31-2

2. The shorelines where the proposed sites will be located are sandy soils and subject to liquefaction.

This also includes the rail lines as well as the 15 plus bridges along the rail routes. I do not believe the shifting soil can be mitigated enough to prevent potential spills and accidents.

3. The proposed sites are located on a fault line with the high risk of an earthquake and potential for a tsunami, neither of which can be mitigated.

Response GP31-2

Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events.

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP31-3

4. The Treaty rights of the Quinault Nation will be violate with any interruption in fishing or crabbing in the Harbor or on the Ocean. This reason alone should be enough to stop crude oil shipments at the Port of Grays Harbor.

Response GP31-3

Comment acknowledged.

Comment GP31-4

5. The erosion along the banks of the Harbor due to the size of and number of vessel calls to the port cannot be mitigated.

Response GP31-4

As described in Draft EIS Chapter 3, Section 3.1.5.2, *Proposed Action*, proposed action vessel trips would result in a small, incremental increase in the potential for impacts associated with wake compared to the no-action alternative. Final EIS Section 3.1.5.2 explains the basis for this conclusion.

Comment GP31-5

6. With only one day of training for local Emergency responders is not good enough. This simply validates the fact that there is no amount of training that can prepare and protect responders and reidents in case of a spill or explosion.

7. Grays Harbor has to many sensitive wildlife habitat areas to risk losing them to a spill or accident.

8. The lack of maintenance and upkeep on all harbor rail lines and bridges causes extreme risks to waterways and residents along these lines.

9. The potential for a spill and or explosion and fire due to human error cannot be mitigated.

Response GP31-5

Comment acknowledged.

GP32, **Anderson, Gary**

Comment GP32-1

My name is Gary Anderson. I live in Olympia. I spent 12 years trying to clean up the water in the area. Don't waste it. If anybody thinks this is a good idea, well thank God I won't have to work for the next 20 years, because I retired.

But if you think this is a good idea, fly to Beaumont, Texas, drive to the Texas coast where I come from, all the way across the country. And if you get through without puking, this is a good idea.

Response GP32-1

Comment acknowledged.

GP33, Anderson, Glen

Comment GP33-1

Let's get REALISTIC! The "environmental impacts" go FAR BEYOND THE IMMEDIATE SITE. Your EIS ABSOLUTELY MUST include ALL environmental impacts! These include ALL of the MANY DIRECT AND INDIRECT environmental impacts related to EXTRACTING oil, TRANSPORTING it all along the route, TRANSFERRING it into the oil storage facilities in Grays Harbor, LOADING it onto ships, BURNING it in other locations around the world, and POLLUTING THE AIR AND DISRUPTING THE CLIMATE everywhere in the world. Unless your EIS addresses ALL of these, your process is a sham. The public already distrusts the Dept of Ecology, because POWERFUL POLITICAL AND BUSINESS INTERESTS REPEATEDLY OVERPOWER YOUR AGENCY'S HONEST SCIENTISTS and allow our ecology to be abused. In order to restore public trust, the Dept of Ecology ABSOLUTELY MUST do EVERYTHING possible -- and use the BEST AVAILABLE SCIENCE -- to FULLY EXAMINE ALL of the environmental impacts.

Response GP33-1

Comment acknowledged.

GP34, Anderson, Glen

Comment GP34-1

A virtual consensus of climate scientists agrees that THE CLIMATE CRISIS IS AN EXTREMELY SERIOUS -- AND EXTREMELY URGENT -- PROBLEM. Burning fossil fuels (coal, oil, gas) pollutes our atmosphere in ways that caused -- AND CONTINUALLY WORSEN -- the climate crisis. I am ABSOLUTELY APPALLED that you are considering these proposals, because BOTH PROPOSALS WOULD MAKE THE CLIMATE CRISIS MUCH WORSE.

Response GP34-1

Comment acknowledged.

Comment GP34-2

The REAL environmental impacts happen ALL THE WAY ALONG THE ROUTE from where oil is extracted, including the pollution damage and climate damage from those points of origin, and THE RISK OF SPILLS AND OTHER PROBLEMS ALONG THE RAIL LINE ROUTES AND PIPELINE ROUTES, to the proposed Imperium and Westway sites, where SPILLS ARE VERY LIKELY, and all the way across the Pacific Ocean to the FOREIGN NATIONS THAT WILL BURN THE OIL AND POLLUTE THE ATMOSPHERE AND DESTROY OUR CLIMATE. The EIS ABSOLUTELY MUST address ALL of these. Otherwise your process is a lying sham. THE CLIMATE CRISIS IS PART OF THE ENVIRONMENTAL IMPACT!!!!!

Response GP34-2

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in

the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

GP35, Andrews, Susan

Comment GP35-1

Name: Susan Andrews
City/State/Zip: Hoquiam, WA 98550

I would like to know if the people on the stage live in Aberdeen, Hoquiam area? If not, would they move here knowing what they know? I live in the blast zone, how would they mitigate / recompense all the people who would die? How would they give me back my life? Bottom line, it's about human lives.

Response GP35-1

Comment acknowledged.

GP36, Armley, Jeff

Comment GP36-1

Jeff Armley. I live in King County, Seattle. Where to begin. I mean, it starts with the fracking, oil and shell sounds; then oil by rail; and now refineries. Refineries.

Under current U.S. laws you cannot ship crude oil, but a little light refining, and wha-lah, transportable oil to overseas markets.

I'm not anti-oil. We need oil. But do we need to export it? Where will it be exported to and under? The Pan-Pacific tree, this is going to go, you know, to Asia. And once in Asia where do you think it's going to wind up at? It's going to fuel China's ambitions.

Right now I and many other people have been working with senators, congressmen, and we have new regulations for oil light rail as I think oil people will understand in the pipeline.

It seems to me that these people want to build these facilities as quickly as possible and then grandfather them in before these new regulations get set up. These new regulations are here to protect us against them.

Response GP36-1

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for more information. Refer to the Master Response for Purpose and Focus of the EIS.

Comment GP36-2

Not since the 1900's robber barons has there been more corporate irresponsibility and hostile actions taken towards the populous for no reason other than profiting very, very few people.

The jobs that I hear about for the construction that will not benefit Hoquiam. I'm a union man. Those jobs will be dispatched out of Seattle, Tacoma, and Olympia, and you've got to be union because a guy like me will be on site to make sure.

In the end, basically what we have here are oil companies and railroads acting like a bunch of bullies, cramming this down our throat before our legislative officials can regulate. Like any other bully, they don't want to play fair, and if we force them to play fair they'll take their ball and go home.

Response GP36-2

Comment acknowledged.

GP37, **Armley, Jeffrey**

Comment GP37-1

Once again, Jeffrey Armley, King County, Seattle. Once again I'm not quite sure where to begin. I heard the gentleman that this was a construction complicated matter, that to have two minutes just doesn't seem quite fair enough to address just even a smattering, if you will, of how complex this issue is.

It affects more than just Hoquiam. It affects all the way down that snaking monster. And it starts out in the Bakken oil field in the sand; it starts out in shell pits out in Oklahoma.

The earthquakes, they're polluting the Olalla Aquifer. That's going to poison over five states. This is just—I mean, it's insidious what they're doing.

And your decision doesn't just affect your little square acre, it affects all the way down the line.

We have regulations in the pipeline that are going to be much better than this oil baron mentality that is going on now.

These guys are water barons. This is as it was in the early 19th Century. They need to be regulated. This isn't the Wild West. Empire has been built. They need to be regulated. And the regulation is in order now. If they were to build now, that means we would have an inferior structure that's going to be grandfathered in and they will go on business as usual. If nothing else, wait until the new regulations get put into place. They are in the pipeline. Even the oil man understands that. That's what makes me think they want to get this over with real quick. Don't do it. Thank you.

Response GP37-1

Comment acknowledged.

GP38, Armstrong, Jude

Comment GP38-1

My name is Jude Armstrong. I live in Hoquiam, Grays Harbor County. I've been looking forward to this day for a long time, but I've got to tell you, I haven't been able to get my homework done. The study is so long, I don't know how anybody is going to plow through those thousands of pages and get you really good written comments. But I'm going to try, as are most are of my friends. So we will be submitting written testimony. Just give us another couple weeks.

I looked around to see if there's anybody here from Westway or from Imperium, and I think that we do have one from Imperium. I just want to say that when Imperium came to Hoquiam, we were so happy they were going to come and produce clean energy. And Brian you're partly responsible for that. So I appreciate it. And now with REG coming we hope you will be able to continue in that clean energy tradition.

Westway was great, too. It's good that we're trying to feed the world. But I -- I'm feeling like that I'm really on a battle line against crude oil, and I'm really sorry that Westway and Imperium and REG are involved with it, because they were really good for us.

There's so many reasons that have been given to you today that I could give more of them, but two minutes is too short. I just want you to know what my intent is and what I beg you to do.

Please, don't destroy our way of life. Don't destroy my ability to bring my grandchildren here to enjoy a summer vacation.

Please don't destroy our health. I have problems with COPD. It's going to be a real challenge for me if they come. Don't destroy the safety we want for all of our children.

Response GP38-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP39, Ashby, Crandall

Comment GP39-1

Westway and Imperium Draft EIS (DEIS) comments.

"The DEISs for Westway and Imperium show that the risks of oil spills, train accidents, increased train and oil tanker traffic, air pollution, noise, harmful impacts on tribal culture and resources, and vehicle delay at railroad crossings cannot be fully mitigated and could cause significant environmental damage.

These proposals simply offer too much risk and too little reward. Grays Harbor communities would take on the risk and oil companies would reap the profits, while Grays Harbor would become a through way for oil headed elsewhere.

Much of what makes Grays Harbor special would be put at risk. A single major oil spill could devastate the area's maritime economy, productive fisheries, tribal cultures and economies, and spectacular coastal waters.

Response GP39-1

Final EIS Chapter 3, Section 3.2, *Air*, has been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analysis predicts lower emissions; the updated level of increased risk is not considered significant. Therefore, the Final EIS concludes no potential unavoidable and significant adverse impacts on air quality.

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP39-2

The alarming safety record of oil trains means an explosive oil train derailment is not a question of if, but when. Less dramatic but equally concerning is the air pollution, spill risks, and traffic delays oil trains would bring to communities along the rail line, from Aberdeen to Chehalis and all the way to the source of the oil in North Dakota and Canada".

Response GP39-2

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*, which presents the analysis of potential impacts on air quality, water quality, and traffic in the study area related to routine operation of the proposed action.

Comment GP39-3

The above statement expresses my concerns. I commercial fish for a living as does my extended family. Crude oil shipments and storage on the banks of the Grays Harbor (GH) estuary is threatening to our fisheries and local economy. There is one type of crude oil that is especially threatening and that one is dilute bitumen (dilbit) from Canada. This type of crude is not covered under the GH Geographic Response Plan. It sinks in water when spilled and would not be retrievable if a spill happened. The mitigation for a spill in GH is the Geographic Response Plan which would not work for dilbit. This puts our family and all other fishermen at a high level of risk that would destroy

our local fisheries up and down the coast of Washington. Please put a section in the DEIS covering dilbit and how it would be recovered if a spill happened. If an oil spill can't be contained and mitigated then the projects should not be allowed.

Response GP39-3

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Mod*eling, refer to the Master Response for Oil Spill Modeling Methods. To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill.

GP40, **Ashby, Dan**

Comment GP40-1

RE: Comments to Draft EIS for lmperium and Westway

10/09/15

Dear Hoquiam and DOE,

Last evening there was a public hearing concerning oil terminals held in Aberdeen. People talked about bomb trains in recognition of how train wrecks carrying North Dakota crude often explode into fire balls. Much of the 2 minute testimony per person centered on the scope of the projects DEISs. Discussion centered on how there are many communities that these oil trains, headed to Hoquiam, will pass through. In fact many of the commenter's were from distant communities with real concerns about mile long oil trains and the dangers they pose for their citizens. As an example: The commenter from Hood River was worried about how an oil spill into the Columbia would endanger salmon migrations at the dam's fish passage ways and cited scientific data as proof. Another east of Vancouver commenter was worried about the train tracks close to schools all along the way from North Dakota to Hoquiam. Even another, who couldn't attend from Spokane, had a person read their concern about elevated train tracks, river crossing over drinking water sources and proximity to large population centers. There were many like commenter's with distant local concerns.

he DEIS only covers from Centralia to Hoquiam now. Because of the huge amount of oil train traffic now being anticipated for the North West it is only prudent that these remote concerns are addressed as it is not fair for local projects with a proposed local benefit to shift costs and impacts to other communities without resources to pay for them. The DEIS should be opened up to include all the impacts from North Dakota and Canada to Hoquiam.

Another point in the DEIS that needs to be addressed.

Response GP40-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP40-2

I'm a commercial crab fisherman. Our whole extended family fish for a living or work in the bay as oystermen. The DEIS does not address crude oil from Canada that does not float but sinks to the bottom when spilled into water. The DEIS needs to address this and add a section to explain how this tar sands oil will be mitigated for and cleaned up in case of a spill. Another point to be acknowledged is rail cars that leak crude while in transit. This has been an ongoing problem for crude oil trains in the state and would create serious long term problems for fisheries in GH and the ocean. If these issues can't be mitigated then these projects should not go forward as the risks far exceed any employment benefits.

Dan Ashby
78 Groveland Ave.
Aberdeen, WA 98520

Response GP40-2

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Modeling*, refer to the Master Response for Oil Spill Modeling Methods. To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill.

Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for additional information about the analysis of emergency planning and response capabilities. For more information about the development, implementation, and enforcement of mitigation measures, refer to the Master Response for Mitigation Framework.

GP41, **Ashby, Dave**

Comment GP41-1

Comments to draft EIS Westway-lmperium.

Dear Sirs,

Our family has commercial fished, sport fished and hunted in Grays Harbor county for over a century. Oil terminals on the GH estuary are the biggest threat that has ever been proposed. Our

family has over 14 members making a living off the ocean and bay and the draft EIS does not disclose what a spill would mean to our family members.

A more through EIS would study the impacts of an oil spill in the estuary and give citizens a review of what real impacts would mean to their livelihoods and to their families. There has been economic studies prepared by the Quinault Indian Nation and Friends of Grays Harbor that shows how much fishing and hunting add to the economic well being of the county. Please add these to the draft and put them in a location that is easy to find. Doing this would add real meaning to the draft EIS. Someone said this below quote and it makes perfect good sense to our family.

"Although the likelihood of a large spill, fire, or explosion is low, the potential for significant adverse impacts on the environment and human health in the case of such an incident is high"

Dave Ashby

Response GP41-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP42, **Ashby, Ken**

Comment GP42-1

Westway and Imperium crude oil-by-rail terminal EISs.

A quick read of the DEIS reveals that there is missing information and a thorough understanding of the natural environment where these projects are being located. The projects are to be serviced by a railroad (RR) that was built to haul logs and lumber to distant markets. The RR's were built to standards of their time, in the latter 1800s, with less than modern engineering techniques. They cross or are adjacent to as many as a 100 streams and rivers. This is just on the line from Centralia to Hoquiam. These waterways feed into the Grays Harbor estuary that serves as a nursery for many species that support the economic base of GH county. Any spill will ultimately end up in the estuary. Fully 30% of GH's economy is marine related.

Response GP42-1

The commenter does not provide sufficient detail on missing information to allow for a response.

Comment GP42-2

A simple reading of daily newspapers and we learn that these trains hauling crude oil crash, spill, and burn on a regular basis. We also learn there is great difficulty in cleaning up the mess from a spill with associated high costs with some as much as a billion dollars. Even though cleanup is accomplished to some degree, on average only 14% is ever retrieved. Add in the reality of remoteness of the crossings, the nature of the product being hauled and the new analysis by safety experts about the why crude oil trains crash and you have real concern about these projects.

Response GP42-2

Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for additional information about the analysis of emergency planning and response capabilities.

Comment GP42-3

Remoteness of crossings- There is no simple way to get to many of these possible spill locations. At best it would take days to marshal any type of true cleanup operation. As an example- the Chehalis River Surge Plane cleanup must contemplate tides, high river flows and dense vegetation. The bridges are antiquated and feeble at best. The RR road beds are spongy and soft in a climate that has over 80 inches of rain most years. In recent years the local RR has experienced three derailments with one derailment just toppling over and while not even moving and also adjacent to the Chehalis river.

Response GP42-3

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. The geographic response plans referenced in Final EIS Chapter 4, Section 4.2, *Applicable Regulations*, provide additional information on sensitive resources that could be affected by a spill at specific locations in the study area. The plans also identify appropriate response strategies. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including impacts on the Chehalis River.

Comment GP42-4

The product- the RR has said it must haul legal products in North America. One product that they have to haul is dilute bitumen (dilbit) out of Canada's tar sands in Alberta. Canada is looking for markets for this product and the Canadian government has not been able to get sufficient pipelines from Alberta to BC to ship from Canadian ports. It is assured that if GH is an oil port dilbit will be shipped here. The problem with dilbit is that when spilled it sinks in water. There is no known approved technology to clean up dilbit in water. Even DOE is struggling to develop a technology and the best minds have not resolved this problem. These oil shipping projects in GH rely on current

technology to cleanup a spill as stated in the DEIS but the technology does not exist for the dilbit they propose to cleanup.

Response GP42-4

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Modeling*, refer to the Master Response for Oil Spill Modeling Methods. To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill.

Comment GP42-5

New analysis- currently new information reveals that because of the nature of long crude oil trains (over 100 tank cars long), track harmonics, sheer combined weight, and rail deficiencies oil trains are crashing often in America. A casual review of the railroad conditions in GH, Thurston and Lewis counties and a conclusion would be that these local rail facilities are below standards of Class One mainlines that are experiencing recent crashes.

Response GP42-5

As stated in Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, the PS&P rail line is considered a Class 3 short-line railroad by the Surface Transportation Board based on its annual revenue. The Federal Railroad Administration (FRA) classification of railroads is based on the number of mainline tracks and operating speed. PS&P tracks are registered with FRA as Class 2 tracks with an overall maximum speed of 25 miles per hour for freight trains, although there are exceptions to the maximum speed in certain areas as noted in Section 3.15.4.2, *PS&P Rail Line Track Conditions and Physical Characteristics*.

Comment GP42-6

I'm a crab fisherman and my extended family all fish commercially and recreate in the GH area as our ancestors have. Bringing crude oil facilities to GH is a high risk endeavor with low benefits to local citizens. DOE and the city of Hoquiam must factor in my concerns and the DEIS must reflect in real terms just how my concerns are going to be mitigated. If these concerns can't be remedied then Westway and lmperium projects should not go forward.

Kenny Ashby
PO Box 2165
Westport, WA. 98595

Response GP42-6

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP43, Ashby, Nicholas

Comment GP43-1

Comments to: lmperium and Westway Expansion Projects DEIS.

Dear Sirs,

I come from a large fishing and hunting family. Fishing and oystering is what we do to make a living. All of our extended family is commenting on these projects because of the seriousness of the issue. Many folks at hearings have stated that in Grays Harbor (GH) county 30% of the economy is marine related. This is a true statement and proven by recent studies contracted by Surf Rider Foundation. If there was ever a crude oil spill all these jobs would be lost as well as the economic activity provided by the natural environment. The DEIS does not develop a vision of how a spill would impact this economic activity and develop a strategy for mitigation. The DEIS recognizes over time a spill will happen but does not go that next step of study and mitigate the total impacts.

Response GP43-1

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP43-2

In recent years a Geographic Response Plan (GRP) has been updated to cover the estuary and ocean in case of an oil spill. The updated plan does not address how oil that sinks (Canadian Tar Sands crude or dilbit) would be cleaned up and the fact that a Government Transportation Study relates that only 14% of spilled oil is even recaptured. This is of great concern for fishers as all the natural animals living in the ocean and estuary frequent this environment. One can only imagine how thousands of gallons of oil that sinks will affect these animals and juvenile forms. As an example: GH has been fortunate to not have endangered species designations in their salmon stocks. How would two years of oil spill contamination affect smolts and fry returning to the estuary and ocean on out migration. Studies in the Alaska Valdez spill salmon are still being impacted by that spill. Would this happen in GH? Also- these two developments could be shipping all dilbit (millions of gallons a day) in the future as all the associated transfer and storage facilities are profit driven.

Response GP43-2

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4,

Environmental Health and Safety, and Appendix N, *Oil Spill Mod*eling, refer to the Master Response for Oil Spill Modeling Methods. To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill.

Comment GP43-3

Then there is this issue with the local rail road: The EIS implies that the local railroad creates little additional danger to the present traffic and compares our local line to the main lines of BNSF. Truth is there Is a huge difference In as BNSF Is a class one line hauling vast amounts of goods and relatively well maintained. While the local PS&P is ill maintained and has had three derailments in the last two years. Add in that the local RR skirts or crosses over 100 streams and rivers between Centralia and Hoquiam. One derailment would devastate valuable fisheries and clamming in the GH area. A full review of the PS&P railroad and its ability to haul crude oil to Hoquiam and an engineering study to recommend full replacement of the line before it is used to haul oil should be part of the DEIS.

Response GP43-3

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Section 4.5, *Environmental Health Risks—Rail Transport*, addresses potential rail accidents and derailments.

Comment GP43-4

It is interesting, to my knowledge, there has never been a shakeout or performance drill for the GH GRP. Without a test drive this plan is just hope and hope is not a responsible plan to deal with an oil spill. Especially in light of a spills potential devastation of the local environment and economy. A full review and test drive of the GH GRP should be initated. The test drive should be under varied conditions and not the perfect conditions the GRP is develop upon. The GRP also requests that local fishermen help with oil recovery. This should be part of the test as all parts need to be tested for GRP completeness.

Response GP43-4

Comment acknowledged.

GP44, **Ashby, Steve**

Comment GP44-1

Westway and lmperium crude oil by rail terminal EIS-draft comments.

Sirs,

These are my comments to the draft EIS. Our family have clammed, fished, commercial fished and hunted many years around Grays Harbor and the Pacific ocean. GH has provided for our family and brother's families far back in history as well as today. During the Great Depression my uncles, aunts, parents and grandparents survived because of what was offered in the marine environment and the woods. Even up until today the ocean and bay keep giving.

Marine oil terminals are not the answer to unemployment for the "Harbor". Though they create some jobs they threaten our way of life as crude oil spills and the always drip, drip, drip of this product into the environment never stops. While fishing years ago the crab fishermen experienced this:

1998 Dec. 23: Barge Nestucca broke loose from tug, sustained a six-foot gash in its side when it collided with the tug, spilling 231,000 gallons of bunker oil off Grays Harbor. More than 3,500 seabirds were killed, mostly encapsulated in a thick oily mousse as they washed up on Vancouver Island.

From this spill the Dungeness crab fleet was put at risk of lost fishing time and damage to their fishing gear. Many birds along the coast were lost and clamming was impacted. The one thing not known was what long term damage was done to the crab and clam resource. Studies were not required.

Response GP44-1

Comment acknowledged.

Comment GP44-2

The DEIS glosses over potential oil spill impacts to fisheries. The DEIS should at the very minimum outline losses to fisheries over time in case of drip, drip, drip or a major spill.

Response GP44-2

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including on fish and other aquatic species. The Final EIS section acknowledges that these potential impacts would affect commercial and recreational fisheries.

Comment GP44-3

The DEIS should do more in the way of studying how dilapidated the rail line into Hoquiam is and require a full blown upgrade before any crude comes to GH. There have been three derailments in

the last couple of years and pictures showing the poor quality of the RR Bridge at Wynoochee brings pause to these projects.

Response GP44-3

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

For more information about the development, implementation, and enforcement of mitigation measures, refer to the Master Response for Mitigation Framework.

Comment GP44-4

Another requirement is the DEIS should show how barge and ship traffic is managed in an estuary currently with all the marine traffic there already. At best only 14% of spilled oil is picked up. A study needs to examine just how the remaining unrecovered oil will hurt marine resources. These are all potential costs and need to be identified and mitigated not glossed over.
In closing- if all the potential impacts can't be mitigated then these projects should not be developed as the potential impacts far outweigh the benefits to the community.
Steve Ashby (Commercial Fisherman) Amy [?] A. Ashby (spouse 92 Groveland Ave Aberdeen, WA. 98520
F.U. [indecipherable]

Response GP44-4

Draft EIS Chapter 3, Section 3.17.4.4, *Vessel Traffic Management*, discusses the systems that are in place to manage vessel traffic in Grays Harbor safely. The Final EIS section provides additional information. Chapter 4, Section 4.6, *Environmental Health Risks—Vessel Transport*, presents an analysis of potential impacts from increased risk of vessel collisions, groundings, and allisions and related consequences (e.g., release of crude oil) under the proposed action, and proposes mitigation measures to reduce the likelihood of a vessel incident. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP45, **Atkinson, Kim**

Comment GP45-1

The DEIS failed to substantively address the concerns raised by many. The specific concerns are related to the Columbia River Gorge National Scenic Area. This is inconsistent with the scenic area act, and it is illegal under the State Environmental Policy Act to ignore these impacts. The DEIS fails to disclose the actual risk of an oil spill or explosive accident in the Gorge.

The DEIS provided analysis of the risk of a spill or explosion near the facility where maximum speeds are limited to 25 mph. The DEIS completely fails to disclose the risk of spills and explosions in the Gorge, where the maximum speed is 50 mph for unit trains of oil and 60 mph for mixed-commodity trains with up to 34 oil tank cars dispersed throughout the entire trainThe DEIS fails to analyze the likelihood of a spill in the Columbia River along hundreds of miles of the BNSF rail line. Along with failing to analyze the likelihood of a spill, the DEIS fails to analyze safety impacts to local communities, environmental impacts to threatened and endangered salmon species in the Columbia River, and operational impacts on Columbia River Dams. There are better way to meet our energy demands.

Response GP45-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

Comment GP45-2

Washington State is rapidly moving away from fossil fuels and towards clean, renewable sources to meet our electricity needs and respond to global warming. Building more, large infrastructure for yesterday's energy is the wrong path to meet today's energy needs and a big economic gamble for Grays Harbor. Washington state should continue to lead on safe, renewable, clean energy solutions and say no to more oil and coal. I urge you to do everything in your power to stop these dirty and dangerous projects. I urge you to protect Grays Harbor, the Columbia River Gorge, and our communities by rejecting the proposed Westway and Imperium oil terminals.

Response GP45-2

Comment acknowledged.

GP46, Attermann, Rein

Comment GP46-1

Good afternoon. My name is Rein Attemann. I'm here on behalf of Ben Stuckert who is president of Spokane City Council who cannot be here today. Our city serves a major rail hub in the Northwest. We used to like that designation. It used to mean that local exports could get their products fast.

Being a rail hub used to mean you had economic advantage. Unfortunately, for us it means we could be the location of the next environmental catastrophe. The rail hub is losing its value. Miles and miles of fossil fuel trains are creating a significant public safety risk. The alarming increase of mile-long explosive oil trains coming through downtown Spokane puts the members of our community at incredible risk.

We see the terrifying video explosions and derailments in North Dakota, West Virginia and Alabama. I can say I am not confident in our public safety teams and these railroad companies are logistically coordinated enough to handle the devastation as what has happened in these areas of these states.

The bottom line is that we cannot sit idly by until we're the next Quebec, Alabama, North Dakota, Spokane, King County, Grays Harbor, Vancouver, or any other community across the state. I ask that you thoroughly consider any and all impacts that this project will have to the safety, and health, and security of the residents of Spokane and extend that cumulative impact analysis.

Thank you.

Response GP46-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP47, Autrey-Schell, Yovonne

Comment GP47-1

Neither Westway nor Imperium are willing to put up a bond to fund cleanup of the inevitable oil spills that will occur. When they do occur, our shellfish beds will suffer, as will the fisheries of Grays Harbor and surrounding areas. Our local economy consists largely of aquaculture/fishery operations and tourism, which will be devastated when a spill occurs. This is not even taking into account the damage that will be done to local streams and rivers, as well as Grays Harbor itself and the waters of the Pacific ocean outside the harbor. Please do not allow these oil terminals and rail transport into Grays Harbor! The risks and inevitable harm, to both the environment and our local economy, do not outweigh the few jobs that will be opened because of the operation.

Response GP47-1

Draft EIS Chapter 4, *Environmental Health and Safety*, Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP48, **Avery, Jean**

Comment GP48-1

Environmental Health Risks—Rail

Comments on Grays Harbor Draft DEIS by Jean M. Avery

Text is taken directly from the DEIS [**boldface added**]. *My concerns are in italics.*

Based on this DEIS, pursuing the proposed action in Grays Harbor would be reckless and dangerously irresponsible. It seems that Westway is not prepared for the realities of the high-risk transport of volatile oil.

The DEIS admits that "a large spill or explosion would have unavoidable and significant adverse impacts," and that "no mitigation measures would completely eliminate the adverse consequences of a large spill or explosion."

More specifically, the DEIS states that "most emergency response organizations will not have the available resources, capabilities, or trained personnel to safely and effectively extinguish a fire or contain a spill of this magnitude…. Response to unit train derailments of crude oil will require specialized outside resources that may not arrive at the scene for hours."

Also note: THE LOCAL FIRE DEPARTMENTS ALONG THE PS&P RAIL LINE DO NOT HAVE TECHNICAL HAZARDOUS MATERIAL TEAMS.

The comments below are further evidence for lack of preparedness by Westway for a major disaster.

Page	Risk?	Comment / Concern

4.5-4 4.5-3 4.5-5 4.5-6	High	Under the proposed action plan, potential risks related to oil spills, fires, or explosions associated with rail transport include: • potential for more frequent spills of bulk liquids relative to the no-action alternative • potential derailment resulting in a spill of up 900,000 gallons, or 21,400 barrels or 30 full tank cars. The DEIS tries to estimate that such spills will not happen except in 11,000 years. However, previous incidents in Lac-Mégantic, Québec; Casselton, North Dakota; Aliceville, Alabama; and Lynchburg, Virginia have been more significant than estimated risks. The DEIS also states that **"it is not possible to predict the timing or magnitude of an incident.** " Also, **"the movement of spilled oil in the Chehalis River can vary dramatically, depending on weather conditions and hydrologic flow conditions." "Oil could move into the estuary in as few as 7.6 hours."**
4.5-2 4.5-3 4.5-7 4.5-12	High	Speed and length of trains are critical factors in predicting severity of a derailment: • **Previous derailments occurred at 5, 6, 10, and 5 mph.** • The PS&P rail line maximum speed is 25 mph. • The prevention plan includes reducing speeds to **no more than 40 mph.** • Trains traveling to the project site would consist of unit trains (longer trains carrying a single commodity) of oil. Increasing the number of cars carrying high-hazard commodities increases the chance of environmental harm in the event of rail incident. • An oil leak could occur over several miles of track. *Who will enforce standards for speed and length? Even at low speeds, there can be derailments.* *"Voluntary Measures" and "an emergency preparedness workshop…not more than one day in length…and at least once annually" are not sufficient preparation for such high-risk situations.* The DEIS even suggests that "Ecology should urge the legislature to amend current laws…and seek funding for a grant program to supply firefighting equipment and oil spill response equipment to local responders along the rail line. *This sounds like a clear admission that the resources are not sufficient to deal with high-risk situations.*

4.5-3 4.5-4 4.5-7 4.5-10	High	The new oil types include heavy crude oils such as bitumen from Canada and Bakken crude from North Dakota. Bakken crude oil is more flammable than other heavier crude oils. Trains carrying such oil are **"high-hazard flammable trains."** ***The DEIS seems dismissive of dangers of explosions, saying that long-term historical data show that most spills do not result in fires or explosions.***

Response GP48-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations, including updated requirements as described in Section 4.2, *Applicable Regulations*. Chapter 4 also identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. The geographic response plans referenced in Section 4.2 provide additional information on sensitive resources that could be affected by a spill at specific locations in the study area. The plans also identify appropriate response strategies. However, as noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

The results presented in Draft EIS Chapter 4 are not directly comparable with studies that evaluate risks outside this area (e.g., the BNSF main line). This is mainly because the risk analysis presented in the Draft EIS is specific to the PS&P rail line. There are substantial differences between the study area (PS&P rail line) and the extended study area (e.g., BNSF main line) with respect to rail transport conditions. The scale of the nationwide rail system is more than a 1,000 times the length of the 59-mile-long segment of the PS&P rail line in the study area and different classes of rail travel at different speeds and under different regulatory requirements. Many more trains travel each day on the main lines. For these reasons, the likelihood of an incident occurring in the study area is lower than the likelihood of an incident occurring on the entire mainline rail system.

Refer to the Master Response for Risk Assessment Methods for a discussion of the assumptions, data sources, and methods used in the analysis of risks.

Comment GP48-2

4.5-11 4.5-12	High!!!	The DEIS quotes the Pipeline and Hazardous Materials Safety Administration (2014): "In the event of an incident that may involve the release of thousands of gallons of product and ignition of tank cars of crude oil in a unit train, **most emergency response organizations will not have the available resources, capabilities, or trained personnel to safely and effectively extinguish a fire or contain a spill of this magnitude** (e.g., sufficient firefighting foam concentrate, appliances, equipment, water supplies). **Response to unit train derailments of crude oil will require specialized outside resources that may not arrive at the scene for hours."** **THE LOCAL FIRE DEPARTMENTS ALONG THE PS&P RAIL LINE DO NOT HAVE TECHNICAL HAZARDOUS MATERIAL TEAMS.**

Response GP48-2

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment GP48-3

4.5-6 See also 4.7	High	Per Table 4.5-1, there are sensitive habitats along the PS&P Rail Line: • Three marbled murrelet critical habitat areas - 3 miles • Three crossings of bull trout streams designated as critical habitat areas - 2 miles • Chehalis River Surge Plain Natural Area - 6 miles • Stretch of Chehalis River close to the rail line, designated as critical habitat for bull trout – 10 miles • Critical habitat for the Oregon spotted frog along Black River - 10 miles • Locations of two sensitive plant species (multiple location between US Route 12 and the Black River crossing – 10 miles

Response GP48-3

Comment acknowledged.

Comment GP48-4

4.5-8		The local responders will do what is necessary to evaluate and report on the situation, keep themselves and the public safe, and monitor response and cleanup operations for compliance with local ordinances and permits. Steps to isolate or evacuate may be required. *Who are the local responders, how many are there, and are they capable of timely and effective response.* Per the DEIS, the U.S. Environmental Protection Agency, U.S. Coast Guard, and Ecology may take a more aggressive role in the initial response operations to ensure that the responsible party is taking appropriate and timely action to mitigate damages to the environment. ***But hours matter!***

Response GP48-4

Refer to Response to Comment GP48-2.

Comment GP48-5

4.5-8	High!	*Loop-holes in "emergency preparedness":* The federal basic oil spill response plan (49 CFR 130) currently applicable to rail operators with oil shipments of a capacity of 3,500 to 42,000 gallons per car **does not require** equipment to be contracted and available for an immediate response to an oil spill….Prior to adoption of [additional] rules, the federal oil spill response plans will be used to meet the state requirement. ***Then who will respond, contain the spill, and ensure safety of persons, wildlife, and environment?*** Placement of booms is part of the response plan. ***But booms won't help if there's an explosion.***
4.5-9	High!	In some cases, economic considerations may dictate response priorities (for example preventing oil from affecting a dock area near a waterside restaurant or a marina). These priorities are discussed prior to a spill and reflected accordingly in the GRPs to prevent a delay in the allocation of **potentially scarce response assets** during an active spill response. ***The DEIS admits that response assets are scarce.***

Response GP48-5

Final EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport*, has been revised to reflect updates to state regulations requiring rail operators, such as the PS&P, to develop oil spill contingency plans consistent with WAC 173-186. Oil spill contingency planning will require identification of appropriate response strategies and response assets. Refer to the Master Response

for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS.

Comment GP48-6

4.5-16	High	*The DEIS seems to be avoiding responsibility – passing the buck? – by boldly suggesting :* To improve response capability on the Chehalis Tribe Reservation in the case of an oil spill, the Chehalis Tribe should identify members who could respond to oil spills and provide this information to PS&P and the Grays Harbor Local Emergency Planning Committee. To improve response capability in Grays Harbor in the case of an oil spill, the Quinault Indian Nation should identify members who could respond to oil spills and provide this information to PS&P and the Grays Harbor Local Emergency Planning Committee. *In other words, the tribes will have to manage on their own?*

Response GP48-6

The mitigation measure the commenter is referencing recognizes that Quinault Indian Nation and Confederated Tribes of the Chehalis Reservation members may be the first on the scene of an accident. Early notifications and initial responses can reduce the impacts of spills. A separate mitigation measure proposes annual training for hazard awareness oil spill training for the tribes to provide information on danger and improve safety. As stated in the Draft EIS, the local fire and police departments are the most likely first responders. The state and federal response system would be used to determine the appropriate level of response for a spill or incident.

Comment GP48-7

4.5-16		*The DEIS naively suggests that a public awareness campaign will be adequate:* To reduce the risk of an incident on the PS&P rail line, PS&P should work with local officials to collaborate and initiate a comprehensive community awareness campaign to educate and inform the public of the dangers of trespassing into the railway and trying to beat a train.
4.5-16 4.5-17	High	**A large oil spill or explosion would likely cause unavoidable and significant adverse environmental impacts.** ***Hoping that* "the likelihood of a large spill or related explosion is low, ...the potential for significant consequences to the environment and human health in the case of a large spill or explosion is high.** **No mitigation measures would completely eliminate the possibility of alarge spill or explosion, nor would they completely eliminate the adverse consequences of a large spill or explosion.**

Response GP48-7

Comment acknowledged.

GP49, Avery, Jean

Comment GP49-1

Environmental Health Risks—Vessel Transport
Comments on Westway/Imperium Expansion Project at Grays Harbor Draft EIS
by Jean M. Avery
Text is from DEIS (**boldface added**). *My comments are in italics.*

It seems that the DEIS states the risks many times, and then minimizes those risks as unlikely. But, if incidents cannot be predicted, they cannot be discounted.

The DEIS clearly states: A large oil spill or explosion would likely cause unavoidable and significant adverse environmental impacts…[and] the potential for significant consequences to the environment and human health in the case of a large spill or explosion is high.

Page	Risk?	Comment/Concern
4.6-1 4.6-3 4.6-5 4.6-13	Too high to be ignored	Per the DEIS: • **It is not possible to predict the timing or magnitude of an incident.** • Spill scenarios describe possible spills of 105,000 gallons to 15.1 million gallons. *If incidents cannot be predicted, then they cannot be discounted. Yet, the DEIS estimates no occurrences for 120 years or more! The DEIS also seems to minimize the spills, because they were "less than a full discharge of contents."* Historically, there have been several vessel incidents in Grays Harbor: 28 from tankers and tank barges in 13 years. One spill affected beaches as far south as Oregon and north to Vancouver, British Columbia. The DEIS clearly states: **A large oil spill or explosion would likely cause unavoidable and significant adverse environmental impacts…[and] the potential for significant consequences to the environment and human health in the case of a large spill or explosion is high.**

Response GP49-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Section 4.6.3, *What mitigation measures would reduce impacts related to vessel transport?* to reduce the likelihood of a spill reaching the environment and the potential impacts if an incident were to occur in Grays Harbor. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. For more information about the data, assumptions and methods used in the risk

analysis, refer to the Master Response for Risk Assessment Methods and the Master Response for Environmental Health and Safety Analysis.

Comment GP49-2

4.6-3	High	Grays Harbor has navigational challenges, including a bar at the entrance to the harbor, a constrained navigation channel for deep-draft vessels, and sharp turns in the channel.

Response GP49-2

The comment repeats text from the Draft EIS.

Comment GP49-3

4.6-6 See also 4.5	High	*How can a spill be contained? And whose responsibility is it?* Per the DEIS, the owner or operator activates the vessel contingency plan by making notifications and coordinates with Ecology and the U.S. Coast Guard to take any necessary actions to protect the public health, welfare, and natural resources of the state. • The GRPs describe response strategies such as placing booms to close off access of spilled oil into environmentally sensitive sites. ***If there is an explosion, booms won't help.*** ***Are there sufficient resources?*** **According to Section 4.5, resources are limited.**

Response GP49-3

Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for additional information about the analysis of emergency planning and response capabilities. For more information about the development and implementation of mitigation measures, refer to the Master Response for Mitigation Framework.

Comment GP49-4

4.6-11 4.6-13		To reduce the risk, the DEIS indicates that Westway will ensure that vessel traffic is limited while a laden tank vessel is in the navigation channel. Also, the DEIS suggests that the USCG should research the need for a one-way channel transit along the inner harbor for laden tank vessels and, if needed, revise regulations. *What about other boats in the harbor? What about tribal fishing boats? What about recreational boat?*

Response GP49-4

Traffic-related impacts specific to recreational and commercial fishing boats are addressed in Chapter 3, Section 3.10, *Recreation,* and Section 3.17, *Vessel Traffic*, respectively. As noted, potential conflicts within the navigational channel are not anticipated to be frequent. Further, recreational

boats and commercial fishing boats can navigate around larger vessels limited to the navigation channel to avoid potential impacts. Implementation of mitigation measures described in Section 3.17.7.1, *Applicant Mitigation*, to provide advance notice of arrivals and departures would reduce impacts on these types of boats.

Comment GP49-5

4.5-14		*Who will pay? Will the vessel operators cover all costs, or will taxpayers have to pay the remaining amount?* Washington State law requires tank vessels to pay at least 1 billion dollars. **Washington State places no limits on liability of third parties, allowing the state to recover cleanup costs and natural resource damages beyond the federal limit.**

Response GP49-5

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP50, Avery, Jean

Comment GP50-1

Environmental Health—Impacts on Resources
Comments on Westway/Imperium Expansion Project in Grays Harbor Draft EIS
by Jean M. Avery
Text is from DEIS (**boldface added**). *My comments are in italics.*

In my view, this whole enterprise seems like Russian roulette! – hoping that catastrophes will not happen. Many times over, the DEIS states that incidents cannot be prevented or fully mitigated. To proceed with the proposed action plan in the face of these high risks is basically choosing to accept the consequences and live with the damage: *very high cost for what gain?*

Plants, animals, ecosystems, and humans could be adversely affected.

The DEIS states that "ground water could be contaminated and drinking water is at risk" – and there is no mitigation.

As stated many times in the DEIS, **"no mitigation measures can be implemented that will completely eliminate the possibility of a large spill, nor are there any mitigation measures that will completely eliminate the adverse consequences of a large spill ."** FYI, thirteen (13) incidents are documented in chapter 4.7 pages 17-18 of the DEIS.

Response GP50-1

For more information about the development, implementation, and enforcement of mitigation measures, refer to the Master Response for Mitigation Framework.

Comment GP50-2

4.7-1 4.7-2	High: **Ground water could be contaminated and drinking water is at risk**	Re: Water In water, spilled materials can spread quickly Spills into adjacent surface waters or onto the ground at the project site, along the PS&P line, or in the harbor **could contaminate marine and inland waters, associated wetlands, and underlying groundwater.** The spilled material could expose aquatic and terrestrial plants and animals, aquatic habitats, shorelines, sediments, and humans to contamination. This could contaminate municipal and private drinking water wells and other types of wells (e.g., irrigation, industrial supply). Contaminants could degrade surface water quality and potentially affecting aquatic life in those resources. **The PS&P rail line runs through several areas underlain by largely unconfined surficial aquifers, which lie only a few feet below land surface** and extend to a depth no more than 100 feet.

Response GP50-2

The comment repeats text from the Draft EIS.

Comment GP50-3

4.7-4		If a larger-scale spill occurred along the PS&P rail line, contaminants could enter waterways at numerous crossings and drain to the Chehalis River, and eventually into Grays Harbor.

Response GP50-3

The comment repeats text from the Draft EIS.

Comment GP50-4

4.7-2 4.7-19	High	Re: Plants Crude oils and heavy refined oils can destroy plant tissues. 3 to 5 years is a typical recovery period for salt marshes This affects the base of the estuarine and marine food web, which can result in broader ecological damage. A spill could destroy plants' ability to photosynthesize ***(which affects air quality as well).*** Fire can result in plant mortality as well. High intensity fire can sterilize the soil and delay vegetation recovery, affecting community structure and function. Reduced vegetation cover after a fire can accelerate soil erosion and sedimentation.

Response GP50-4

Comment acknowledged.

Comment GP50-5

4.7-5 4.7-6 4.7-7 4.7-8 4.7-19 4.7-20	High threats to wildlife	Re: Animals Animals can be affected in water, on the shoreline, and on land. Constituent compounds within oil (e.g., polycyclic aromatic hydrocarbons) can be acutely toxic to animals and cause death by contact or ingestion. Toxic effects include immunosuppression, skin irritation or ulceration, adrenal system damage, and behavioral changes, which could ultimately lead to death. ***Other gruesome details are covered in this section and in Table 4.7-1.*** Animals would also be affected by fire. Species that could be affected include: Fish Crabs, shellfish double-crested cormorants pied-billed grebe, belted kingfisher Caspian tern Western sandpiper, Dunlin, and Sanderling Bufflehead ducks and common goldeneyes common mergansers harbor seals sea lions killer whales sea turtles humans! (Yes, we can suffer mucous membrane inflammation from the oil or its fumes) pink-footed shearwater black footed albatross northern fulmar beavers river otters bald eagles (can be exposed by feeding on injured or dead fish) clams, mussels, barnacles, snails algae and plankton salmonids protected under the Endangered Species Act migratory birds frogs

Response GP50-5

The comment repeats text from the Draft EIS.

Comment GP50-6

4.7-8 4.7-9	High threats to ecosystems	Re: Ecosystems that could be affected: Ecosystems in the study area support a variety of animals, including several sensitive species. U.S. Fish and Wildlife Service has designated critical habitat in several areas along the PS&P rail line. The Washington State Department of Natural Resources' Chehalis River Surge Plain Natural Area U.S. Fish and Wildlife Service's Grays Harbor National Wildlife Refuge

Response GP50-6

The comment repeats text from the Draft EIS.

Comment GP50-7

4.7-11 4.7-20	High impact on aesthetics	Re: Aesthetics A spill could degrade the visual quality of surrounding landscapes including both terrain and waterways Removal of oil and cleanup efforts on land and water is difficult and time-sensitive, and residual visual effects (e.g., leftover oil slicks or sheens, increased erosion from void of vegetation) **may remain after cleanup operations.** Aesthetics would also be affected by fire.

Response GP50-7

The comment repeats text from the Draft EIS.

Comment GP50-8

4.7-12 4.7-20	High interruption of recreation – up to months or years.	Re: Recreation A number of recreational resources (i.e., city and state parks and natural areas) offering a variety of recreational opportunities (e.g., fishing, bird-watching, boating, etc.) are available throughout the study area. A large oil spill could degrade the environment and preclude the use of recreational resources from the site of the release to throughout the extent of the spill. Recreation would also be affected by fire. **Recreational activities could be restricted from the affected area for months, and in some cases years.**

Response GP50-8

The comment repeats text from the Draft EIS.

Comment GP50-9

4.7-12 4-7.13 4.7-21		Re: Cultural Resources and Tourism Tourism could decline (evidence: the Exxon Valdez oil Cultural and archaeological resources could be affected by spills and fire.

Response GP50-9

The comment repeats text from the Draft EIS.

Comment GP50-10

4.7-14 4.7-21	Risk to tribal way of life	Re: Tribal Resources Tribal fishing resources could be affected Grays Harbor is home port for fishing vessels in ocean fisheries, and this is where fishers offload catch for these fisheries. Quinault also manage razor clams for commercial and subsistence harvest on beaches on and off the reservation adjacent to Grays Harbor. Fire could also result in the exclusion of tribal members from traditional areas during incident response.

Response GP50-10

The comment repeats text from the Draft EIS.

Comment GP50-11

4.7-15	High risk to human health	Re: Human Health Humans could be affected by spills or burning of oil: Inhalation of vapors resulting from exposure to a spill can cause irritation of the respiratory system. A potential health risk is posed from the inhalation of high concentrations of hydrogen sulfide released into the air Concentrations (well in excess of 10 ppm) could be immediately dangerous to workers due to respiratory paralysis. At levels between 700 and 3,000 ppm, benzene can cause drowsiness, dizziness, rapid heart rate, headaches, tremors, confusion, and unconsciousness. When crude oil is burned it emits chemicals that affect human health.

Response GP50-11

The comment repeats text from the Draft EIS.

GP51, **Avery, Jean**

Comment GP51-1

Cost-Benefit Analysis
Comments on Westway/Imperium Expansion Projects Draft EIS by Jean M. Avery
Text is from the DEIS (**boldface added**). *My thoughts are in italics.*

Note: The scope of the DEIS's analysis is limited to potential costs and benefits to residents of Hoquiam.

Page	Risk?	Concern
7-31		*The number of jobs created is quite low.*

		Construction of Phase 1 of the proposed action would support 82 direct jobs at the job site and an additional 211 indirect jobs **anywhere in** Washington. During **operations**, ECONorthwest (2014) estimated that 11 direct jobs would be supported at the terminal if only Phase 1 infrastructure were operational, and an additional 4 direct jobs would be supported at the terminal if both Phase 1 and Phase 2 infrastructure were operational. This excludes vessel and rail transportation direct jobs.
7-34, 7-35, 7-36, 7-37		Other costs include: • increased train traffic, with increased risks of accidents at grade crossings • increase safety risks (e.g., storage tank failure, train derailments, and vessel collisions) that could result in harm to both humans and the surrounding environment • the implementation and maintenance of emergency preparedness and response protocols intended to mitigate adequately the risks related to the proposed action • reduction in property values by making surrounding properties less desirable

Response GP51-1

Comment acknowledged.

GP52, Avery, Jean

Comment GP52-1

Economics Comments on Westway/Imperium Expansion Project in Grays Harbor Draft EIS by Jean M. Avery Text is from DEIS (**boldface added**). *My comments are in italics.*		
Page	**Risk?**	**Concern**
7-6 7-7		*It's important to realize that the money is not all going to the state or county.* FYI: $14.2 million (52%) of non-labor costs would be spent out of state. The relatively low share of in-state non-labor spending reflects the need to import specialized equipment manufactured outside Washington. Essentially, all business taxes and net business income related to onsite operations and income earned by rail and vessel operators would leave Grays Harbor County and **would not result in regional employment or income.**
7-7		*The job numbers are not very high.* At full buildout, the proposed action would generate an estimated 36 direct jobs in Grays Harbor County associated with onsite operations (by

		the applicant), rail transport (by PS&P), and vessel transport (by vessel operators). The proposed action would generate an estimated 73 jobs throughout the County's economy. These jobs would account for $3.6 million in annual direct labor.

Response GP52-1

Comment acknowledged.

GP53, Avery, Jean

Comment GP53-1

Social Policy

Comments on Westway/Imperium Expansion Projects Draft EIS by Jean M. Avery

Text is from the DEIS (**boldface added**). *(My thoughts are in italics.)*

It seems the DEIS identifies many what-if's, but fails to address these scenarios as real concerns. If these what-if's came to pass, they ***would affect*** *the communities near the proposed terminals. And although the proposed mitigation could alleviate some of the impacts, the adverse impacts would likely remain unavoidable and significant.*

Page	Risk?	Concern
7-10		FYI: The project site is located within the city limits of Hoquiam and Aberdeen along the industrial waterfront at the Port. Land on and directly surrounding the project site is designated and zoned for industrial use. FYI: Social policy addresses community cohesion, community welfare (physical and mental well-being), population growth, and minority and low-income communities. Community welfare analysis identifies the factors that influence the existing sense of welfare in the study area, such as living in a healthy and safe environment and relatively easy access to public amenities and services.
7-20, 7-21, 7-22, 7-10, 7-23, 7-24	More what-if's. Higher impact for some communities than for others. Also covered in Chapter on Vehicle Traffic and Safety.	Per the DEIS, it is not possible to predict when trains would be traveling to and from the project site or what time of day a train may pass by and the potential impacts. • Operation of the proposed action **would affect** community cohesion if activities were to bisect, disrupt, or isolate any established communities… • The increased [rail] traffic **would affect** community cohesion if it were to block or obstruct access to important community resources. • Operation of the proposed action **would affect** community welfare if it were to substantially degrade air quality, increase noise, reduce access to parks and recreational uses, or reduce property values. • Onsite operation **would affect** community cohesion if it were to block or obstruct access to important community resources….

		Loading of tank vessels at the Terminal 1 dock could disrupt fishing activities adjacent to the dock. • The PS&P rail line intersects Centralia, Fords Prairie, Ground Mound, Rochester, Elma, and Aberdeen, where it divides portions of these communities. When a train is traveling through this corridor, access from one side of the town to the other can be temporarily blocked. There are some locations along the PS&P rail line where access is completely blocked by a passing train, with no alternative routes….There are locations in Aberdeen and Hoquiam where vehicle delay and access would notably worsen: Port of Grays Harbor and Olympic Gateway Plaza. • Access into the Olympic Gateway Plaza and the industrial area near the project sites would also substantially worsen. Although the proposed mitigation in Section 3.16 could alleviate some of the impacts, **the adverse impacts would likely remain unavoidable and significant.**
7-13	Also covered in Recreation chapter	FYI: Grays Harbor encompasses many recreational areas, including several state and local parks and designated wildlife areas. Fishing, shell-fishing, bird and wildlife viewing, hiking, and boating are popular recreational activities throughout the harbor. Per EIS, most of Grays Harbor's recreational areas are on the western half of the harbor. The proposed project area is on the North and East side of the Harbor. (See map on 7-18.)
7-13, 7-14		(As noted in chapters on Recreation and Tribal Resources), existing deep-draft vessel traffic currently does cause some disruption to recreation boaters and fishers and tribal and commercial (treaty and nontreaty tribal) fishing.
7-13, 7-14	High	Per the EIS, the project site does not have significant documented concerns with air quality or water quality…. However, closest to the project site, there are areas that experience some exposure to increased train noise and environmental health and safety risks associated with the existing industrial facilities and residents **and some risks of incidents.** *I'm concerned with the first statement, which minimizes the impact.*

7-15, 7-26, 7-27	High – especially for minority and low-income populations	The proportions of minority and low-income populations in the study area communities are higher than at the state and county level, with the most meaningful differences occurring closer to the project site and around the harbor. . . . . **Any impacts would disproportionately affect minority and low-income populations.** Nearly half (31 of 57) of the census block groups in the study area have minority populations that exceed their respective county levels. Minority populations account for 19.1% of the Grays Harbor population. 31 of the 43 census block groups along the PS&P rail line are considered minority and/or low-income populations. 15 of the 22 census block groups along the Grays Harbor shoreline are considered minority and/or low-income populations. (FYI, the EPA considers impacts on minority populations to be disproportionate if the minority population exceeds 50% of the study area population, or if the minority population percentage of the study area is meaningfully greater than the minority population percentage in the general population of the study area.) *We may want to look more closely at the exact numbers.*

Response GP53-1

Final EIS Chapter 4, *Environmental Health and Safety,* includes additional mitigation measures to reduce risks. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP53-2

7-19	FYI only	Per EIS, it is assumed that growth in the region would continue under the no-action alternative, which could lead to development of another industrial use at the project site within the 20-year analysis period (2017 to 2037). *I'm not sure this is relevant.*

Response GP53-2

Refer to the Master Response for Baseline and No-Action Alternative for a discussion of the baseline used in the analysis and a description of the No-Action Alternative.

Comment GP53-3

7-19	Unanswered What-if's	Per EIS, construction of the proposed action would affect community welfare **if** it were to substantially degrade air quality, increase noise, reduce access to parks and recreational uses, or reduce property values.

Response GP53-3

Comment acknowledged.

Comment GP53-4

7-19	High – but minimized in EIS. More in Air Chapter	Construction of the proposed action could result in emissions of toxic air pollutants, primarily associated with diesel particulate matter, **a known human carcinogen**. Per the EIS, this would only be short-term and intermittent. *What is an acceptable amount of carcinogens??* Per EIS, off-site exposure would likely be well below any level of concern based on the level considered acceptable for permitting new stationary sources of toxic air pollutants in Washington State.

Response GP53-4

As described in Draft EIS Chapter 3, Section 3.2, *Air*, based on air quality modeling for conducted by the applicant, onsite emissions of toxic air pollutants under the proposed action would be below the state thresholds identified in WAC 173-460-150. These emissions are subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping for onsite stationary sources. Refer to the Draft EIS for a list of permit conditions and applicant mitigation that would reduce potential impacts on air quality.

Comment GP53-5

7-20	More in Noise and Vibration Chapter	Construction noise would likely be audible in nearby residential areas and recreational uses. However, per EIS, the levels would relatively low level and are not expected to adversely affect the surrounding these areas. *Does EIS minimize?*

Response GP53-5

As noted in Draft EIS Chapter 3, Section 3.7, *Noise and Vibration*, increased noise from construction is anticipated to be low. Therefore, mitigation is not recommended.

Comment GP53-6

7-20	More in Aesthetics, Light, and Glare	Construction can also affect community welfare by temporarily lowering property values during construction. Specifically, potential buyers may find a property less attractive if views are altered by the visible and audible presence of construction equipment and activity. However, per EIS, views of the project site by residents are relatively limited and consist of elements that are already industrial in nature. *Again, EIS seems to dismiss and minimize the impact.*

Response GP53-6

As noted in Draft EIS Chapter 3, Section 3.7, *Noise and Vibration,* potential aesthetic impacts during construction would be low. Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*,

acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values.

Comment GP53-7

7-20		Because the period of construction is relatively short (10 to 12 months), it is expected that construction workers would commute from nearby communities. *So, perhaps the local community would not see a big increase in jobs.*

Response GP53-7

Projected job increases are presented in Draft EIS Section 7.1, *Economics*.

Comment GP53-8

7-21	Also in Tribal and Vessel Traffic Chapters	Onsite operations **would** reduce access to fishing areas immediately adjacent to the dock as result of increased frequency of vessels docked at the Terminal 1 berth.

Response GP53-8

Comment acknowledged.

Comment GP53-9

7-22	Also in Recreation chapter and Tribal chapter	Per EIS, recreational fishing and pleasure boating occurs throughout the harbor and . . . **small vessels could easily navigate away from tank vessels in transit.** *Is this really true? Or would the small vessels avoid using the harbor altogether?* Per EIS, proposed mitigation providing advance notice of incoming vessels could help reduce potential conflicts, but would still likely result in some disturbances.

Response GP53-9

As described in Draft EIS Chapter 3, Section 3.17, *Vessel Traffic*, fishing vessels and recreational boaters must obey the navigational rules (Inland Navigation Rules at 33 CFR 83) to give way to the larger commercial vessels that are limited to the navigation channel. Current vessel traffic includes a mix of large commercial vessels and smaller fishing and recreational vessels. The addition of one tank vessel transit per day under the proposed action is not expected to result in traffic impacts with fishing and recreational vessels.

Comment GP53-10

7-23, 7-24, 7-26	High. Also in Environ. Health & Safety and Oil Spills chapters	Increased rail traffic related to the proposed action could also affect local communities as the result of the increased risk of train incidents. The environmental outcome of larger incidents (e.g., oil spills associated with storage tank failures) would be substantially different compared to the no-action alternative. This is because of the potential for additional harmful substances (e.g., crude oil) to enter the environment… If crude oil entered the environment, environmental degradation could occur that could adversely affect humans and the natural environment. Per EIS, **no mitigation measures would eliminate the possibility of a large spill or explosion, nor would they eliminate the adverse consequences of a large spill or explosion.** Additionally, the perception of increased risks and concerns over the potential for environmental damage may also cause some individuals concern they would otherwise not have related to these risks. (The impacts on property values are discussed in Section 7.3.3.2, Fiscal Revenues to the City of Hoquiam.)
7-24	High. *Mitigation is not sufficient.* *Perception matters.*	No mitigation measures would eliminate the possibility of a large spill, fire, or explosion, nor would they eliminate the adverse consequences of a large spill, fire, or explosion. These impacts, should they occur, **could shape the perception** that the communities in the study area are unsafe, unhealthy, or undesirable. These perceptions could affect community welfare **whether or not** there is a measurable impact on community resources or a substantial increase in risks related to the proposed action.
7-25	*Important to note re: job numbers.*	Operation of the proposed action would [create] an estimated 36 direct [plus 73 indirect] jobs in Grays Harbor County. It is more likely [the jobs] would be filled by current residents or by **workers living outside the area** (as would likely be the case with rail and vessel operators). *I.e., even in operation mode, very few new jobs would be created for current residents of Grays Harbor residents.*
7-26	See also Tribal Resources chapter	Any large releases with the potential to enter the harbor from the project site could disproportionately affect minority and low-income populations in these areas. Tribes would also be affected.
7-27	Some areas would be more affected	Traffic delays at certain intersections could disproportionately affect minority and low-income populations in communities immediately surrounding the affected areas.

Response GP53-10

Refer to Response to Comment GP53-1.

GP54, Avery, Jean

Comment GP54-1

Re: Tribal Resources The DEIS includes many significant what-if's: potential impacts of the project on the tribal communities and their livelihood. However, the DEIS seems to assume that these what-if's won't happen. I believe the DEIS needs to be rigorous in its assessment and review of the potential consequences of the project. I personally am not as familiar with tribal culture as others may be. I understand that Ms. Maia Bellon may have more knowledge in this regard.

Response GP54-1

The commenter does not provide sufficient details to allow for a response.

Comment GP54-2

Tribal Resources Comments on Westway/Imperium Expansion Projects Draft EIS by Jean M. Avery Text is from the DEIS (**boldface added**). *My comments are in italics.*		
F*YI: Tribal resources refer to the collective rights and access to traditional areas and times for gathering resources associated with a tribe's sovereignty or formal treaty rights (per federal and state laws). These resources may include plants or fish used for commercial, subsistence, and ceremonial purposes. Tribal fishing resources include catch in freshwater, Grays Harbor, and ocean fisheries. The tribes in this area are Quinault and Chehalis tribes; there are some differences in how these two tribes are impacted*.		
Page	**Risk?**	**Concern**
S-34	High *The EIS should be more rigorous in assessing risks to tribal resources overall.*	Mitigation would reduce but not completely eliminate impact on tribal resources. Vessels would travel through fishing areas in Grays Harbor. Increased vessel traffic could restrict access to tribal fishing areas. Also, no mitigation measures would completely eliminate the possibility of impacts on fishing resources due to vessel operations. *This chapter sounds vague and contradictory. Also, it seems the DEIS avoids discussing the direct impact to tribal resources – saying that impact to tribal resources depends on impact to water, earth, etc.*

Response GP54-2

The commenter does not provide sufficient details to allow for a response.

Comment GP54-3

3.12, p. 4	High *It seems the DEIS minimizes the impact.*	The waters of Grays Harbor, the Chehalis River, and other streams entering Grays Harbor are important fishing areas for Native American tribes in the region. The Grays Harbor shores continue to be productive hunting and plant-gathering areas.

Response GP54-3

The commenter does not provide sufficient details to allow for a response.

Comment GP54-4

3.12, p. 5	High	Quinault fishers are dependent on Grays Harbor to access ocean fisheries, because [their] villages lack a harbor. Grays Harbor nourishes other species of fish important to the Quinault fisheries, such as white sturgeon and Dungeness crab. Quinault weavers have gathered materials from the Grays Harbor area for many generations.

Response GP54-4

The comment repeats text from the EIS.

Comment GP54-5

3.12, p. 6	High	Preservation of tribal land and culture is essential for the perpetuation of the Chehalis people. The importance of the land to the tribe cannot be overstated. It provides the living space, sacred and cultural sites, and natural resources that sustain the Chehalis people and culture. [The land] provides spiritual and physical sustenance, and the means for economic self-sufficiency. Many tribal members hunt and fish to supplement their incomes (commercial harvest), to provide sustenance for their families, and for cultural reasons (subsistence and ceremonial harvest).

Response GP54-5

The comment repeats text from the EIS.

Comment GP54-6

3.12, p. 17 3.12, p. 7 3.12, p. 16	High *The DEIS seems to gloss over the what-if's (listed on the right).* *The DEIS sounds contradictory when it says the tribal*	Construction could have an impact on tribal resources…**IF**… • . . . **IF** construction activities were to limit access to or degrade the resources used by the tribes -- including plants and fisheries described in other sections (re: earth, water, animals, and plants). • . . . **IF** Construction could degrade the fishery • . . . **IF** construction were to impair water quality • . . . **IF** construction produced vibration levels from pile driving that would be harmful to fish in Grays Harbor But, construction would have no impact on tribal resources???? (as stated at the end of the section). *This sounds contradictory.*

	resources are "essential," but that construction "would have no impact."	FYI: the Chehalis own tidal land in Grays Harbor and use it for recreational shellfish harvesting. The tribe plans to make it a commercial operation in the future.

Response GP54-6

The referenced bullets represent the mechanisms through which construction activities could affect tribal resources. They are presented to frame the discussion that follows.

Comment GP54-7

3.12 , p. 18 3.12, p. 11	High *The DEIS minimizes how huge vessels could easily squeeze out the tribes' small boats and low-tech fishing nets.*	Onsite operations could reduce access to tribal fishing areas as result of the increased frequency of vessels docked at Terminal 1. FYI, tribal fishers deploy gillnets and drift…. Fishers deploy gear one boat at a time, releasing their net beginning from the bank and extending across and in some cases into the navigation channel. The boat and net then drift with the current. During peak periods of the fall fishery, up to nine boats may be actively fishing the navigation channel near and in front of the terminals…. Fishing nets are marked at each end by orange or red marker buoys during daylight hours. When fishing occurs at night, nets are marked at each end with a steady white or flashing white or red light. While a vessel is at berth, fishing nets cannot be extended as far and cannot access the areas nearest to the dock structure where fish are assumed to be concentrated. When a vessel is docked, fishers must either shorten their drift or move farther out into the navigation channel to avoid the vessel. FYI: The typical 550-class tank barge is approximately 600 feet in length.

Response GP54-7

Comment acknowledged.

Comment GP54-8

3.12, p. 19	High	Increase in rail traffic could have an impact on tribal resources **IF**. . . • **IF** it were to reduce access to tribal fishing fleets, boat launches, and net sites as a result of delays at crossings • **IF** it were to degrade the fishery through water quality impacts. ***The DEIS seems to assume that these what-if's won't happen.***
3.12, p. 20		An increase in vessel trips could have an impact on tribal resources IF… • IF it were to degrade water quality

		• IF it were to reduce access to tribal resources, including the plants and fisheries.

Response GP54-8

The referenced bullets represent the mechanisms through which rail and vessel traffic could affect tribal resources. They are presented to frame the discussions that follow.

Comment GP54-9

3.12, p. 21 3.12, p. 18	High *Some of the DEIS comments sound contradictory.*	However, Inbound and outbound vessels could disrupt access to the Quinault's ocean crab and marine fisheries because ocean fishing vessels prefer to use the navigation channel to transport the catch into the harbor. <u>It is likely this disruption would be minor because smaller Quinault fishing vessels would have the ability to skirt around or adjust their time to avoid the transiting tank vessels.</u> *This sounds disruptive to me…How small are the fishing boats, compared to the huge vessels.* FYI: The typical 550-class tank barge is approximately 600 feet in length and a maximum of 78 feet wide and is assisted by a tug that is approximately 127 feet long and a maximum of 42 feet wide. A Panamax class tanker has a maximum overall length of 950 feet and a maximum width of approximately 106 feet.

Response GP54-9

The referenced text has been clarified. The larger fishing vessels would need to adjust their time of travel when a tank vessel is transiting the navigation channel.

Comment GP54-10

3.12, p. 20		Vessels related to the proposed action would be most likely to affect tribal fishing during the fall salmon management period, when more fishers typically deploy drift gillnets in the navigation channel….During peak periods of the fall fishery, up to nine boats may be actively fishing this area and two to four fishers with nets deployed at one time. . . . Increased vessel traffic means a greater chance that a vessel could travel through this area and affect tribal fishing.
3.12, p. 22		Vessels would travel through usual and accustomed fishing areas in Grays Harbor. Increased vessel traffic could restrict access to tribal fishing areas in the navigation channel and adjacent to Terminal 1 – mostly with fishing of salmon, steelhead, and sturgeon.

Response GP54-10

The comment repeats text from the EIS.

GP55, Avery, Jean M.

Comment GP55-1

I submitted comments previously, but have two more comments after reading today's newspaper (The Columbian, 11/23/15): - My earlier comments included concerns about impacts on fishing in the area of Grays Harbor. Today's article states that the Quinault's tribal fishing area in Grays Harbor is "one of the few spared by a toxic algal bloom on the Pacific coast." Let's not put that at risk with potential oil spills. - My earlier comments included concerns about the safety of rail transport. Today's article states that "as many as 19 mile-long trains carrying crude oil roll through the state each week." (That number is before any additional volume of oil would be transported.) That is a lot of exposure to possible spills, accidents or -- heaven forbid -- terrorist activities.

Response GP55-1

Comment acknowledged.

GP56, Bachelder, Karen

Comment GP56-1

My name is Karen Bachelder. I'm from Seattle, but I have spent a lot of time enjoying Grays County and I plan to continue to do that. I want to address the piece of EIS that relates to some of those critical risks and I'm going to ask you to translate those risks, because I think the EIS is reporting three -- kind of three. I'm going to say three.

One is higher than average likelihood of immediate spill during vessel loading which would likely reach water with serious, if not severe potential environmental effect.

A medium or moderate likelihood of a large rail transport spill equal to three rail cars likely reaching with a serious environmental effect.

And thirdly, from the EIS, medium to moderate likelihood of large spills from vessel collisions with a high likelihood of oil reaching water and having a severe impact.

Now, the EIS goes on to say that no mitigation measures can be implemented that could eliminate the possibility of a large spill nor any mitigation measures that could eliminate the adverse consequences of a large spill.

So given the likelihood of these things happening and these adverse effects coupled with the impossibility for complete mitigation, I see the risk simply too great to warrant the short-term benefits.

I urge the City of Hoquiam and Department of Ecology and stand up to big oil and stop doing business as usual. We have the opportunity right now to move in the direction of reducing our reliance on fossil fuel rather than stand in it.

And I urge you to have the courage to reject these proposals and to work instead on ways to create a future and jobs that uses clean, renewable, and safe energy. We have the technology. We need the political will.

Response GP56-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 to reduce the likelihood of a spill reaching the environment and the potential impacts if an incident occurs at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion.

For more information about the development, adequacy, and enforcement of mitigation, refer to the Master Response for Mitigation Framework.

GP57, Baker, Brandon

Comment GP57-1

As someone who loves the outdoors and especially fishing, the thought of what might happen with an accident with these new and expanding terminals breaks my heart. The tiny amount of new jobs compared to the risk to the environment, as well as the tourist and commercial fishing industries is not worth it. I would imagine one clam tide has a bigger impact on the local economy here than what these projects would bring in economic activity to this area. Building this kind of project in an area prone to bad storms and earthquakes is a terrible idea. And that isn't even taking into account what might happen to the lives of the people who live alone the train tracks if an accident might happen. All I see are risks for the community with very little reward. Please do not let this go forward.

Response GP57-1

Comment acknowledged.

GP58, Ballo, Dennis and Julie

Comment GP58-1

November 17, 2015

Westway and lmperium Expansion project EISs c/o ICF International 710 Second StRECEIV ED NOV Z 0 2015 Suite 550

Seattle, WA 98104

In order to ensure the safety and health of our environment in Grays Harbor, we are opposed to the oil terminal projects proposed in Grays Harbor, for the followings concerns: One of the biggest, busiest fishing harbors

Known for the best salmon, crab, oysters and razor clams

One of the most popular recreation areas with pristine beaches

Why would we even think of taking a chance on ruining this area with the chance of oil spills and train derailments along the rivers and ocean. The rail system has had numerous '"oil car derailments" in the USA and Canada, with a poor clean up record to the environment. My wife and I go down to Grays Harbor Area six or seven times a year, please continue to protect the area for our Family and future generations. Sincerely, Dennis and Julie Balla 4307 301st Ave N E Sammamish, WA 98074

Response GP58-1

Comment acknowledged.

GP59, Ballo, Kristi

Comment GP59-1

11-30-2015 Westway & Imperium DEIS's comment I am commenting on the Westway and Imperium DEIS's. These proposed projects are the worst possible types of industry for this environmentally sensitive area given the wildlife that use the bay as a nursery, the salmon that pass through here to get to their spawning grounds. the birds that stop over in the Harbor during their migrations and the businesses that rely on this clean water natural resource for their livelyhoods.

Response GP59-1

Comment acknowledged.

Comment GP59-2

These DEIS's are filled with errors, fictionalized stats and inaccurate depictions of the project and it's potential impacts. 1. The omission of comments and the subsequent fix for that situation still did not include any reference of the analysis to comments. Even after pointing out the omissions our letter was not found and possibly that is because there are 2 different addresses for the same place one is a street which is incorrect instead of ave. This mistake is repeated several more times in the DEIS's.

Response GP59-2

The co-leads reviewed and considered all scoping comments. Final EIS Appendix A, *Scoping Comments*, provides a catalog of all comments received during the formal scoping period.

Comment GP59-3

2. The lack of factual information is criminal. The modeling is done with a type of oil that is not even proposed for these facilities. Tar sands or heavy crude should be what the modeling is based on. The speed of the currents in the bay are also not true, many times a year current speed exceed the 1 or 1.5 knot model and 3 knots is common over 100 times per year. It also states that marine mammals don't enter the bay but usually stay 3 miles off shore. This is a total farce, Grey whales can be found inside the bay during certain times of the year and Sea Lions and Harbor Seals can be found in the bay year round.

Response GP59-3

Draft EIS Appendix N, *Oil Spill Modeling*, presents data from ADIOS at the 48-hour mark to easily compare with the GNOME mass balance estimates at that same period. This comparison provides a better representation of the behavior of Bakken crude oil or diluted bitumen (dilbit), which can be modeled using ADIOS but not GNOME, in the environment.

Refer to the Master Response for Oil Spill Modeling Methods, which addresses the applicability and selection of the three models used as part of the oil spill modeling effort: GNOME, ADIOS, and Hydrologic Engineering Centers River Analysis System (HEC-RAS). It was determined that these models provided sufficient analytical capabilities for the purposes of evaluating spill scenarios for the Draft EIS. GNOME, specifically, was selected to complete the oil spill trajectory analyses because it is a commonly accepted industry standard for contingency planning, scenario analysis, and oil spill response used by the National Oceanic and Atmospheric Administration, the U.S. Coast Guard, and the Washington State Department of Ecology.

Draft EIS Chapter 3, Section 3.5, *Animals,* acknowledges that marine mammals are frequently observed in Grays Harbor, and discusses sea lion and harbor seal use of Grays Harbor. The Final EIS section clarifies whale use of Grays Harbor and provides additional information on gray whale, humpback whale, and killer whale.

Comment GP59-4

3.Vessel refueling hazards are not included in DEIS and these present a very real and significant danger for a spill.

Response GP59-4

Final EIS Chapter 2, *Proposed Action and Alternatives*, clarifies that proposed operations would not include vessel bunkering (fueling) at the project site. Final EIS Chapter 4, Section 4.6, *Environmental Health Risk—Vessel*, and Chapter 5, *Extended Rail and Vessel Transport*, reflect additional information about federal and state regulations related to bunkering operations.

Comment GP59-5

4. The USF&W point out in their comments “the cost benefit analysis included in the draft EIS’s fail to acknowledge or consider significant impacts, damages or costs”. They also state that these projects present “unacceptable risks” concerning risk assessment in the likelyhood of a vessel spill.

Response GP59-5

Final EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns*, reflects a fuller discussion of the range of costs that can result from a crude oil spill. Information about the potential consequences of such an event is provided in general terms consistent with the approach described in the Master Response for Environmental Health and Safety Analysis.

Comment GP59-6

5. There is no mitigation for an oil train fire, evacuation is the only certified response plan in such an event.

Response GP59-6

Comment acknowledged.

Comment GP59-7

6. All three of the oil terminal proposals should be considered together as they are all doing the same thing on the same tracks in the same geographical location. This is the only way to measure the true and total impacts of these projects on the environment and our communities.

Response GP59-7

Draft EIS Chapter 6, *Cumulative Impacts*, presents the potential impacts of the proposed action and the REG (formerly Imperial Terminal Services) Expansion Project and the Grays Harbor Rail Terminal Project.

Comment GP59-8

7. We have experienced an increase of erosion on our shorelines from the Army Corps of Engineers Deep Draft project. There are no measures in the DEIS for mitigation of potentially greater erosion with an increase of vessel traffic especially of such large and heavy vessels.

Response GP59-8

As described in Draft EIS Chapter 3, Section 3.1.5.2, *Proposed Action*, proposed action vessel trips would result in a small, incremental increase in the potential for impacts associated with wake compared to the no-action alternative. Final EIS Section 3.1.5.2 provides additional explanation of the basis for this conclusion.

Comment GP59-9

In conclusion this DEIS was poorly put together and one can only assume that this was intentional given the abundance of mis-information and fictional statistics. DEIS is meant to be informative and accurate this is not and was put together in an overly large volume of what can only be described as deceiving and confusing information. This seems intentional and should be grounds for dismissal for not honoring the intent of the process.

Response GP59-9

The commenter does not provide sufficient details to allow for a response.

Comment GP59-10

The omission of comment letters and the analysis of reference materials constitutes fraud on the part of the entity charged with preparing the DEIS.

Response GP59-10

The co-leads reviewed and considered all scoping comments. Final EIS Appendix A, *Scoping Comments*, provides a catalog of all comments received during the formal scoping period.

Comment GP59-11

Even a small spill will have disasterous affects on our business. Seafood is already heavily scrutinized for contaminants and the publicity from even a small spill will hurt us if not completely put us out of business. Regards, Kristi Ballo Brady;s Oysters inc, Owner 3714 oyster pl Aberdeen, WA 98520 360-268-0077

Response GP59-11

Final EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* reflects additional information on the economic and social costs of oil spills. This includes information on accidents and spills, and information on crude oil spill during marine transport.

GP60, **Ballo, Mark**

Comment GP60-1

Is it too much to ask that the agency conducting these comment periods at least provide a real address or that they make up their minds is it 2nd Avenue or 2nd Street? 2nd street is the address I have sent my letter but i will send another to 2nd Avenue. Both are sited in the DEIS this only highlights the incompetence of the ICF INternational or is confusion the goal?

Response GP60-1

The address was corrected in the Draft EIS files and the updated files were reposted to the Ecology website. The U.S. Postal Service confirmed that comments addressed to Second Street would be delivered to Second Avenue. Comments addressed as such were received.

GP61, **Ballo, Mark**

Comment GP61-1

Westway/Imperium DEIS Comment Thursday, November 5, 2015 at 10:56 am

This EIS is quite possibly the worst one I have ever encountered. It is filled with a lot of non-essential junk and filler and doesn't even address all the issues that these projects present. This appears to be an attempt to make digesting the important and essential information both difficult and excessively time consuming for the general public who by the way this is intended for.

Not all the scoping comments were listed in the appendices also making this a difficult task. It seems all too coincidental that many of the primary resource users were the ones left off the appendices.

Response GP61-1

The co-leads reviewed and considered all scoping comments. Final EIS Appendix A, *Scoping Comments*, provides a catalog of all comments received during the formal scoping period.

Comment GP61-2

First of all the area included in the EIS doesn't adequately include areas potentially impacted that a spill further away would not have significant impacts for us on the coast is incorrect. A spill further away than 59 miles along the Columbia River would still impact us out on the coast. A spill would eventually be flushed out the mouth of the Columbia River and be transported up our coast in the prevailing currents.

Response GP61-2

Refer to the Master Response for Oil Spill Modeling Methods and the Master Response for the Geographic Scope of the EIS.

Comment GP61-3

I didn't see any acknowledgement of potential shore line erosion from the increased wave height and frequency that would come with increased vessel traffic and the increased size of the vessels coming and going to and from the terminals. The deep draft project itself has caused problems for shoreline owners and oyster growers. I believe that it should be noted that the oyster growers have been dealing with problems with the Army Corps of Engineers that are associated with the deep draft project for over 20 years now without any resolution, and that is without the proposed increased vessel traffic.

Response GP61-3

As described in Draft EIS Chapter 3, Section 3.1.5.2, *Proposed Action*, proposed action vessel trips would result in a small, incremental increase in the potential for impacts associated with wake compared to the no-action alternative. Final EIS Section 3.1.5.2 explains the basis for this conclusion.

Comment GP61-4

An oil spill would have a disastrous affect [sic] on the 70 something year old Grays Harbor oyster industry. When a best case scenario includes only recovering 5-14% of all oil spilled this cannot be mitigated for, especially for filter feeding shellfish. This document grossly underestimates the negative impacts while over estimating the positive impacts, of which I can think of no positive impacts these projects could produce given their ability to destroy 30% of Grays Harbors economy.

Response GP61-4

Final EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* reflects additional information on the economic and social costs of oil spills. This includes information on accidents and spills, and information on crude oil spill during marine and rail transport. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP61-5

The rate at which the water moves within the bay is incorrect. Almost daily the tidal currents move the water at more than 1 knot per mile, in fact 3 knots is common. This is just an out right [sic] lie. What If the spill occurs on one of many days that the wind blows 15-60 knots?

Response GP61-5

The information presented in Draft EIS Chapter 4, Section 4.3.2.3, *Water Flow*, is intended to generally describe the range of water flow conditions that can occur within the study area. Draft EIS, Appendix N presents the assumptions used relative to wind conditions and water currents within the study area. Wind, tide, and other factors affecting water flow used in oil spill modeling are further described in the notes section of Table 1 (see p. N-5 of DEIS Appendix N) and in the Master Response for Oil Spill Modeling Methods.

Comment GP61-6

As a seller of seafood I know that we are required to have an excessive amount of liability insurance but these companies are allowed to be grossly under insured for the potentially huge damages they can inflict upon us.

Why are local and state governments responsible for cleaning up after these under insured takers? Why are they allowed to be under insured for their potential costs of clean up?

We can figure out new ways to stimulate our economy without doing permanent damage to our environment.

This a bad idea for Grays Harbor no matter how you look at it.

Mark Ballo

3714 Oyster Pl

Aberdeen, WA 98520

Response GP61-6

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP62, **Barkhurst, Ross**

Comment GP62-1

The probablities for large and medium spills, river and bay, are suspect based on real life. For example, there have been several train wrecks on pertinent tracks in the past ten years, yet your PRA implies little or no chance. The discussion on tank ruptures makes it clear that containment

berms cannot hold all tank contents, yet a tsunami or earthquake or sabatoge can clearly rupture such tank(s). The same three events can and would impact train tracks while in use. These tracks and tank farms would need to be designed to a maximum credible event such as the three above. All are credible in Grays Harbor estuary or drainage. Still, maximum credible events are not named or quantified as such. As a result there can be no design basis incident qualification of systems and components whose failure would cause spills. Because of the liklihood of these three events being greater than once in 40,000 years, we have an unreviewed environmental, economic, and personnel safety question here.

Response GP62-1

Refer to the Master Response for Risk Assessment Methods and the Master Response for Seismic Risk and Design Requirements.

Comment GP62-2

Sections on plants and animal effects are written at a grade school level. You mention 7,605 acres of eelgrass and its qualitative importance to animals, for example, however impacts of its loss are never quantified in resource impacts or economic impacts segments. The impacts would be catastrophic. Aquatic vegetation and its resident invertebrates are the base of the food pyramid for salmonids, forage fish, and waterfowl. Two studies relate this in detail, yet contents are missing from this EIS. A multi year study by Wild Fish Conservancy of Grays Harbor Smolt Habitat shows how important scrub/shrub wetlands are to Coho, and aquatic vegetative beds are for Chinook and Chum. The other major estuarine smolt habitat player is shown to be gravel/cobble beds. This EIS correctly describes how vegetative beds will be lost, and gravel/ cobble cannot be cleaned up. These will be wiped out for indefinite, long periods of time, yet deserve no mention in the economic impacts section, or a missing econnoic risks section. The second study is by Baldwin and Lovvorn, 1994. It disusses in detail the use by waterfowl of both species of eelgrass in Boundary Bay, BC. The same major species of waterfowl use Grays Harbor. These are Widgeon, Pintail, Mallard, and Pacific Brant.Of these, three seldom meet North American Waterfowl Management Plan goals. Still, the EIS talks about shorebirds and mentions only mergansers as waterfowl. This EIS must recognize waterfowl and impacts beyond Grays Harbor in order to approximate legitimacy. These must be addressed here, or more appropriately in a new Economic Risks section. Fishing (commercial and recreational) hunting (waterfowl, which is not even addressed) and shorebirds (birdwatching) are at risk but not economically quantified. The nature of these “other” economic and recreational activities is such that they do not risk heavy industrial endeavors, yet the latter constitutes a major as yet unquantified risk to them. The EIS does not look outside local impacts in any meaningful way. Salmon, shorebirds, green sturgeon, and waterfowl are migratory, crossing county, state, and even national boundaries. Grays harbor is a Shoreline of Statewide Significance, yet this does not seem to have impacted the impacts One would not guess this from the inadequate plant and animal impacts section, nor from the missing economic impacts section relative to all other environmentally related economic activities. Grays Harbor environmental health impacts salmonids which do not run up its rivers. For example, at times there are more Chinook smolts in Grays Harbor which originated in the Willapa Bay drainage than there are which originated in Grays Harbor. In both cases these are Coastal Fall Chinook. The portion of this significant unit of salmon residing in these two systems has now been officially declared “overharvested” by NOAA. One would never guess this, nor the environmental, recreational, or economic impact, from this EIS.

Response GP62-2

Draft EIS Chapter 3, Section 3.4.4.3, *Grays Harbor*, describes aquatic vegetation as the base of the food web for other aquatic organisms in Grays Harbor. Section 3.5, *Animals,* recognizes the importance of aquatic vegetation as habitat. Also, Section 3.5, *Animals*, mentions specific waterfowl species or waterfowl in general terms in several locations.

Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, addresses economic considerations, social policy implications, and the costs and benefits associated with the proposed action. Final EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* reflects additional information on the economic and social costs of oil spills. This includes information on derailments and other accidents involving trains carrying crude oil and information on a crude oil spill during marine transport. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7.

GP63, **Barkhurst, Ross**

Comment GP63-1

Please accept this as my summary of my comments #000000480. I ran out of space for a summary. "In summary it is clearly difficult to justify location of a large source of liquid pollutants such as crude oil or petroleum products on an estuary such as Grays Harbor. Mechanical and eletrical components, as well as civil engineered structures, must be qualified to withstand maximimum credible events such as tsunamis, earthquakes, and manmade disasters such as sabatoge. These have not been well defined, if at all, in the EIS. Only train wrecks have been clearly identified, and we are supposed to believe, without justification, there will be no more along the harbor or Chehalis river. Existing economic activities would be at risk, as well as the ecology DOE is supposed to protect. This EIS cannot justify such projects.

Response GP63-1

Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events.

GP64, **Bassett, Beverly**

Comment GP64-1

Good evening. My name is Beverly Bassett, and I live in Olympia, Washington. Scientists tell us that we are deep into irreversible climate change or global warming. When the large ice sheets melt, it will be too late to save life as we know on planet earth.

Last summer was the hottest on earth since records began to be kept more than 100 years ago. And if we don't stop this madness, this fossil fuel madness, each coming summer will be hotter than the last. Before too many years pass, crops will fail, and millions of people and other creatures will perish and die.

Our extraction of toxic fossil fuels is the reason we're burning up our little planet earth, our only home. We will transition to sustainable and renewable sources of energy. Let's do it while there's still a chance that we can mitigate some of this bad as anything could possibly be catastrophe now in progress.

Let's show that we love our children more than we love the bad money that fossil fuels can possibly bring to our local economies. It's time for sanity and reason to prevail. No oil terminals in Grays Harbor County.

Response GP64-1

Comment acknowledged.

GP65, Bayer, John

Comment GP65-1

Oil trains block traffic. They interfere with commerce, emergency response and school buses. The adverse impacts will be significant. There is no practical way to mitigate for blocked traffic.

Response GP65-1

Draft EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, addresses potential impacts on vehicle delay and emergency vehicle access. The Final EIS section clarifies proposed mitigation and potential significant and unavoidable impacts.

GP66, Beattie, Will

Comment GP66-1

My name is Will Beattie. I'm a salmon biologist in Olympia, Washington. The final EIS must include a much stronger assessment of the short and long term effects of spilled crude oil on salmon, crab, and other fish and shellfish species and the food they depend on.

It should describe not just the immediate effects of spills, but also the cumulative long-term effects of whether crude oil can persist for years along the shorelines and at the bottom of the bay.

Spill accidents significantly reduces the production of these species for many generations. The final EIS should summarize in much greater detail the large body of scientific research that has proven these effects, including very recently published laboratory studies of oil toxicity and consequence and field studies for spills like the EXXON VALDEZ.

Shellfish are an enormous cultural economic importance locally and regionally. The EIS should count the economic cost and the potential long-term curtailment of commercial fisheries on this species as the result of an accident. Putting species at risk is irresponsible. Please deny the permits.

Response GP66-1

Final EIS Chapter 4, Section 4.7, *Impacts on Resources*, addresses the potential long-term impacts associated with exposure to crude oil and includes information specific to potential impacts on shellfish. The likelihood of increased exposure to crude oil under cumulative conditions is addressed in Chapter 6, *Cumulative Impacts*. Draft EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, addresses economic considerations, social policy implications, and the costs and benefits associated with the proposed action. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP67, **Beckley, Diane**

Comment GP67-1

Westway and Imperium Expansion Projects

Draft Environmental Impact Statements

Comments:
c/o ICF International

Co-Lead Agencies:
Washington Department of Ecology and City of Hoquiam

11/30/2015

My name is Diane Beckley and I am a resident of Ocean Shores, WA.

[box: I am writing to request you deny any permits or authorization to allow oil terminals storage, and/or transport of oil products into and out of Grays Harbor, WA.]

Many comments have been expressed, and written, about the impact of the proposed expansion of our port facilities to allow great volumes of oil to be transported into the port, and out to numerous other areas. I will focus my comments primarily on the impact to Ocean Shores as I feel our area, and the potential devastation which could occur has been overlooked.

1. Ocean Shores primarily consists of residential (high percentage retirees), small businesses, and tourists. While we currently have close to 6000 residents, we have many lots which people continue to build on because of our beautiful natural environment. During summer season, our town can quadruple in size, with the 4th of July having as many as 75,000 people. The small businesses survive from a small amount of resident business, but a large amount of tourist business. The tourists and residents come primarily for the beaches, the clean air, the fishing and crabbing, and the great waterways we have. Many also come for the unique number of birds which flock to our area.

If a barge or tanker had an accident resulting in oil leaking into the waterways, how would the city of Ocean Shores survive? Property values would plummet, businesses and tourism would die. Who would adequately compensate everyone's losses, clean the birds, the water, and replenish the natural environment?

Response GP67-1

Final EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* reflects additional information on the economic and social costs of oil spills. This includes information on accidents and spills, and information on crude oil spill during marine and rail transport. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis.*

Comment GP67-2

2. The harbor entrance to Grays Harbor has seen its shipping catastrophe's over the years. It is said that entrance is the second most dangerous on the west coast of the USA. I have boated for many years and crossing the "bar" was a wild experience in normal weather. When the weather deteriorates which often happens, the "bar" should not be crossed, and especially not if a ship is pulling a barge.

If a ship or barge had a deadline to meet, how could there be a guarantee that they would not enter or exit the harbor until it is safe to do so? Will there be written instructions that all involved would have to adhere to? How would the losses which could occur be mitigated adequately?

Response GP67-2

Draft EIS Chapter 3, Section 3.17.4.4, *Vessel Traffic Management*, discusses the systems that are in place to manage vessel traffic in Grays Harbor safely. See Chapter 4, Section 4.6, *Environmental Health Risks—Vessel Transport*, for mitigation measures associated with vessel traffic.

Comment GP67-3

3. It has been said that losses can be mitigated with insurance by responsible parties. I have been in the Insurance business for over 40 years. I have seen catastrophes in many states, and have also seen losses which result in entities declaring bankruptcy. The project being proposed is by companies organized as LLC's. These are limited liability corporations. Once these go bankrupt, there is no recourse to ask for compensation from the owners involved who are protected by the LLC. They have very little risk to themselves personally. When bankruptcy occurs, people and business are never adequately compensated. Insurance originally started because of the need for maritime insurance. In those times, many years ago, major oil spills were not a risk that insurance was thought to provide coverage for. Today, after major events such as the Exxon Valdez in Alaska, and BP oil refineries in the Gulf Coast, the catastrophic losses to the environment, properties, and peoples lives and livelihood are now a realistic consideration when allowing commerce.

How can a consulting firm hired by companies wishing to expand, and increase profits, possibly be capable of truly determining the risks and feasibility of an expansion project of this significance? With no criticism intended of ICF International consulting, asking them to know all the risks involved, the devastation (which is extremely probable) which will result in numerous areas of the coast, is like inviting the rooster into the hen house. ICT is being paid by the companies, their goal is to obtain an OK from necessary governmental entities as quickly as possible. How can this be allowed? It must be denied.

Response GP67-3

For information about the independent development of the Draft EIS, refer to the Master Response for Purpose and Focus of the EIS. For information about financial obligations of the applicant and the mechanisms in place to address these concerns, refer to the Master Response for Liability and Responsibility for Incidents.

Comment GP67-4

4. With so much oil coming in to Grays Harbor, being stored in Grays Harbor, and exiting it, I am extremely concerned with the terrorism potential. The volume of oil products being suggested today will only grow in time. Our entire area in Grays Harbor is at great risk from terrorists wanting to disrupt the source of fuel for the USA and shipment to other areas. I know the House of Representatives in Washington DC has Okayed shipment of oil out of the USA for commerce. If the Senate gives an OK, and the President also gives an OK, our risk increases for disrupting shipment to other countries.

Has Homeland Security been asked to review the plans? Have they, or other areas involved in Terrorism prevention been asked to create a plan which involves the degree of possibility, and steps to secure the area and prevent an attack?

Response GP67-4

Refer to the Master Response for Purpose and Focus of the EIS.

Comment GP67-5

5. Currently, the oil tank storage discussed has been for Hoquiam, WA. The rail tracks carrying the oil Will be through many cities and areas in Grays Harbor. The length of trains will increase dramatically, and the delays where the tracks pass through populated areas which include homes and businesses will increase greatly. Because of the current location of tracks, emergency service is already impacted when help is needed and a train is slowly passing through the area. With an increase in number of trains per day, and the number of cars in any one train greatly increasing, there will likely be a negative impact to necessary emergency care.

How will this be prevented? Will new tracks be required away from populated areas before this Project is approved?

Response GP67-5

Draft EIS Section 3.16, *Vehicle Traffic and Safety*, analyzed 81 at-grade crossings along the PS&P rail line and the potential for trains going to or coming from the project site to increase vehicle delay at these crossings, including delay of emergency response vehicles. Section 3.16.7.1, *Applicant Mitigation*, proposes mitigation measures to reduce impacts on vehicle delay. Final EIS Chapter 3, Section 3.16.8*, Would the proposed action have unavoidable and significant adverse impacts on vehicle traffic and safety?* clarifies that while implementation of proposed mitigation could reduce impacts on vehicle traffic, average and peak hour vehicle delays at the following grade crossings in Aberdeen would remain significant.

- Average hour: East Heron Street and Newell Street (Olympic Gateway Plaza area).

- Peak hour: Washington Street (Port of Grays Harbor area).

Comment GP67-6

6. Currently, Ocean Shores and other coastal cities plan for any necessary evacuations through the Hoquiam and Aberdeen areas. Our only hospital is in Aberdeen, but we must first go through Hoquiam.

If a disaster occurs at the oil storage sites, how ill Ocean Shores and other coastal areas get to the hospital safely? If the oil spill or explosion pollutes the air (which it will) how will those people with lung problems get safely to the hospital in Aberdeen? I lived in Anacortes, when the Shell oil refinery had a fire. The pollution resulted in horrific air quality problems, as well as dead sea life. What are the plans to mitigate this potential for Grays Harbor?

Response GP67-6

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Final EIS Section 4.7 has been revised to more fully describe human health impacts that could occur as the result of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment GP67-7

7. We live in a highly earthquake and tsunami prone area. The last major (9.0) earthquake was 200 years ago. It has been predicted that our area will experience another major quake in 200 years from the last one. We are at that year prediction now. Ocean Shores, and other coastal cities also are at great risk for a tsunami a short distance off the coast. The Techtonic plate has been active the past years with one plate inevitably colliding with the other plate causing a catastrophic earthquake. Oil should not be shipped or stored in such an unstable area. There are areas in Hoquiam, especially where the port is which are built on land which can turn to liquefaction when an earthquake occurs.

Why would there be any consideration given to build, store, or transport oil in or out of such a susceptible earthquake/tsunami prone area? It makes no sense, except those mostly interested in financial gain, or those wishing a catastrophe to occur. Please deny the permits and do not allow project to go forward.

Response GP67-7

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP67-8

8. Much has been said about improved rail cars, and improvements to train tracks. I've seen no details these changes would prevent spills for sure, or if they would be done before approvals are given. I've also seen no significant changes to ships carrying oil, and the disallowance of barges which are highly at risk crossing the "bar" at the entrance to Grays Harbor. It has been verbally said that things would be done to diminish the risk of an oil spill, but none have stated this would occur before the project can proceed. It has also been implied that risks would be "mitigated".

The DEIS states in several places that mitigation is not possible. If mitigation is not possible, then why is there consideration given to permitting this proposal? It is not possible to mitigate the horrendous risk involved. Therefore, these projects must be denied.

Response GP67-8

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP68, Bedall, Frank H.

Comment GP68-1

Name: Frank H. Bedall
Organization Name (if applicable): Bayfront Owner
City/State/Zip: Hoquiam, WA 98550

I totally oppose anything that could destroy Gray Harbor's greatest asset—its beauty and natural environment.

Response GP68-1

Comment acknowledged.

GP69, Bell, Sherri

Comment GP69-1

Say no to the OIL TRAINS: I'd say more, but I think you get the gist.

250 jobs is not worth the risk and side effects these terminals would impose on the Harbor and coastal Washington. We could lose thousands of existing jobs from one spill alone. And replacing one type of job with another is not creating jobs by any means. Just say no to these poorly thought out crude oil terminals, they're simply not worth it.

Please attend the meetings mentioned above, or if you can't please submit comments to the Department of Ecology through their website, thanks. Oh, and Renewable Energy Corp... just an FYI, but Crude Oil is NOT a Renewable Energy, at least not in the human time frame. So either change your hypocritical name, or drop your proposal and focus on what your facility in Grays Harbor was originally meant for, Biofuel production!!!

Response GP69-1

Comment acknowledged.

GP70, Bellamy, Patricia

Comment GP70-1

My name is Patricia Bellamy. Thank you for the opportunity to speak today. I'm here because the possibility of having an additional 100-mile long diesel coal train rumble through our beautiful northwest is horrifying to me.

I'm also speaking from the experience of over 40 years working as a critical nurse caring for heart and lung patients. But most importantly, I'm a great grandmother, and I'm most concerned about my great grandson's future, health, and safety.

These mile-long oil trains chugging diesel exhaust through our countryside communities will fill our air full of multiple toxins and carcinogenics, visual and microscopic soot. The unknown health risk associated with diesel transport makes expanding oil trains a moving public county health hazard, especially for children and elderly as well as those with respiratory and heart diseases.

Who would assume the cost of these stricken victims? Certainly not the oil companies or the railroads. How can people be assured by you decision-makers against the worst case oil train disaster like the one in Quebec, Canada where 47 citizens were killed?

The immediate health risk from vehicle transport and the potential for delays in the emergency response services, which is fire, police, and ambulance, cannot be mitigated, as well as continuous risk of derailment, fire and explosions.

Expanding diesel rail traffic is potentially widespread health crisis with the low-income families living along rail line suffering the most. Prevention is key in public health. You have the opportunity to make a real difference for many lives. Reject this flawed inadequate Draft EIS.

Thank you.

Response GP70-1

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion, including revisions to more fully describe human health impacts. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP71, Berger, David

Comment GP71-1

All energy projects should be evaluated on a comparative "cradle to grave" impact basis with respect to air, and water pollution, and climate change. Cumulative long and short term impacts must be regarded.

All oil trains should only be allowed to roll, if the cars can handle impact at the maximum velocity (eg. 70 mph) that they travel at.

We do not need to, in effect subsidize or bare the risk of large private corporations. Thanks for taking comment, Dave

Response GP71-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP72, Berman, Lowen

Comment GP72-1

To be very clear. To even consider the construction of new fossil fuel infrastructure at a time when 97%+ of the world's climate scientists warn of impending climate catastrophe is little short of madness. Any potential amount of jobs or development dollars pale in comparison to the financial, moral, human and environmental costs of continuing to extract, transport and burn fossil fuels. Instead of investing in new fossil fuel infrastructure we should be funding a Marshall Plan level effort to develop and implement sustainable energy systems while focusing on energy conservation through systemic lifestyle changes. These are not political opinions. They are hard scientific facts. They are reality. I am 73 years old and will not live to see the worst consequences of climate chaos. But my children and all of the world's children will curse our generations for failing to act when we had full knowledge of the consequences of our actions and inactions. In the name of humanity and the rest of the world's sentient being, we beg of you to say NO! to any new fossil fuel infrastructure.

Response GP72-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP73, Bernard, Judith

Comment GP73-1

No new petroleum trains or storage in WA! Spills WILL happen. We need to be working hard to find healthy alternatives to oil, not further endangering our land and water.

Response GP73-1

Comment acknowledged.

GP74, Beugli, David

Comment GP74-1

As the Project Coordinator for the Willapa Grays Harbor Oyster Growers Associate's I would like to thank your for the opportunity to submit comments for the Westway and Imperium EISs. Please review our attached comment letter. Sincerely, David Beugli

Response GP74-1

No attachment was uploaded to CommentWorks with this submission. However, Mr. Beugli's submission on behalf of Willapa Grays Harbor Oyster Growers Associate is presented with responses in Chapter 5, *Organizations,* of this Final EIS.

GP75, Bigelow, Bill

Comment GP75-1

Everything is connected. I have never even been to Grays Harbor, but expanding storage facilities for oil in Grays Harbor will affect all of us living near the Columbia River Gorge. Inevitably, rail traffic of unit trains carrying vast quantities of oil will increase throughout the Gorge. This would bring increased diesel pollution to our region; increase the threat of catastrophic accidents (have you investigated the impact of even a medium sized earthquake?); threaten Columbia River salmon; threaten Indigenous fishing rights; and violate the spirit of the Columbia River Gorge Scenic Area.

Response GP75-1

The Draft EIS considers the impacts related to a large earthquake, and smaller events are considered by inclusion in the consideration of the larger and more intense seismic event. Refer to the Master Response for Geographic Scope of the EIS for information about the analysis of indirect impacts in the extended study area in Chapter 5, *Extended Rail and Vessel Transport*. Refer the Master Response for Earthquake Probabilities regarding the analysis of impacts from seismic events.

Comment GP75-2

Perhaps most significantly for humanity, any increase in fossil fuel infrastructure increases the likelihood of a rise in global temperatures that put at risk the very communities throughout the world that contribute the least to greenhouse gas accumulations. The United States and most countries in the world are committed to an increase of no more than 2 degrees Celsius over pre-industrial times. Our carbon budget to stay under that temperature rise is 565 gigatons. The problem is that corporations and countries possess reserves of at least 2,795 gigatons of carbon -- more than five times our acknowledged budget. This means that there should be a moratorium on building fossil fuel infrastructure. I would like to know, point by point, whether these items are being taken into consideration as you deliberate over whether additional oil storage facilities should be allowed in Grays Harbor. Thank you for reading this comment.

Response GP75-2

Refer to the Master Response for Purpose and Focus of the EIS.

Final EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport from the likely source of crude oil to the furthest likely refinery destination, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively, in the context of emission inventories and reduction goals.

GP76, Black, Barbara Jean

Comment GP76-1

I attended the public hearing on October 8, 2015, in Aberdeen, Washington. I was moved by the passionate comments of so many citizens and public officials who, like me, are against any expansion of the use and transport of fossil fuels here in Washington or elsewhere. I believe we need to cut oil use and shift to clean fuels now. This will decrease air pollution and improve public health. Petroleum use is declining so it does not make fiscal sense to invest in these types of projects that are being proposed by Westway and Imperium. Furthermore, transporting oil puts communities at risk. The risk is not worth the few jobs these proposed expansions will create. We know from past experience that oil spills can have devastating effects on our natural resources. Please say "NO" to these projects and "YES" to a cleaner and greener future by investing in renewable energy like those projects in Grays Harbor, Oregon and Canada are already doing. Keep Washington clean and green and a place where people want to come and live and bring families to enjoy the beauty of the natural world. Let's spend money improving habitate for salmon and other species such as the many birds that stop here on their migration.

Response GP76-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP77, Blackbird, Marles

Comment GP77-1

we are very concerned about the health of our environment and children. please stop this assault on the earth and her peoples.

Response GP77-1

Comment acknowledged.

GP78, Bo, Bri

Comment GP78-1

These holding docs are highly dangerous for not only the environment, but the surrounding population as well. Methanol is poisonous to the central nervous system, and may cause blindness, coma, and death. I, along with countless others, oppose the Westway and Imperium Expansion Projects.

Response GP78-1

Final EIS Chapter 4, Section 4.7, *Impacts on Resources,* has been revised to more fully describe the human health impacts that could occur as the result of an oil spill, fire, or explosion. Issues specific to the REG (formerly Imperium Terminal Services) Expansion Project would be addressed in responses to comments as part of the Final EIS for that project.

GP79, Boatsman, Carolyn

Comment GP79-1

Put in an underground pipeline for gods sake. The Columbia Gorge should not be a rail conduit for oil no matter where it is going. That said, lets not despoil a public treasure to line the pockets of the oil industry. The whole idea is just infuriating.

Response GP79-1

Comment acknowledged.

GP80, Bock, Christian

Comment GP80-1

My name is Virginia Bock. I live in Hood River, Oregon, in the National Scenic Area of the Columbia River Gorge.

Oil trains pose a threat to our community. The greater the number, the greater the danger of derailment and explosion with catastrophic long-term sequences.

Your approval of these projects would increase the traffic of oil trains through the Columbia River Gorge, and consequently, the danger.

Please reject these proposals.

Response GP80-1

Comment acknowledged.

GP81, Bock, Christian

Comment GP81-1

My name is Christian Bock. I came up from Longview. Two days ago, I turned 80. And I just came here to help keep the environment because the generation born today, when they're my age, that they don't say, What did you guys do?

The thing is, ten years ago in Longview, there were some spin doctors who told us, We need energy. The United States needs energy. We need to put in an unloading facility for liquid natural gas.

And we all protested. We said, We don't need it. Upon which, a year later, two years later, this company out of Houston, Texas, went belly-up with over $100 million in debt.

Then another company started, right across from my house, to build a Ethanol plant because, We need energy. The plant was completed and they went into bankruptcy.

So we should not believe any one of these spin doctors who say, We need to do that. We need to do that. Just send them off.

Contrary to just recently, Donald Trump, he says, Yeah. Yeah. Yeah. Bankruptcy is part of business and I made a lot of money on it. We don't want that because it will ruin the landscape.

If an oil port is put in and it collapses ten years later, who is going to clean up? Nobody. For a century, it will be in a bad position.

The energy that's dug out of the ground should belong to all the people to be used here in moderation. Some people say it will last 100 years. I doubt that. But if it's used in moderation, maybe our grandchildren, when they turn 80, can still use it.

Response GP81-1

Comment acknowledged.

GP82, Bodding, Jim (Aleutian Isle Fisheries, LLC)

Comment GP82-1

Westway & Imperium Terminal

Services Expansion projects EISs

C/O ICF International

710 Second Street, STE 550

Seattle, WA 98104

Sirs:

As a Washington coastal Dungeness crab fisherman, I emphatically oppose the development within Grays Harbor of the proposed oil shipping of Bakken and tar sands oil via rail and tankers.

A devastative spill or spills are inevitable with [illegible] environmental devastation. I also own property within Grays Harbor and forsee [sic] an eventual property value problem as a result.

Jim Bodding

Response GP82-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values. Refer to the Master Response for Purpose and

Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP83, Boland, Brice (Surfider Foundation)

Comment GP83-1

My name is Brice Boland with the Surfrider Foundation. I'm here to voice a concern for over 3,000 boarders in Washington state who are opposed and are concerned about the proposed oil terminal.

Our members come from all over the state to recreate in Grays Harbor. Our members walk the beach, watch the sunsets in Ocean Shores, and enjoy the State Park in Westport. They bring their wallets, they bring their boards, they bring their enthusiasm to support this great area of recreation within the state of Washington.

Surfrider recently completed a Recreation Use Study and will be used as part of the state's marine spatial planning process. It has determined that $481 million comes to the coastal communities of Washington in nonconsumptive recreational uses. A major portion of that is in Grays Harbor.

The DEIS needs to address the financial impact to the current existing economy whether it is recreation, commercial fishings, the shellfish industry, and all the various current economies that are providing jobs, employment, and a way of life here in Grays Harbor. We oppose the terminals and ask for no action on the proposed permits.

Thank you.

Response GP83-1

Draft EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, addresses economic considerations, social policy implications, and the costs and benefits associated with the proposed action. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7.

GP84, Bold, Molly

Comment GP84-1

My name is Molly Bold. I'm a lifelong resident of Grays Harbor. My family has been here for a 130 years, and my son, Fritz, will be a fifth generation fisherman here in Grays Harbor County and of the coast of Washington.

And, as a young woman that grew up in the heart of the timber bust, one of my greatest concerns and something that is very dear to my heart is the economy of Grays Harbor and having jobs and family wage jobs that will benefit our community, that will rebuild our resources and our infrastructure, and our surrounding areas, and lift the depression that is over this community, both economically and socially.

But, as I look at the oil proposals and the shift in our resources being directed toward a fossil-fuel based economy, I'm concerned because it's not sustainable.

And, as I look to the future and generations of fishermen and families and the thousands of people that are supported by our seafood economy, transferring our resources and investing so much and risking so much toward these oil expansions is not worth it. It's not a great investment or a great choice.

When I think of Grays Harbor 35 years from now, I don't want to think of a dirty community or an oil saturated community. Or even as we've seen with these huge industrial projects in our port, I don't want to see empty facilities as this phase -- or as these types of facilities phase out and are no longer needed. I want us to invest in things that are sustainable and will benefit our communities and our families. Big oil is not the proper investment for us.

Response GP84-1

Comment acknowledged.

GP85, **Boonstra, John**

Comment GP85-1

Good afternoon. My name is John Boonstra. I'm former executive minister of the Washington State Association of Churches. I'm currently serving in the United Church of Christ.

I speak on behalf of faith-based people who remind you that today's hearings are not only about the future of Grays Harbor. These proposed oil terminal retrofits will escalate dangerous rail transport of volatile crude where I also live in the Columbia Gorge.

Your EIS is limited in scope. It excludes any truthful analysis of the impact of extended communities, like the one in which I live. It treats people in extended regions as if we are collateral damage to the deadly risks of the big oil agenda.

Everybody knows you can't mitigate significant environmental destruction from oil train accidents, and oil tank spills, and air pollution.

Everybody knows that all the insurance policies in the world written to cover the cost of low profile oil spills will never be enough to compensate for the impossible liability that big oil places on the lives of our children.

Everybody knows that oil is a fossil fuel that wrecks the planet and in 15 years it will become an expendable asset. When Pope Francis came to the United States, he reminded us that harm done to the environment is harm done to all humanity; that high polluting oil must be and can be replaced with renewable energy; that we are one single family and that this is the moment to make decisions for our own dignity.

I urge you to reject the expansion proposal by Westway and Imperium, and I believe that everybody knows it's the sensible, conscionable, and responsible thing to do.

Thank you.

Response GP85-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

GP86, **Borso, Pam**

Comment GP86-1

Dear Consultants, Ecology and City of Hoquiam. The people of the State of Washington have the right to decide which risks they are willing to accept and which they are not, and just because some dangerous projects were permitted, that doesn't mean we should approve of more of them. We urge you to reject the oil terminals proposed in Grays Harbor because they will create the following significant and adverse impacts which cannot be avoided or mitigated and are unacceptable. The tank cars cannot be made crash worthy. Non-yard oil train derailment spills are guaranteed to happen in the extended area several times per decade. An oil spill would have significant and adverse impacts that cannot be prevented or mitigated. At best only 14% of the oil is recovered in a spill. Crude oil contains benzene which cannot be recovered from the water. Thank you for allowing this comment Pam Borso

Response GP86-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP87, **Bossard, Pat**

Comment GP87-1

My name is Pat Bossard. I object to the transportation of crude oil through Grays Harbor. Who pays for the overpasses and underpasses of the railroads so that emergency crews and citizens can travel about their daily lives without being blocked by the trains?

Response GP87-1

As noted in Master Response for Connected or Similar Actions, no modifications to the railroad are needed because of the proposed action. The analysis of impacts related to railroad improvements is outside the scope of this Draft EIS.

Comment GP87-2

Who will pay for cleanup of crude oil? Is that in writing? Has a complete study been done on the Wynoochee River Railroad Bridge that is over 100 years old. Who will repair and replace that bridge if necessary? Is that in writing?

You sit on the streets and when loaded log trucks come through Aberdeen and hits a bump, you can feel the ground shake. Same with Hoquiam. The ground is unstable. It rains a lot in Grays Harbor County. Railroad ties decay and collapse. We had many grain rollover cars last year. Three of them were near streams.

Response GP87-2

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP87-3

Should crude oil get the okay to ship through Grays Harbor County and there is a spill into one of our streams or rivers, it would carry to the ocean. And because the law of averages and the history of spills we've already had with grain, this will happen.

The fish, crab, and razor clam industry will be affected for a very long time which will trickle down to many losses. The impact will be huge. If an explosion and fire should happen due to crude oil, many lives will be lost and there will be horrible regrets forever.

Response GP87-3

Comment acknowledged.

Comment GP87-4

Please use common sense in your decision-making and not let dollar signs taint and cloud your thinking. Please listen to the testimonies and knowledge of the citizens of all walks of life and ages of Grays Harbor County, Oregon state, and beyond worldwide. Please listen and learn by others' mistakes. I had to cut this letter way down.

Thank you so much for listening. I moved here in 1948. I'm almost 70 years old. I've seen a lot of mistakes made. A lot of people thought they could make huge, huge money off of some of these things, and it's not as great as you think it's going to be.

Thank you.

Response GP87-4

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP88, **Bossard, Pat**

Comment GP88-1

I object to the transportation of crude oil and coal by railway or any other means through Grays Harbor and Washington State.

I object to the storing of crude oil and coal in Grays Harbor and Washington State.

Response GP88-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP88-2

Who will pay for overpasses and underpasses of the rails so that citizens, bus drivers, business owners, emergency crews, et cetera, can travel about in their daily lives without being blocked for 30-plus minutes by increased train activity due to crude oil or coal shipments? Is it in writing?

Response GP88-2

Draft EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, addresses potential impacts on vehicle delay and emergency vehicle access. Refer to the Master Response for Mitigation Framework for more information about the development, implementation, and enforcement of mitigation measures.

Comment GP88-3

Who will pay for cleanup of crude oil or coal spills? Is it in writing?

Response GP88-3

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP88-4

How will companies such as lumber, automobile, grain, Lemay Enterprises, Inc., et cetera ship by rail in and out of Grays Harbor County if crude oil and coal transporting takes up the majority of the rail time?

Response GP88-4

Draft EIS Chapter 3, Section 3.15.4.7, *Current PS&P Rail Line Capacity and Operations*, presents the results of the rail modeling analysis of the PS&P rail line capacity. Based on this analysis, the addition of 1.25 trains per day on average to baseline trips would result in approximately 4.25 train trips per day along the rail line, which is approximately one-third of the capacity of the line.

Comment GP88-5

Has a complete study been done on the Wynooche River Railroad Bridge that is over 100 years old? Who will repair the Wynooche River Railroad Bridge or rebuild it when necessary? Is it in writing?

Response GP88-5

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP88-6

Please read the History of Aberdeen and Hoquiam, Washington.

The cities were built on fill. If you stand by a street when a loaded log truck hits a bump, you can feel the ground shake. If you are in a building, it can be felt also. The ground is unstable.

It rains a lot in Grays Harbor County. Railroad ties decay and collapse. Many are currently worn out and have not been adequately repaired, maintained or replaced. Recent train car rollovers and spills prove this.

Should crude oil and coal get the okay to ship through Grays Harbor County? If there is a spill into one of our streams or rivers which will carry it to the ocean -- and because of the law of averages and history of spills we've already had, this will happen -- the fish, crab, oyster, and razor clam industry will be over with for a very long time. This will trickle down to many losses, tourism, home sales, and real estate values will plummet. The impact will be huge.

The same would happen to the logging and farming industry and other businesses if a dry land spill happens. The impact will be huge.

If an explosion and fire should happen due to a crude oil accident, many lives will be lost and there will be many horrible regrets forever.

Please, I beg you to use common sense in your decision making and not let dollar signs taint your thinking.

Please listen to testimonies and knowledge of the citizens of all walks of life and ages of Grays Harbor County, Washington State, and beyond worldwide.

Please listen and learn by other's mistakes.

Our Port of Grays Harbor County has had many opportunities in the past to have clean and safe businesses to start up and ship out of our port but were pushed out because of expensive leases, permits, and costs, so they went elsewhere.

Are the potential hazards of bringing crude oil and coal through Grays Harbor County to be stored at and shipped out of our port really worth the 85 jobs it will generate?

Force the oil companies to build refineries near drill sites instead of shipping crude oil and coal across multiple states and oceans.

Thank you for reading my comments. I moved to Grays Harbor County as a baby in December 1948.

Pat Bossard, 32 Matzen Road, Montesano, Washington 98563.

Response GP88-6

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP89, Bougher, Thomas

Comment GP89-1

Name: Thomas R. Bougher, concerned Citizen
Organization: Citizens for a Clean Harbor
City/ State/ Zip: Hoquiam, WA 98550

My concern is for public safety. Not seeing input from local first responders included in the DEIS, my question is whether our communities have capacity to respond to a petroleum fire like that which occurred in LacMegantic, Quebec? We had "crash" trucks that projected FOAM fire suppression agents to deal with such events affecting aircraft operations in Danag. What resources do Hoquiam and Aberdeen fire departments have on hand to fight petroleum fires? What do our firechiefs [sic] say about our readiness to undertake exposure to large volumes of flammable petroleum? If specialized firefighting equipment is called for, who will pay for it? Residential taxpayers, or those private enterprises creating the threat? Having survived fires, and explosions during the Vietnam War, I feel very threatened by the proximity of these proposed projects nearby my home in Hoquiam. The apparent willful disregard of public safety by responsible public officials is reminiscent of the attitude of the politicians who compelled my generation to serve in the military, as well as the same mindset which sent subsequent generations to the Middle East

Response GP89-1

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

GP90, Bougher, Thomas

Comment GP90-1

My concern is for PUBLIC SAFETY. My background includes service as a United States Marine Corps safety office, employment as a USDOL/OSHA compliance safety and health officer, and Membership in the American Society of Safety Engineers. Transportation, and storage, of volatile toxic and flammable materials in bulk, like those proposed for the Port of Grays Harbor, which includes the City of Hoquiam, poses a serious and imminent hazard to those of us residing in proximity to these operations, which cannot be administratively mitigated. Approval of these proposed commercial operations, by cognizant public officials, would assume a voluntary assumption of risk by the electorate which simply does not exist, i.e. they have no legal mandate to proceed in accommodating existential corporate interests, and doing so will constitute willful disregard for public health and safety, which they have been entrusted to protect. Having personally experienced the devastating effects of a worst case scenario, while serving in a combat environment during the Vietnam war, I can testify that the tragic events experienced by the citizens of Lac Megantic, Quebec, will have the same destructive impact upon our communities here in Grays Harbor, Washington. The fact that large numbers of my fellow citizens here in Hoquiam have not felt these affects personally, and are behaving in an apathetic manner toward these presently abstract proposals, in no way negates the legal, and moral duty, of our public officials to act with an abundance of caution, in the public interest. Therefore, I strongly recommend that these proposals, currently under review, or contemplated, as in the care of Terminal 3 in Hoquiam, be DISAPPROVED.

Response GP90-1

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP91, Bougher, Tom

Comment GP91-1

My name is Tom Bougher. I am a homeowner in Hoquiam. And I wasn't sure whether I wanted to speak this evening. This is fairly emotional for me. I'm unfortunately a person that suffers from PTSD having served in the Marine Corps in Vietnam. And one of the events that led to that condition is

very similar ironically to the event that occurred in a small town like Hoquiam, Lac-Megantic, Quebec is where one of these Bakken crude train exploded and burned and killed 47 people.

So this is a very real feeling to me. I feel personally threatened by the thought that this project would go through and I would have to live in proximity to these explosive materials. I bought my home because I thought Hoquiam was a safe place to live in retirement. And I opted for a simpler lifestyle and to be debt free rather than continuing in a manufacturing business in California that we owned.

My question is what our fire chief has to say about our preparedness for meeting this threat. In Da Nang we had crash trucks to cover air traffic like they have at the Seattle International Airport to deal with fighting fires involving flammable materials like petroleum.

We recently acquired a ladder truck in Hoquiam for over $1 million. Would we also have to acquire a foam truck in order to meet the threat of a fire involving petroleum?

Thank you.

Response GP91-1

The City of Aberdeen Fire Department provided detailed comments on the Draft EIS, which are presented with responses in Chapter 3, Section 3.1, *Regional and Local Agencies,* of this Final EIS. Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

GP92, **Bougher, Tom**

Comment GP92-1

My name is Tom Bougher spelled B-O-U-G-H-E-R.

I'm a homeowner in Hoquiam, and I've read and studied a number of what I consider to be valid considerations questioning the safety and cost benefits I think of the proposed projects. What concerns me most is public safety.

I served with the Marine Corps in Vietnam, and one morning I was awakened at three a.m. by an explosion involving a field depot. So I have some personal experience of what it feels like to be in an environment like the Lac-Mégantic, Quebec rail disaster. That's what it is. You can find it in social media.

And I'm concerned that we don't have any input in the DEIS from our fire chief in Hoquiam or the other communities affected, and whether or not we're able to fight a fire.

We had crash trucks that could project foam on the fuel fires that occurred because we dealt with aircraft operations. Airports have crash trucks that are specialized equipment. They're very costly.

Hoquiam taxpayers, like myself, were recently asked to acquire a ladder truck for our fire department because we have a multi-story occupancy, the Emerson Hotel, and that was over a million dollars. I think it was almost a million and a half dollars.

How much would it cost to be able to address the risk of a petroleum fire, and who would pay for that, and that's my concern.

I'm trying to adopt a positive attitude and I'm a Marine. I was trained to can do, but I don't really like the idea. I feel threatened by the existence of these explosive trains near where I live. I feel like I'm back in Vietnam, which may or may not be a realistic response to what's taking place.

Those are my concerns.

Response GP92-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP93, **Brake, William**

Comment GP93-1

Thank You for extending the comment period for the Westway and Imperium DEIS from 60 days to 90 days. It appears that Westway and Imperium Agreed to this change and are interested in being a "Good Neighbor in the Community"

Response GP93-1

Comment acknowledged.

GP94, **Brake, William**

Comment GP94-1

November 15, 2015

Washington Department of Ecology
Sally Toteff
Southwest Regional Director

City of Hoquiam Washington
Brian J Shay
City Administrator

Westway Terminal Expansion Project

Public Comments on Draft Environmental Impact Statement

Comment Period August 31, 2015 to November 30, 2015

Dear Decision Makers,

Thank You for the opportunity to submit public comments.

I am submitting 53 comments on the proposed Westway Terminal Expansion at the Port of Grays Harbor Washington to deliver by rail 49,041 Barrels Per Day Crude Oil and Store at the Facility and deliver to Marine Vessels for delivery to west coast and international locations.

I am a retired Professional Engineer and have a 35 year career in the energy business with specialization in environmental, process and safety engineering as well as a management position in charge of a workforce of 115 employees. My degree in Chemical Engineering with specialization in cryogenic natural gas and helium operations offers the operational experiences lacking in this report.

The following is the top twelve reasons to deny permits for the Imperium Crude Oil Terminal Facility at Grays Harbor and the 53 items of concern on the project.

William Brake PE
3407 NW 116th Way
Vancouver, WA 98685
H – 360-574-9735
Williamb98685@aol.com

Port of Grays Harbor Washington –

Crude Oil by Rail Receiving, Storage, and Marine Vessel Loading to unknown destinations

COMMENTS - There were 22,200 comments received during the Scoping Comment Period for the preparation of the Draft Environmental Impact Statement for the Westway and Imperium Projects. The entire Grays Harbor County has a population of 72,797 people in 2010 so there is a considerable concern by citizens beyond the local area in areas considered “up track”.

RAIL - There are 52 rail bridges and culverts and 37 named and unnamed tributaries of the Chehalis River that are crossed by the PS&P Railroad and the 2,600 square mile watershed has no flood control facilities and is a wild river.

RAIL - There are 103 grade crossings of the PS&P Railroad and it impacts the wait time for both personal vehicles as well as emergency vehicles along the 59 mile rail system from Centralia to Hoquiam.

Response GP94-1

Comment acknowledged.

Comment GP94-2

RAIL - The rail systems are an aging 125 year old system that even in the perfect world are not maintained or managed for the rapid growth of unit trains of fossil fuels like crude oil, coal and propane. The long and repetitive weight has a large bearing on the recent surge of incidents especially at bridges, rivers, and

curves. If there are problems now, there will be incrementally more problems in the future as the maintenance cannot keep up with the growth.

Response GP94-2

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP94-3

TERMINAL - The Imperium Bio Diesel Facility has had a rapid decline in production the past three years with 50 %, 20 %, and 10 % of rated capacity. The facility was recently sold to Renewable Energy Group.

TERMINAL - There is no need for additional crude oil terminals in the Pacific Northwest as all the crude oil product is currently going to destinations now without the construction of new terminals. This only a business opportunity for a "Middleman Operation" to obtain a fee per barrel delivered.

EARTH - Between a 30 % and 50 % Probability of a Magnitude 6.0 or greater earthquake in the area in the next 50 years indicates this is not the ideal site for crude oil facilities.

EARTH - The Westway and Imperium Terminal Facilities are built on extremely poor soil of dredged and fill material requiring significant engineered steel pipe pilings being built between 75 and 130 feet below grade.

Response GP94-3

Comment acknowledged.

Comment GP94-4

AIR - There are 22 sensitive receptors within 1 mile of the facility like parks, child care facilities, health care facilities, schools, and recreational facilities and farmers markets. This is unacceptable proximity to a Crude Oil Terminal.

Response GP94-4

Final EIS Chapter 4 has been revised to include an additional applicant mitigation measure to improve local emergency planning and response that includes development of a geographic information system (GIS) layer that identifies critical facilities near the facility and along the PS&P line. The facilities will include schools, hospitals, community centers, and parks within 0.5 mile of the rail line. The GIS layer will be provided to the Local Emergency Planning Commission, local fire departments, and Ecology. The study will be submitted prior to beginning operations. Nonetheless,

mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP94-5

SAFETY – There is No HAZMAT Team in the immediate vicinity of the project area from Centralia to Hoquiam and a serious spill, explosion, or fire requires a 2-3 hour wait for specialized teams to arrive from Tacoma or Olympia.

Response GP94-5

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment GP94-6

VESSEL - The Port of Grays Harbor is a shallow water port influenced by 9 foot tidal changes twice a day. A deep draft marine vessel can easily run aground due to shallow water depth.

Response GP94-6

Draft EIS Chapter 3, Section 3.17.4.2, *Large Commercial Vessels*, provides information about navigable windows based on tidal heights.

Comment GP94-7

BUSINESS – The Tax Revenue of the two projects is $2,858,000 annually and is $0.0616 per barrel for a product valued between $40 and $100 per barrel. A single rail car represents $41 Tax Revenue.

Response GP94-7

Comment acknowledged.

Comment GP94-8

CONCERNS BY William Brake

WESTWAY TERMINAL AT THE PORT OF GRAYS HARBOR

Format is as follows: Section, Page Number, Risk (H,M,L) and Comment

General – Information Only – Comparison of the Railcar Unloading spots and the expected number of railcars to be Unloaded Daily is as follows for several of the proposed Crude Oil By Rail Terminals

LOCATION	NEW RAIL UNLOADING SPOTS	BARRELS PER DAY	RAILCARS PER DAY	RAIL CARS/ SPOT
Westway	62	48,917	70	1.12
Imperium	41	78,166	112	2.73
Tesoro Savage	90	360,000	514	5.71
NuStar Energy	12	22,200	32	2.66

Westway is significantly under estimating the Crude Oil Product or is significantly overbuilding the number of railcar unloading spots for future expansion.

Response GP94-8

As stated on page 1-1 of the Draft EIS, the applicant would be permitted to handle up to 17.9 million barrels per year. Chapter 3, Section 3.15, *Rail Traffic*, states that each unit train would have an estimated 120 cars. Each rail car would hold approximately 714 barrels for a total of approximately 85,000 barrels per loaded unit train. The anticipated rail traffic of 1.25 trains per day (including both loaded and empty trains) is consistent with the estimated 49,000 barrels per day on average. Additional capacity is needed to accommodate above-average days.

As noted in the Master Response for Project Objectives and Alternatives, the proposed action is a private project and the objectives and proposal are defined by the applicant. Draft EIS Chapter 2, *Proposed Action and Alternatives*, describes the type of material and approximate volumes to be transported based on this information. The City of Hoquiam will specify maximum throughput in the conditions of a shoreline development permit. In addition, other permit approvals could identify the maximum allowable (permitted) throughput of the facility. Any increase in annual throughput capacity would require revised or new permits and plans.

Comment GP94-9

General Page 13 – LOW - 22,200 comments were received during the scoping process and this is a significant involvement by the public. The public is actively involved in the Westway Terminal Project and is appreciated that the project has moved forward to the Draft Environmental Impact Statement.

Response GP94-9

Comment acknowledged.

Comment GP94-10

General Page 14 – HIGH - The project area is from Centralia Washington where the PS&P Railroad takes custody of the Crude Oil and continues along the Chehalis River for 59 miles to the Westway Terminal Facility in Hoquiam Washington and to a marine loading berth in the Port of Grays Harbor. This area is very limited in scope as there are several million people within the Danger Blast Zone along the route from the Production Fields in the Intermountain Western United States and Canadian Provinces. Additionally the US Water Boundary is usually designated as 12 miles off shore and this area should be considered also. There are habitat and people that is impacted throughout the approximate 1,285 miles from Williston ND to Hoquiam WA which is considerably more than 59 miles.

Response GP94-10

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP94-11

General Page 16 – HIGH- Considerable Earthquake, Seismic, and Tsunami potential exists in the Cascadia Subduction Zone and this is not a preferred location for a Crude Oil Transfer Terminal operation.

Response GP94-11

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP94-12

General Page 21 – HIGH - Rail Noise from both the Horn and the Wayside Noise from the Engines and wheels is a significant impact to human health along the 1,273 mile route. This needs to be studied more.

Response GP94-12

Draft EIS Chapter 3, Section 3.7, *Noise and Vibration,* provides an analysis of noise and vibration impacts related to the proposed action that would occur in the study area. Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP94-13

General Page 25 – HIGH - The Quinault Nation has unavoidable and non-mitigatable fishing damage from the proposed Westway Terminal in the Grays Harbor Area. This loss of fishing revenue needs to be compensated.

Response GP94-13

Comment acknowledged.

Comment GP94-14

General Page 28 – HIGH - The Olympic Gateway Plaza retail area has unavoidable and non-mitigatable retail damage from the proposed Westway Terminal in the Grays Harbor Area. This loss of retail revenue needs to be compensated.

Response GP94-14

Draft EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, addresses economic considerations, social policy implications, and the costs and benefits associated with the proposed action. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7. For more information about the development, implementation, and enforcement of mitigation measures, refer to the Master Response for Mitigation Framework.

Comment GP94-15

General Page 34 - HIGH - A 10,000 Gallon or an 8.4 Million Gallon fire that reaches the water are both classified as the same high potential environmental impact.

Response GP94-15

Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant, regardless of spill size.

Comment GP94-16

General Page 34 – HIGH - A three, five or thirty rail car fire are all classified as the same high potential environmental impact.

Response GP94-16

The scenarios referenced in the comment all have a high potential to result in environmental impacts. As noted in Draft EIS Chapter 4, Section 4.7, *Impacts on Resources,* while the potential for impacts would depend on the specific circumstances of each incident, larger spills are more likely to result in significant environmental impacts because of the relatively greater potential for widespread damage.

Comment GP94-17

General Page 36 – HIGH - Table S-3 indicates that animals die but people only have respiratory problems, dizziness, nausea, and eye and throat irritation. These are very hazardous and toxic materials and people die.

Response GP94-17

Final EIS Chapter 4, Section 4.7, *Impacts on Resources*, has been revised to more fully describe human health impacts that could occur as the result of an oil spill, fire, or explosion.

Comment GP94-18

General Page 110 – HIGH - The change from 18 to 80 rail car unloading spots only has concrete containment for a spill equal to one rail car plus an allowance for precipitation. This change in the number of rail spots is significant and the project needs several more containment basins.

Response GP94-18

Draft EIS Chapter 2, *Proposed Action and Alternatives,* Figure 2-4, *Existing Rail Loading and Unloading Spots over Concrete Containment Area,* shows that, for the proposed action, railcars would be unloaded one by one in the containment area. The project site would only accommodate 20 cars of a unit train (120 cars) for each rail spur, so the train would need to be delivered in six separate switching operations. The leading 20 cars would be pushed into a track and the remaining 20 would be pushed into the adjacent track.

Failure of an unloading hose would typically be constrained to a single tank car being unloaded. Moreover, such spills would not be expected to involve the loss of a full rail car as unloading would be stopped—and the car may already have been partially unloaded. The proposed action would comply with regulations regarding spill containment.

Comment GP94-19

General Page 111 – HIGH - The location of the Dock Safety Unit is indicated to be on the dock if space is available and on the shore if space is not available. This defeats the purpose of the safety unit and the project design should be farther along at this stage and not be a point to be determined later in the project.

Response GP94-19

If adequate space is not available on the dock, the unit would be installed on the shoreline near the dock in accordance with U.S. Coast Guard siting requirements.

Comment GP94-20

General Page 112 – HIGH- There is NO need for the Westway Terminal at the Port of Grays Harbor Washington as it is NOT a terminal directly connected to a refinery. It is strictly a "Middle Man Operation" that charges a Fee to receive crude oil by rail and store and transfer to marine vessels for delivery to unknown final destinations.

Response GP94-20

Comment acknowledged.

Comment GP94-21

General Page 112 –HIGH - The Rail Facilities will not be able to handle an entire unit train at 120 rail cars and require the segmented batching of the rail cars though a switchyard increases the potential for an unsafe act or unsafe condition resulting in either a spill or fire of the crude oil. Repetitive operations are one of the most dangerous tasks.

Response GP94-21

Comment acknowledged.

Comment GP94-22

Earth Page 127 – HIGH - Three historic major earthquakes indicate that this is not a preferred site for a crude oil transfer terminal. The use of 18 inch steel pipe driven 150 feet deep and over 200 columns per tank is a good indication the soil is very susceptible to liquefaction and unsuitable for a terminal facility. The three earthquakes were the 7.1 magnitude Olympia Earthquake in 1949, the 6.5 magnitude Seattle Tacoma Earthquake in 1965 and the 6.8 magnitude Nisqually Earthquake in 2001.

Response GP94-22

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP94-23

Earth Page 129 –HIGH - A 30-40% probability of a 6.0 Magnitude Earthquake in the next 50 years at the terminal site and a 40-50% probability of a 6.0 Magnitude Earthquake in the next 50 years along the PS&P Railroad is not a Mitagable event and the project should be cancelled. There will be a large spill, fire, explosion and loss of life related to this earthquake potential.

Response GP94-23

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP94-24

Air Page 145 – HIGH - The impact area for air emissions is from the Centralia Rail Yard, through the terminal operations and to 3 miles off shore. The emissions are not for all the locomotive emissions from the delivery to the railroad in Montana, North Dakota or Alberta Canada or does it include the standard 12 miles from the shore line to the boundary of US and International Waters. These items should be included in the analysis to be a valid impact area for the project. This does not include upstream crude oil production operations, Crude Oil Delivery Railroad Terminal Operations or any distance in International waters to the final refinery feedstock. As a Middleman Operation, this Terminal is not required as all the Bakken Crude Oil Product is currently going to market and this is only a business financial opportunity for Westway.

Response GP94-24

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively. The Final EIS has been updated to include estimated emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

Comment GP94-25

Air Page 161 –HIGH - The concern on Greenhouse Gas Emissions seems to be focused on Locomotive Diesel and Marine Distillate Fuel Oil Emissions and not on the actual product. The emissions could be reduced considerably by changing to either Propane or LNG as the fuel source for the large industrial engines. The overall emissions would be close to half of the similar Locomotive Diesel and Marine Distillate Fuel Oil Emissions and needs to be evaluated as an alternate fuel supply. It is important to note that this is an isolated project study area and could be an example for other Railroad and Marine Vessel Projects in the State of Washington.

Response GP94-25

As noted in the Master Response for Project Objective and Alternatives, the proposed action is a private project and the objectives and proposal are defined by the applicant.

Comment GP94-26

Air Page 163 – HIGH - The required emission efficiency of the Marine Vapor Combustion Units (MVCU) is listed at 98 %. The NuStar Energy Terminal Application in Vancouver Air Discharge Permit (ADP-07-2710-R3 Dated April 21, 2014) requires 99 % reduction efficiency for the MVCU. The 1 % difference is significant for the Crude Oil Product as it has a lot of undesirable compounds that need destruction. 99 % is a routine achievable standard.

Response GP94-26

The Olympic Region Clean Air Agency determined that the best available control technology for the marine vapor combustion units is 98% in their Notice of Construction Application response to the applicant dated December 5, 2014. The proposed vendor for the marine vapor combustion system guarantees a minimum 99% reduction in total hydrocarbon vapor emissions when operated in accordance with vendor specifications.

Comment GP94-27

Water Page 182 – HIGH - The 100 year flood zone elevation used in this report is meaningless based on two recent events. In December 3, 2007 the Interstate – I-5 was closed for 20 miles due to flooding and January 7, 2009 the same area was closed due to flooding of the Chehalis River. We are not exempt from flooding for the next 94 years so more extensive engineering review is required. The Watershed is about 2,600 square miles and has no flood control dams and is considered a wild river. By comparison the state of Rhode Island is 1,212 square miles so the watershed is over twice the size of this state.

Response GP94-27

The floodplain information provided in the Draft EIS is based on the Federal Emergency Management Agency's (FEMA) floodplain mapping. FEMA's Federal Insurance Rate Maps are the official maps on which FEMA delineates the special flood hazard areas for regulatory purposes under the National Flood Insurance Program. Special flood hazard areas are also known as the 100-year floodplain, which are areas that have a 1% annual chance of flooding. The 100-year floodplain is the area where the floodplain management regulations of the National Flood Insurance Program must be enforced. The 2013 preliminary FEMA maps that are described in Chapter 3, Section 3.5,

Water, are the appropriate standard for reference for the proposed action. RISK Map studies that were used to delineate the 1% floodplain area are based on the best available and up-to-date information recently gathered from Light Detection and Ranging (LIDAR) and other technology that was not previously available when older FEMA floodplain maps were developed.

Comment GP94-28

Animals Page 241 – MEDIUM - The voluntary two week Crude Oil Shutdown period for the annual migratory shore bird festival in Hoquiam is not a realistic event. The City of Hoquiam will lose $765,348 per year revenue from the terminal and $15.3 million dollars over the 20 year project life related to this festival. Industry and Birds do not mix and this is a meaningless requirement.

Energy and Natural Resources Page 243 – HIGH - The 138,583 gallons annually of Diesel for Rail Operations is only a fraction of the overall rail operations that is 22 times this amount. Similarly the Marine Vessel Fuel is 93,961 gallons annually is only a fraction of the entire Marine Fuel requirement that is 166 times more.

Response GP94-28

Comment acknowledged.

Comment GP94-29

Energy Natural Resources Page 248 – MEDIUM -The diesel fuel requirement of 138,583 gallons per year for the 458 PS&P Railroad trips could be replaced with either 196,865 gallons of propane or 213,825 gallons of LNG. Both are a better alternative to diesel with lower emissions and have an added benefit of increased engine life and reduced maintenance requirements.

Response GP94-29

Refer to the Master Response for Purpose and Focus of the EIS.

Comment GP94-30

Historic and Cultural Preservation Page 320 – HIGH - The first portions of the Northern Pacific Railroad were completed in 1892 and the rail line is 123 years old and is currently owned by Genesee and Wyoming and operated as Puget Sound and Pacific Railroad. The railroad as a small independent short line operation does not have the capital funding or technical expertise to maintain the rail line to the requirements of a Class I Railroad and frequent derailments and damaged equipment appears to be routine. If it was in better shape, it would be an attractive asset for purchase by BNSF or others, but this is not the case. The introduction of Crude Oil as a rail commodity brings significant added danger and risk over other currently handled commodities. Crude Oil is an upstream product of Oil Production and is not predictable in physical or chemical composition and 'wildness' is a common characteristic.

Response GP94-30

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under

existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant. Refer also to the Master Response for the Purpose and Focus of the EIS.

Comment GP94-31

Historic and Cultural Preservation Page 323 – HIGH - The soil below the Westway Terminal Site is Dredged Fill between 75 and 130 feet below the surface. This soil material lacks cohesiveness and structural strength required for large industrial foundations. The Storage Tank design calls for about 150 pieces of 18 inch steel pipe and use of a pile driver to force the pipe to a depth of refusal at 150 feet below grade. This soil is not strong enough to hold the weight of a single steel tank and its crude oil contents and will result in a catastrophic failure at piping connections. The dredge and fill operations have been ongoing since the early part of the 20th century.

Response GP94-31

Final EIS Chapter 3, Section 3.1, *Earth*, clarifies that according to the investigations completed at the project site, the majority of the site consists of gravel to about 40 feet below the surface underlain by loose to dense sandy gravel to a depth of about 130 feet below the surface. Figure 8 of the Hart Crowser report (2013; as cited in Section 3.1, *Earth*) indicates competent soil is generally reached at 150 feet below-ground surface.

Comment GP94-32

Tribal Resources Page 347 – HIGH - The vessel trips per year currently are 436 and the proposal for the Westway Terminal is an additional 238 trips per year making the new total 674 trips per year. This is a 35 % increase over existing vessel traffic and the Westway Project will significantly impact the fishing rights and fishing harvests of the Quinault Indian Nation that has treaty protected rights. Additionally the Chehalis Tribe will be impacted by the Westway project although they do not have treaty protected rights. These rights cannot be mitigated by the proposed measures and the Quinault Nation should be adequately compensated for the loss of fishing revenue by Westway. This compensation for the 737,800 average pounds of commercially caught Quinault Fish Harvest and the 2,581,019 average pounds of Dungeness Crab Quinault Crab Harvest cannot be overlooked.

Response GP94-32

The Draft EIS does not make a determination of significance related to tribal resources or treaty rights.

Comment GP94-33

Hazardous Materials Page 360 – HIGH - The Imperium Terminal at the Port of Grays Harbor was inspected by the Washington Department of Ecology and in 2011 found 7 violations and in 2014 found 6 violations that have reportedly all been corrected. The violations were on CERCLIS,

Manifest, RCRA, EPA and Echo and this is a concern on the potential Imperium Crude Oil Expansion Project. Also Westway was not reviewed and they are a similar operation.

Response GP94-33

The specific violations mentioned in the comment have all been corrected. They were mentioned in Draft EIS Section 3.14, *Hazardous Materials*, as having a low potential to affect the proposed action because of their location within the project footprint. The environmental history of the project site was reviewed (via prior environmental site assessments) and no recognized environmental conditions were noted during the review.

Comment GP94-34

Hazardous Material Page 364 – HIGH – The Groundwater at the Westway Project Site is 10 feet below grade and makes this an extremely dangerous site for a Crude Oil Terminal. The American Institute of Chemical Engineers Facility Siting Guidelines would prohibit the construction of a petroleum facility on this site.

Response GP94-34

Response:

The proposed facilities would be designed and constructed in accordance with all applicable regulations.

Comment GP94-35

Rail Traffic Page 376 –HIGH – The PS&P is classified as a Class III Rail System with annual revenue of $34.7 Million Dollars and has 52 rail bridges and culverts along the 59 mile route from Centralia to Hoquiam Washington. Part of the narrative discusses Class 2 and the difference is confusing on what is allowed and disallowed on this short line rail system. One example is that the maximum speed limit is 25 mph and some locations like the two rail drawbridges the maximum speed is 5 mph.

Response GP94-35

As stated in Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, the PS&P rail line is considered a Class 3 short-line railroad by the Surface Transportation Board based on its annual revenue. The Federal Railroad Administration (FRA) classification of railroads is based on the number of mainline tracks and operating speed. PS&P tracks are registered with FRA as Class 2 tracks with an overall maximum speed of 25 miles per hour for freight trains, although there are exceptions to the maximum speed in certain areas as noted in Section 3.15.4.2, *PS&P Rail Line Track Conditions and Physical Characteristics*.

Comment GP94-36

Rail Traffic Page 394 – High – The wait time at grade crossings near Aberdeen and Hoquiam is currently at 1 hour and 10 minutes and this will grow to 1 hour and 52 minutes with the addition of the Westway Terminal. The wait time is NOT a problem for the rail line but is a significant danger to vehicle traffic. If I lived or worked on the wrong side of the tracks, it would be extremely dangerous to have to wait for police, ambulance, or fire truck in an emergency situation. This current danger

does not go away and only gets worse with the addition of more rail traffic and people can die in this situation.

Rail Traffic Page 403 - High – There are 81 grade crossings of the PS&P Railroad between Centralia and Hoquiam in this 59 mile rail system. Many of these are the only means to a business or property and the delays are non mitigatable.

Response GP94-36

Comment acknowledged.

Comment GP94-37

Rail Traffic Page 404 – High – Port Industrial Road in Aberdeen has 17,310 vehicles per day and the wait time will be awful at this intersection. Can people be inconvenienced this much and the report does not address this truthfully.

Response GP94-37

Draft EIS Section 3.16, *Vehicle Traffic and Safety*, describes the potential impacts of increased rail traffic on vehicle traffic, including grade-crossing delay and queuing at nearby intersections. Figure 3.15-6 shows select grade crossings east of Poynor Yard. For detailed vehicle delay information, refer to Section 3.16.5.2, *Proposed Action*, and Appendix L, *Vehicle Traffic Analysis.*

Comment GP94-38

Rail Traffic Page 410 – High – Emergency Services at the Olympic Gateway Plaza is blocked for 35 minutes. This is a large shopping area and this impacts the local business in a significant way. Financial Compensation is needed.

Response GP94-38

Final EIS Section 3.16.7, *What mitigation measures would reduce impacts on vehicle traffic and safety?* identifies the measures to mitigate impacts on vehicle traffic and safety. Refer to the Master Response for Mitigation Framework for a discussion of how mitigation measures were identified.

Comment GP94-39

Vehicle Traffic Page 421 – High – Due to blockage of the Emergency Access to the Olympic gateway Plaza, Two paved recreational trails are suggested for emergency vehicles limited to 8.5 feet high. This is NOT a solution.

Response GP94-39

Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

Comment GP94-40

Vessel Traffic Page 441 – High – A 9 foot difference in tidal changes can make a difference on a vessel or barge to flow freely through the Grays Harbor or to run Aground. This is not the best location for a 24 / 7/ 365 operation that depends on the movement of product.

Response GP94-40

Draft EIS Chapter 3, Section 3.17.4.2, *Large Commercial Vessels*, provides information about navigable windows based on tidal heights.

Comment GP94-41

Environmental Health and Safety page 473 – High – No HAZMAT Team is in the immediate vicinity of the project area from Centralia to the Port of Grays Harbor. Furthermore, 35 % Statewide has no Type 1 Hazardous Response Team and 12 % Statewide has no Hazardous Response Team at All. These Statistics make this location extremely dangerous to employees, residents and visitors in the area. HAZMAT Teams from Tacoma or Olympia are 2 to 3 hours away.

Response GP94-41

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment GP94-42

Environmental Health and Safety Page 482 – High – A small spill of 200 gallons once every 25 years to a large spill of 8,400,000 gallons once every 50,000 years is unrealistic for the existing methanol operations.

Environmental Health and Safety Page 485 – High – A small spill of less than 30,000 gallons once every 9 years to a large spill of 8,400,000 gallons once every 40,000 years is unrealistic for the crude oil operations.

Response GP94-42

Refer to the Master Response for Risk Assessment Methods for a discussion about the assumptions, data sources, and methods used in the assessment of risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, and Appendix M, *Risk Assessment Technical Report*.

Comment GP94-43

Environmental Health and Safety Page 497 – High – The recent accidents on the PS&P Railroad are as follows:

There were four recent derailments on the PS&P rail line, all in April and May 2014. These derailments did not involve oil spills.

- On April 29, two cars derailed at 5 mph at South Washington Street in Aberdeen due to wide

gauge (track separation).

- On May 9, seven cars derailed at 6 mph at Heron Street in Aberdeen due to wide gauge.
- On May 15, 10 cars derailed at 10 mph near Montesano due to thermal track misalignment.
- On May 21, 11 cars derailed at 5 mph at Blakeslee Junction due to a combination of train makeup and track geometry design.

Had these derailments been petroleum products the damage could have been catastrophic.

Response GP94-43

Comment acknowledged.

Comment GP94-44

Environmental Health and Safety Page 503 – High – This is an example of the double talk in this report and the truth is that 14 recent Crude Oil incidents did result in fires and explosions.

Although fires or explosions can result from spills resulting from events like collisions and derailments, long-term historical data show that most spills do not result in fires or explosions. A fire or explosion would be less likely to occur than a spill. While there have been multiple recent derailments of trains on main lines that resulted in fires or explosions, the chance of an extreme derailment is very limited in the study area because of the slow speeds on the PS&P rail line, which are slower than typical mainline speeds. In general, large derailments from high-speed trains lead to releases from multiple rail cars. The energy involved in high-speed derailments and the resulting scatter of rail cars yield the greatest chance of a fire that affects other rail cars and possibly result in an explosion.

Response GP94-44

Refer to the Master Response for Risk Assessment Methods for a discussion about the assumptions, data sources, and methods used in the assessment of risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, and Appendix M, *Risk Assessment Technical Report*.

Comment GP94-45

Environmental Health and Safety Page 513 – High – The recent Grays Harbor incidents emphasize that the policy and procedures are inadequate and will only get worse and are not mitiagable. To have a potential three crude oil facilities at this site is an accident waiting to happen. Good stewardship of the land and water should be criteria for a new facility and bad stewardship should not be rewarded with more problems.

Response GP94-45

Comment acknowledged.

Comment GP94-46

Grays Harbor has navigational challenges, including a bar at the entrance to the harbor, a constrained navigation channel for deep-draft vessels, and sharp turns in the channel. The substrate

of the channel is generally sand and mud, which, in addition to the requirement for vessels to be double-hulled, reduces the potential of spill due to groundings.

Response GP94-46

This information was considered in the analysis of risks presented in the Draft EIS Chapter 4, *Environmental Health and Safety*, and Appendix M, *Risk Assessment Technical Report*.

Comment GP94-47

From 2008 to 2014, several vessel incidents occurred in Grays Harbor, including one methanol spill from a vessel. Five incidents were caused by loss or reduction in propulsion. One of these resulted in a vessel grounding with no damage or spill and one resulted in an allusion with a buoy with no damage or spill. In 2011, a ship spilled 200 gallons of methanol to water because of human error in connecting a hose to a flange for a transfer.

In 1988, the barge *Nestucca* spilled 231,000 gallons (5,500 barrels) of heavy fuel oil along Washington State's outer coast, offshore of the entrance to Grays Harbor. The barge was being towed and the line broke after crossing the Grays Harbor bar. The tug collided with the barge and ripped a gash in the hull, causing a spill. The oil spill affected beaches as far south as Oregon and north to Vancouver, British Columbia. Because of the spill, the Washington State Department of Ecology (Ecology) Spills Program and the Pacific State – British Columbia Oil Spill Task Force were established. Since that incident, Washington State laws and federal laws for oil spill prevention, preparedness, and response were implemented, including requirements for double-hulled vessels and natural resource damages.

Response GP94-47

Final EIS Chapter 4, Section 4.2, *Applicable Regulations*, and Appendix B, *Applicable Regulations*, include this information. Both have been revised to reflect updates to the regulatory environment since the issuance of the Draft EIS.

Comment GP94-48

Environmental Health and Safety Page 522 – High – The inerting of the barges for Bakken Crude Oil is necessary but it is overlooked that the inerting of the barges is required for the Canadian Tar Sands Oil and Dilbit as well as any Crude Oil production that could come to the Port of Grays Harbor. Crude Oil is unpredictable in physical and chemical properties and is dangerous. By comparison, refined petroleum products are predictable in physical and chemical properties and at this time would not require inerting of barges.

Response GP94-48

All crude oil coming to the proposed facility would be required to be made inert, consistent with applicable safety regulations.

Comment GP94-49

Environmental Health and Safety Page 533 to 540 – High –

Numerous measures and protocols are in place to prevent and minimize the extent of a spill once it

occurs. These measures aimed at minimizing the frequency of a potential spill and the extent of the spill would reduce the potential for adverse impacts on human health, animals, plant , recreation resources, aesthetics, cultural resources, tribal resources, . However, no mitigation measures can be implemented that will completely eliminate the possibility of a large spill, nor are there any mitigation measures that will completely eliminate the adverse consequences of a large spill.

This Boiler Plate Statement is repeated several (seven) times indicating that not only could it happen, but it will happen and the damage will be adverse. This Terminal for the Westway Project is only an incremental financial opportunity as a middle man operation charging a fee per barrel transferred. This project should NOT be Approved as the Crude Oil is going to market now without any new Crude Oil by Rail to Marine Vessel Terminal and especially at the environmentally sensitive Grays Harbor.

Environmental Health and Safety = Page 540 to 545 -High -

Numerous measures and protocols are in place to prevent and minimize the extent of a spill once it occurs. These measures aimed at minimizing the frequency of a potential spill, fire or explosion and the extent of the spill, fire or explosion would reduce the potential for adverse impacts on human health, animals, plant , recreation resources, aesthetics, cultural resources, tribal resources, . However, no mitigation measures can be implemented that will completely eliminate the possibility of a large spill, fire or explosion nor are there any mitigation measures that will completely eliminate the adverse consequences of a large spill, fire or explosion.

This Boiler Plate Statement is repeated several (seven) times indicating that not only could it happen, but it will happen and the damage will be adverse. This Terminal for the Westway Project is only an incremental financial opportunity as a middle man operation charging a fee per barrel transferred. This project should NOT be Approved as the Crude Oil is going to market now without any new Crude Oil by Rail to Marine Vessel Terminal and especially at the environmentally sensitive Grays Harbor.

Response GP94-49

Comment acknowledged.

Comment GP94-50

Extended Rail Analysis Page 566 – High

The rail systems are an aging 125 year old system that even in the perfect world are not maintained or managed for the rapid growth of unit trains of fossil fuels like crude oil, coal and propane. The long and repetitive weight has a large bearing on the recent surge of incidents especially at bridges, rivers, and curves. If there are problems now, there will be incrementally more problems in the future as the maintenance cannot keep up with the growth.

This analysis of the BNSF lines suggests the following conditions by 2035.

- Pasco-Spokane at 170% utilization.
- Seattle-Spokane via Wenatchee at 150% utilization.
- Spokane-Hauser Junction, Idaho at 150% utilization.
- Vancouver-Pasco at 140% utilization.
- Seattle-Portland and Everett-Burlington are projected to be near the 100% utilization mark.

Response GP94-50

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS.

Comment GP94-51

Extended Rail System – Page 569 – High

The following statement indicates that the state of Washington and Specifically the WADOT is totally unprepared for the crude oil and coal unit trains. Since they are an integral part of the overall decision on the many proposed terminal facilities, the Westway Project needs to be rejected.

The WSDOT State Rail Plan states it did not include crude oil movement by rail or coal export terminal proposals in Washington State for the 2035 projection. The Millennium Bulk Terminals – Longview coal export proposal includes an estimate of 16 train trips a day (Millennium Bulk Terminals—Longview 2013). The Gateway Pacific Terminal coal and bulk export proposal includes an estimate of 18 train trips a day (Pacific International Terminals 2012).

Since this report overlooked all the Crude Oil Terminal, Refinery, Propane Terminal , Butane Terminal at Longview, this report is meaningless with old data and statistics.

Response GP94-51

Rail traffic is highly dynamic and fluctuates because of changing demand. The 2035 rail traffic estimates are intended to provide a "snapshot" of estimated rail traffic volumes; the rail traffic estimates do not represent actual volumes for 2035.

Comment GP94-52

Cumulative Impacts – Page 582 – High The 1 hour NO2 Standard would be exceeded if all the three crude oil projects are approved in the Grays Harbor Area. This Standard cannot be exceeded.

Response GP94-52

As stated in Draft EIS Chapter 6, Section 6.5.1, *Air*, a violation of the NO_2 standard would not likely occur for the following reasons.

- The standard requires that the 3-year average of NO_2 be exceeded.
- The analysis conservatively assumed a high percentage of NO_2 converted.
- All of the mobile source activity as previously described would have to occur simultaneously during meteorological conditions that have the poorest dispersion conditions (i.e., very low wind speeds and a strong temperature inversion).
- The maximum 1-hour background concentration would need to occur simultaneously.

Additionally, incorporation of the mitigation proposed in in Section 6.5.1.3, *Mitigation Measures*, would further reduce the risks of exceeding applicable air quality standards.

Comment GP94-53

Cumulative Impacts – Page 602 – High – If all the crude oil projects are approved in the Port of Grays Harbor, the unit trains will go from 3.1 per day to 7.35 per day and the wait time at one grade crossing will be 3 hours and 23 minutes. This is unacceptable to anyone.

Response GP94-53

Comment acknowledged.

Comment GP94-54

Cumulative Impacts - Page 632 – High – The cumulative adverse impacts are significant and are a significant change in the way of life for all people impacted by the Port of Grays Harbor Crude Oil Terminals. Home Values are degraded, fishing is decimated, the beauty, recreational and cultural resources are tarnished, and people die from the effects of the crude oil. The prescription in this report is to: "Take two aspirins and call me in the morning" is totally unacceptable.

With the cumulative projects, although the chance of an incident occurring would be cumulatively greater, the potential consequences of any one event would be similar to those described in Chapter 4, Environmental Health and Safety. While the increased activities from the concurrent operation of all cumulative projects would increase the risk of a release, the expected impacts from any of the release scenarios would remain the same. As discussed in Chapter 4, Section 4.7, Impacts on Resources, exposure to crude oil could result in adverse impacts on the following resources.

- **Water, plants, and animals.** In general, crude oil can degrade water quality and result in toxic exposure of plants and animals to harmful chemicals. Depending on the specific circumstances, exposure can cause tissue damage in plants and animals that can affect respiration, reproduction, and behavior. In extreme cases, exposure can result in death.
- **Tribal resources.** Harm to natural resources used by tribes for commercial, subsistence, or ceremonial purposes could result in adverse impacts on tribal resources.
- **Aesthetics, recreation, and cultural resources.** Crude oil can cause aesthetic impacts by coating the environment and resulting in large areas of reduced vegetative growth. These impacts can disrupt recreational activities if areas affected by spills have to be closed to prevent harm of exposure to people or to conduct cleanup activities. Spilled oil can also cause damage to historic structures or other important cultural resources. Depending on the circumstances of the incident and the nature of the cleanup activities, ground disturbance during cleanup may also adversely affect archaeological resources.
- **Human health.** Exposure to crude oil can adversely affect humans, primarily through exposure to harmful air pollutants in the first few minutes of a spill. Depending on the circumstances of the incident, if people inhale crude oil vapors, they may suffer irritation to their respiratory systems, which can cause dizziness, rapid heat rate, headaches, confusion, nausea, and / or vomiting.

Response GP94-54

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency

response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment GP94-55

Cumulative Impacts - Page 700 – High – The overall project will generate 82 construction jobs for Phase One and 46 Construction Jobs for Phase Two which will probably be out of area workers and short term. The Operations of the Westway Terminal at full build out will employ an additional 36 workers.

The Tax Revenue related to this project is $1,217,000 per year for the 49,041 BPD Crude Oil by Rail Terminal. The $1,217,000 Annual Tax Revenue divided by (49,041 BPD x 365 Days) = $0.06798 per Barrel. With Crude Oil Market Price between $40 and $100 per Barrel, is it worth $0.6798 per Barrel to the citizens of the State of Washington and more specifically the local Port of Grays Harbor Area?

Response GP94-55

Comment acknowledged.

Comment GP94-56

Appendix M – Risk Assessment Technical Review - Page 362 - HIGH– The Class 2 Railroad system is limited to 25 MPH or less and is as slow as 5 MPH on the Wynochee Bridge. This rail system cannot support this increased hazardous material traffic.

Appendix M – Risk Assessment Technical Review – Page 369 –LOW - The Rail Release Frequencies between 11 and 44,000 years is unrealistic numbers. The statistics need a reality check.

Appendix M – Risk Assessment Technical Review – Page 383 – MEDIUM - 33 million gallons of Methanol annually at Westway and 751.8 million gallons of Crude Oil annually. The potential for cross contamination is very possible as the methanol represents only 4 % of the total rail car product.

Appendix M – Risk Assessment Technical Review – Page 384 – HIGH - The Overall chance of an accident with loaded or unloaded railcars is 1.7 years. This is an extremely high risk and the project is too dangerous for this location.

Appendix M – Risk Assessment Technical Review – Page 386 – HIGH - The Overall chance of an accident with a Marine Vessel is once every 11 years. This is an extremely high risk and the project is too dangerous for this location.

Response GP94-56

The reference in the comment to an incident occurring once in 1.7 years is for the no-action alternative and as noted in Appendix M, *Risk Assessment Technical Report*, does not represent the

likelihood that a spill would occur but rather the chance than any incident might occur regardless of the potential for a release. Similar estimates for rail and vessel transport related to the proposed action are given on Draft EIS pages 4-8 and 5-6, respectively. These numbers represent the incremental chance of any incident associated with the proposed action. Similarly, they do not represent the equivalent chance of a spill. The combined risks of a spill are not presented in the Draft EIS for the reasons discussed in the Master Response for Risk Assessment Methods.

GP95, **Brake, William**

Comment GP95-1

Brake—Comments on Rail Transportation System as it relates to the Grays Harbor Terminals of Westway and Imperium on the DEIS

November 18, 2015

City of Hoquiam—Brian Shay

Washington Department of Ecology – Sally Toteff

Subject: Rail System related to the Port of Grays Harbor Crude Oil Terminals

Westway and Imperium Draft Environmental Impact Statement Comments

I am a retired Energy Engineer that lives "Up Track" of the Proposed Grays Harbor Crude Oil Terminal Projects of Westway and Imperium.

The impacts of this project go well beyond Grays Harbor and its communities. The railroad hauling this explosive crude go right through the heart of two of Washington's largest cities, Spokane and Vancouver, as well as the many smaller communities along the Columbia River and I-5 Corridor. The consequences of an explosive derailment in these communities would likely result in many deaths and the destruction of infrastructure. When the responsible company is sorted out....and then goes bankrupt, who will pick up the tab? The profits are capitalized, the losses are socialized, landing square in the lap of our state and local residents.

Response GP95-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP95-2

The Washington Administrative Code - WAC197-11-060 (4) (b) states that, "In assessing the significance of an impact, a lead agency <u>shall not limit</u> its consideration of a proposal's impacts only

to those aspects within its jurisdiction, including local or state boundaries." Clearly at the very least WA law requires that impacts on affected areas within the state must be considered.

Response GP95-2

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP95-3

However, there is no need for additional crude oil terminals in the Pacific Northwest as all the crude oil product is currently going to destinations now without the construction of new terminals. This is only a business opportunity for a "Middleman Operation" to obtain a fee per barrel delivered. The profit goes to the terminal; the costs of an environmental/human disaster are borne by the public.

Response GP95-3

Comment acknowledged.

Comment GP95-4

Additionally, there is No HAZMAT Team in the immediate vicinity of the project area from Centralia to Hoquiam and a serious spill, explosion, or fire requires a 2-3 hour wait for specialized teams to arrive from Tacoma or Olympia. The rest of the state has very limited emergency response capabilities for the rail systems.

Response GP95-4

Draft EIS Chapter 4, Section 4.2.1, *What framework prevents incidents from happening?* describes the formalized planning framework in place to address risks related to oil spills, fires, or explosions from the terminal operations, rail transport, or vessel transport. The responsible party may vary during the transport of crude oil. This section describes the requirements for planning and preventive equipment and design. Section 4.2.2, *What framework prepares for an incident?* describes federal and state regulations to prepare for an incident, the integration of plans, and drill and exercise requirements.

Final EIS Section 4.2.3, *What framework provides responses to an incident?* has also been updated to better reflect existing response capabilities and resources in the study area, including information identifying existing gaps from the Marine and Rail Oil Transport Study (Ecology 2015). Final EIS Section 4.7, *Impacts on Resources,* has been updated to better reflect how the proposed action could affect emergency service responses.

Final EIS Chapter 4 reflects additional mitigation measures proposed to address gaps in emergency preparedness planning and response capabilities. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions.

Chapter 4, *Environmental Health and Safety*, identifies other proposed measures to ensure that broader prevention, preparedness, and response planning involves the appropriate stakeholders and that updates to any plans applicable to reducing risks related to the proposed action contain

appropriate applicant information and participation. To the extent possible, as outlined in the Master Response for Mitigation Framework, measures that address the need for more coordinated and focused planning clarify the role of the applicant as appropriate.

Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7 describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment GP95-5

The rail systems are an aging 125 year old system that even in the perfect world are not maintained or managed for the rapid growth of unit trains of fossil fuels like crude oil, coal and propane. The long and repetitive weight has a large bearing on the recent surge of incidents especially at bridges, rivers, and curves. If there are problems now, there will be incrementally more problems in the future as the maintenance cannot keep up with the growth

Response GP95-5

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP95-6

For example, there are 52 rail bridges and culverts and 37 named and unnamed tributaries of the Chehalis River that are crossed by the PS&P Railroad and the 2,600 square mile watershed has no flood control facilities and is a wild river.

Response GP95-6

Comment acknowledged.

Comment GP95-7

Additionally, there is No Spill Plan for the Puget Sound & Pacific - This Class 2 railroad is limited by regulation to a maximum of 25 MPH. It is a "Ma and Pa" Railroad and should not be transporting loads that are capable of extreme environmental and safety hazards. It is sheer folly to expect that a railroad and its accompanying bridges, built over 100 years ago could be capable of handling products never dreamed of then. It was built to haul wood products, easily cleaned up after

inevitable derailments. It was not built to handle explosive, heavy loads. To even consider allowing this is to put the state at serious risk of law suit on the basis of casual disregard for human life.

Response GP95-7

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Refer to the Master Response for Risk Assessment Methods for a discussion about the assumptions, data sources, and methods used in the assessment of risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, and Appendix M, *Risk Assessment Technical Report*.

Comment GP95-8

The wait time at grade crossings near Aberdeen and Hoquiam is currently at 1 hour and 10 minutes and this will grow to 1 hour and 52 minutes with the addition of the Westway Terminal with similar times for the Imperium Project. The wait time is NOT a problem for the rail line but is a significant danger to vehicle traffic. If I lived or worked on the wrong side of the tracks anywhere in the state of Washington, it would be extremely dangerous to have to wait for police, ambulance, or a fire truck in an emergency situation. This current danger does not go away and only gets worse with the addition of more rail traffic and people can die in this situation.

Response GP95-8

Comment acknowledged.

Comment GP95-9

The Washington Department of Ecology, the air quality assessment in this DEIS is not taking into account the amount of diesel particulate matter because "this regulation only applies to stationary sources, not mobile sources such as rail locomotives. There are no local or state regulations for DPM (Diesel Particulate Matter) emissions from mobile sources." Mobile Emissions are regulated by the Federal Environmental Protection Agency and not the Washington Department of Ecology.

Response GP95-9

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present analyses of cancer risk from emissions of diesel particulate matter related to the proposed action and cumulative projects, respectively. Final EIS Section 3.2 and Section 6.5.1.2 have been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analyses predict lower emissions; the level of

increased risk is not considered significant. The proposed mitigation measure for air quality monitoring near the project site is no longer warranted.

Comment GP95-10

Of interest is the Draft Environmental Impact Statement acknowledges the risks of pollution, noise and, oh yes, catastrophic explosions from oil trains, the likes of which leveled Lac-Mégantic, Quebec, in July 2013. Disappointingly, having recognized the issues involved, the report simply says there's no way to mitigate them and recommends moving ahead. With a bureaucratic shrug of the shoulders, the concerns of communities from Spokane to Vancouver and onto Aberdeen are dismissed.

Naturally, the Washington Comprehensive Plan disagrees, and so do I. While it's true that there's not a lot the City of Hoquiam can do itself to mitigate the impact of its project, it can force Westway and Imperium to do something about it.

Response GP95-10

For more information about the development and implementation of mitigation measures, refer to the Master Response for Mitigation Framework.

Comment GP95-11

I urge a raft of measures that are within Westway and Imperium's control: advanced notification to local emergency personnel of all shipments, limits on storage of crude-oil tanks in urban areas, funding to train emergency responders, cars with electronically controlled pneumatic brakes, money for rail-safety improvements, implementation of Positive Train Control protocols and, most importantly, a prohibition on shipments of unstabilized crude oil that hasn't been stripped of the volatile elements that made Lac-Mégantic and other derailments so catastrophic.

Response GP95-11

Refer to Response to Comment GP95-4. For information regarding the approach to identifying mitigation, refer to the Master Response for Mitigation Framework.

Comment GP95-12

Due to federal laws, cities along the railway lines have no ability to control what goes through. Only the City of Hoquiam, now, while the project is still on the drawing board, has the authority to set reasonable limits and conditions on a project that puts millions of people along the railroad in harm's way.

I urge the Hoquiam City Council to use its discretionary authority in this matter to protect those of us who have no say in the process.

The Tax Revenue of the two projects is $2,858,000 annually and is $0.0616 per barrel for a product valued between $40 and $100per barrel. A single rail car represents $41 Tax Revenue.

We Can Do Better.

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Response GP95-12

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP96, Brake, William

Comment GP96-1

BRAKE—Marine System Comments for DEIS Westway and Imperium

November 24, 2015

City of Hoquiam—Brian Shay
Washington Department of Ecology – Sally Toteff

Subject: Marine System related to the Port of Grays Harbor Crude Oil Terminals

Westway and Imperium Draft Environmental Impact Statement Comments

I am a retired Energy Engineer that lives "Up Track" of the Proposed Grays Harbor Crude Oil Terminal Projects of Westway and Imperium. My 35 year work experience has demonstrated the wild and unpredictable crude oil dangers - far more than the dangers of the refined products.
The impacts of this project go well beyond Grays Harbor and its communities. The railroad hauling this explosive crude go right through the heart of two of Washington's largest cities, Spokane and Vancouver, as well as the many smaller communities along the Columbia River and I-5 Corridor. The consequences of an explosive derailment in these communities would likely result in many deaths and the destruction of infrastructure.

When the responsible company is sorted out....and then goes bankrupt, who will pick up the tab? The profits are capitalized, the losses are socialized, landing square in the lap of our state and local residents.

However, there is no need for additional crude oil terminals in the Pacific Northwest as all the crude oil product is currently going to destinations now without the construction of new terminals. This is only a business opportunity for a "Middleman Operation" to obtain a fee per barrel delivered. The profit goes to the terminal; the costs of an environmental/human disaster are borne by the public.

Response GP96-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel

transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP96-2

Additionally, there is No HAZMAT Team in the immediate vicinity of the project area as well as off shore and a serious spill, explosion, or fire requires a 2-3 hour wait for specialized teams to arrive from Tacoma or Olympia.

Response GP96-2

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment GP96-3

The Port of Grays Harbor is a shallow water port influenced by 9 foot tidal changes twice a day. A deep draft marine vessel can easily run aground due to shallow water depth.

Response GP96-3

Draft EIS Chapter 3, Section 3.17.4.2, *Large Commercial Vessels*, provides information about navigable windows based on tidal heights.

Comment GP96-4

Historically, there have been several vessel incidents in Grays Harbor: 28 from tankers and tank barges in 13 years. One spill affected beaches as far south as Oregon and north to Vancouver, British Columbia. The DEIS seems to minimize the spills, because they were "less than a full discharge of contents." Per the DEIS, the likelihood of very large releases would remain low. As noted previously, it is not possible to predict the timing or magnitude of an Incident Several Species that could be affected by a significant oil spill include: Fish, Crabs, shellfish, double-crested cormorants, pied-billed grebe, belted kingfisher, Caspian tern, Western sandpiper, Dunlin, and Sanderling, Bufflehead ducks and common goldeneyes, common mergansers, harbor seals, sea lions, killer whales, sea turtles, humans! (Yes, we can suffer mucous membrane inflammation from the oil or its fumes), pink-footed shearwater, black footed albatross, northern fulmar, beavers, river otters, bald eagles (can be exposed by feeding on injured or dead fish), clams, mussels, barnacles, snails, algae and plankton, salmonids protected under the Endangered Species Act, migratory birds, frogs, perhaps others unnamed.

Response GP96-4

Draft EIS Chapter 4, Section 4.6, *Environmental Health Risks—Vessel Transport*, presents the analysis of risk of oil spills, fires, and explosions during vessel transport related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Section 4.6.3 that would reduce the likelihood of a spill reaching the environment and

the potential impacts of an incident. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP96-5

Tribal fishing resources could be affected – Grays Harbor is home port for fishing vessels in ocean fisheries, and this is where fishers offload catch for these fisheries. Quinault also manage razor clams for commercial and subsistence harvest on beaches on and off the reservation adjacent to Grays Harbor. Fire could also result in the exclusion of tribal members from traditional areas during incident response, with a recovery estimate of years, if ever

Response GP96-5

Final EIS Chapter 4, Section 4.7.1.7, *Oil Spills, Fires, and Explosions*, reflects additional information to clarify potential impacts on tribal resources in the event of an oil spill, fire, or explosion.

Comment GP96-6

Wrong place for oil terminals: dramatic increase in oil tanker and barge traffic in Grays Harbor invites an oil spill disaster. If both terminals were built, 638 tankers and barges of oil would need to traverse Grays Harbor every year. The twelve mile Grays Harbor shipping channel is narrow and shallow, subject strong currents and has limited staging area for ships and tugs. An additional 638 trips through the Harbor by tankers and barges – both those carrying crude oil and those empty to receive the crude oil - would only add to congestion and collision risk.

The largest Panamax class tankers that would carry oil through Grays Harbor can hold almost 17 million gallons and are nearly three football fields in length.

Response GP96-6

As described in Draft EIS Chapter 3, Section 3.17, *Vessel Traffic*, the proposed action would result in a maximum of 238 vessel transits under maximum throughput operations; half of these trips would be laden vessels. As described in Chapter 6, *Cumulative Impacts*, the cumulative projects—the proposed action, the REG [formerly Imperium Terminal Services] Expansion Project, and Grays Harbor Rail Terminal Project —would add 758 trips. Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions.

Comment GP96-7

For perspective, the Exxon Valdez disaster in Alaska in 1979 spilled about 11 million gallons.

The Washington State Department of Fish and Wildlife stated “Grays Harbor is an area particularly sensitive to the adverse effects of oil spills.”

A major oil spill could devastate marine resource jobs which support more than 30% of Grays Harbor’s workforce according to a 2013 study by the University of Washington.

An economic study commissioned by the Quinault Indian Nation found that more than 150 tribal commercial fishermen could lose their jobs, resulting in a direct loss of as much as $20 million in wages and up to $70 million in revenue for affected businesses.

In 2014 Washington residents took an estimated 4.1 million trips to the Washington Coast spending $481 million. More than one-third of those visits were to Grays Harbor County to enjoy its spectacular and productive coastal and ocean waters.

Grays Harbor and the region are no strangers to oil spills. The Northwest has experienced two dozen spills and near misses over the last two decades. In 1988, the Nestucca barge holed off Grays Harbor spilling "only" 231,000 gallons of marine bunker oil, killing an estimated 3,500 seabirds. The oil sheen was seen from Oregon to the Strait of Juan De Fuca.

If built the two terminals together could store an astounding 114 million gallons, or the equivalent of 4,000 oil tank cars.

Response GP96-7

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP96-8

Grays Harbor sits in a major earthquake and tsunami zone. Geologists say the odds of a "big" Cascadia earthquake happening in the next 50 years are approximately one in three. The odds of the "very big" one are roughly one in 10.

According to the U.S. Geological survey the overdue earthquake could produce waves from 20 feet to more than 100 feet high. We can expect that wall of water would topple storage tanks washing away all the oil and possibly ignite.

Response GP96-8

Refer to Master Response for Earthquake Probabilities for an explanation of how the probabilities of strong earthquakes reported in the Draft EIS relate to those identified in recent studies. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP96-9

Such a huge surge in oil vessel traffic, in a place not suited to it in the first place, invites disaster. We know from disasters like the Deepwater Horizon in the Gulf of Mexico and Exxon Valdez in Alaska that one major oil spill can be devastating: contaminating coastlines, killing fish and wildlife,

destroying livelihoods, and ruining property values. The damage can last for decades, even generations. – Larry Thevik, long-time fishermen from Ocean Shores

For example, there are 52 rail bridges and culverts and 37 named and unnamed tributaries of the Chehalis River that are crossed by the PS&P Railroad and the 2,600 square mile watershed has no flood control facilities and is a wild river.

Response GP96-9

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP96-10

Only the City of Hoquiam, now, while the project is still on the drawing board, has the authority to set reasonable limits and conditions on a project that puts millions of people along the railroad in harm's way.

I urge the Hoquiam City Council to use its discretionary authority in this matter to protect those of us who have no say in the process. There is Significant Adverse Environmental Impact that cannot be mitigated for these crude oil projects.

The Tax Revenue of the two projects is $2,858,000 annually and is $0.0616 per barrel for a product valued between $40 and $100 per barrel. A single rail car represents $41 Tax Revenue.

We Can Do Better.

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Response GP96-10

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP97, Brake, William

Comment GP97-1

Brake - Comments on DEIS for Terminal Systems for Westway and Imperium Crude Oil Facilities at Grays Harbor Washington

November 22, 2015

City of Hoquiam – Brian Shay
Washington Department of Ecology – Sally Toteff

Subject: Terminal System related to the Port of Grays Harbor Crude Oil Terminals
Westway and Imperium Draft Environmental Impact Statement Comments

I am a retired Energy Engineer that lives "Up Track" of the Proposed Grays Harbor Crude Oil Terminal Projects of Westway and Imperium.

The impacts of this project go well beyond Grays Harbor and its communities. The railroad hauling this explosive crude go right through the heart of two of Washington's largest cities, Spokane and Vancouver, as well as the many smaller communities along the Columbia River and I-5 Corridor. The consequences of an explosive derailment in these communities would likely result in many deaths and the destruction of infrastructure.

When the responsible company is sorted out....and then goes bankrupt, who will pick up the tab? The profits are capitalized, the losses are socialized, landing square in the lap of our state and local residents.

However, there is no need for additional crude oil terminals in the Pacific Northwest as all the crude oil product is currently going to destinations now without the construction of new terminals. This is only a business opportunity for a "Middleman Operation" to obtain a fee per barrel delivered. The profit goes to the terminal; the costs of an environmental/human disaster are borne by the public.

Response GP97-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP97-2

Additionally, there is No HAZMAT Team in the immediate vicinity of the project area from Centralia to Hoquiam and a serious spill, explosion, or fire requires a 2-3 hour wait for specialized teams to arrive from Tacoma or Olympia. If there is a Tsunami or Earthquake in the Pacific Northwest, the wait time for HAZMAT could be days or weeks as there may be other higher priorities in the major urban population centers.

Response GP97-2

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment GP97-3

It is reported in the DEIS that there is between a 30 % and 50 % Probability of a Magnitude 6.0 or greater earthquake in the area in the next 50 years indicates this is not the ideal site for crude oil facilities. In general, the Japanese earthquake and tsunami was an epic disaster, but the resulting industrial failure (Fukishima) was cataclysmic. A great NW quake (magnitude+9.0) occurs every 350 years on average, and is now imminent or overdue. Grays Harbor is in the quake zone, the tsunami zone and the liquefaction zone. No industrial/chemical facility should be allowed there! Additionally, the Westway and Imperium Terminal Facilities are built on extremely poor soil of dredged and fill material requiring significant engineered steel pipe pilings being built between 75 and 130 feet below grade. Lastly, there are 22 sensitive receptors within 1 mile of the facilities like parks, child care facilities, health care facilities, schools, and recreational facilities and farmers markets. This is unacceptable proximity to a Crude Oil Terminal.

Response GP97-3

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Final EIS Chapter 4 has been revised to include an additional applicant mitigation measure to improve local emergency planning and response that includes development of a geographic information system (GIS) layer that identifies critical facilities near the facility and along the PS&P line. The facilities will include schools, hospitals, community centers, and parks within 0.5 mile of the rail line. The GIS layer will be provided to the Local Emergency Planning Commission, local fire departments, and Ecology. The study will be submitted prior to beginning operations. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP97-4

The 100 year flood zone elevation used in this report is meaningless based on two recent events. In December 3, 2007 the Interstate – I-5 was closed for 20 miles due to flooding and January 7, 2009 the same area was closed due to flooding of the Chehalis River. We are not exempt from flooding for the next 94 years so more extensive engineering review is required at the Terminal Sites as they are on the banks of the Chehalis River.

Response GP97-4

The floodplain information provided in the Draft EIS is based on the Federal Emergency Management Agency's (FEMA) floodplain mapping. FEMA's Federal Insurance Rate Maps are the official maps on which FEMA delineates the special flood hazard areas for regulatory purposes

under the National Flood Insurance Program. Special flood hazard areas are also known as the 100-year floodplain, which are areas that have a 1% annual chance of flooding. The 100-year floodplain is the area where the floodplain management regulations of the National Flood Insurance Program must be enforced. The 2013 preliminary FEMA maps that are described in Chapter 3, Section 3.3, *Water*, are the appropriate standard for reference for the proposed action. RISK Map studies that were used to delineate the 1% floodplain area are based on the best available and up-to-date information recently gathered from Light Detection and Ranging (LIDAR) and other technology that was not previously available when older FEMA floodplain maps were developed.

Comment GP97-5

The American Institute of Chemical Engineers details a facility checklist for Facility Siting as required under the OSHA 29 CFR 1910.119 Process Safety Management Program to protect the employees. The PSM Rule requires facility siting to be addressed in all Process Hazard Analysis. For a new facility, fulfilling this requirement can involve an analysis of plant layout and spacing between process units.

However, most PrHAs are performed on existing facilities. For existing facilities, PrHAs should include the severity of consequences of potential accidents involving co-located workers and adjacent facilities. Shielding, barricades, escape routes, control room location, and control room design for employees involved in the operation of the process should also be discussed. In addition, the impacts of vehicular traffic and of adjacent operations should be considered.

Example Checklist of Facility Siting Issues

General Considerations

1. Location of people relative to the unit

2. Location of critical systems

3. Dominant wind direction

4. Climate and weather extremes; earthquake, flooding, windstorms

5. Site topography

6. External hazards or threats (fire/explosion/toxic release from

7. nearby process or facility; aircraft; subsidence; sabotage)

8. Traffic flow patterns and clearances from process vessels and lines

9. Security and reliability of all critical feeds and utilities

10. Command center and alternate command center locations

11. Evacuation routes, emergency exits, safe rally spots

Control Room

12. Minimum occupancy; only essential functions during emergencies

13. Control room construction

14. Fresh air intakes location/isolation; temporary safe havens

15. Control room location relative to unit, columns, and pipe bridges

Process Facilities

16. Area electrical classification

17. Accessibility for mechanical integrity (sampling, maintenance, repairs)

18. Protection of piping and vessels from vehicles and forklifts

19. Protection of small-bore lines, fittings from external impact, personnel

20. Routing of process piping, critical controls cable trays, critical utilities

21. Vent, drain, and relief valve discharge locations

Loading/Unloading and Storage Facilities

22. Incompatible materials segregated; storage, dikes, sumps, drains, waste

23. Siting, labeling of unloading spots for incompatible materials

24. Storage tank separation distances (to process, between tanks)

25. Spill control, drainage direction, destination, treatment capacity

Fire Protection

26. Access for fire fighting and any other emergency services

27. Ignition sources (continuous, occasional/intermittent, uncontrolled)

28. Access to hydrant, indicator, and deluge valves

Accident Mitigation

29. Detection of leaks/ruptures 30. Emergency shutdown switch locations

31. Accessibility of isolation valves

32. Potential for fire/explosion in unit affecting other equipment

33. Critical controls, mitigation, communication, and fire protection systems functional and accessible after initial explosion or release

34. Back-up power supply/redundant feeds for critical electrical systems

35. Water supply for fire fighting

36. Routing of utilities

Personnel Protection

37. Passageways, pedestrian traffic patterns vs. hazardous locations

38. SCBA/respirator locations; accessibility on all shifts

This information was not addressed in the Westway and Imperium DEIS and is very important for the protection of the employees. To ignore this regulation is to ignore the safety of the employees.

The OSHA Process Safety Management (PSM) Regulations protect the employees and the EPA Risk Management Program (RMP) protects the public (neighborhood) from the harmful effects of an industrial facility in an urban environment. Only the City of Hoquiam, now, while the project is still on the drawing board, has the authority to set reasonable limits and conditions on a project that puts millions of people along the railroad in harm's way with the very volatile Bakken Crude Oil.

I urge the Hoquiam City Council to use its discretionary authority in this matter to protect those of us who have no say in the process.

Response GP97-5

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP97-6

The entire world is grappling with the imminent problem of global climate change. One of the major contributors is the use of fossil fuels. Now is not the time to build out risky infrastructure in a dying industry. To allow this project to move forward is to support a dinosaur industry at the expense of the future of the planet and its inhabitants.

The Tax Revenue of the two projects is $2,858,000 annually and is $0.0616 per barrel for a product valued between $40 and $100 per barrel. A single rail car represents $41 Tax Revenue.

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Response GP97-6

Comment acknowledged.

GP98, **Brake, William**

Comment GP98-1

Brake - Public Comments on Westway and Imperium related to Green House Gas Emissions for the entire project proposals from the crude oil rail loading terminal some place in the mid western states or Canada to the proposed Terminals in Hoquiam Washington and to the final destinations to domestic US refineries or to world markets.

November 26, 2015

City of Hoquiam - Brian Shay

Washington Department of Ecology - Sally Toteff

Subject: Westway and Imperium Incremental Emissions Comments for Crude Oil Trans-Shipment DEISGreen House Gas Emissions Calculations

I live "Up-Track" in Vancouver Washington and am a retired Professional Engineer with a 35 year career in the energy business.

These project proposals intend to deliver crude oil by rail from the Mid-Western United States, some 1,200 miles away, and go through the communities of Spokane, Kennewick, White Salmon, Washougal, Camas, Vancouver, Felicia, Ridgefield, Kalama, Longview, Chehalis, Elma, Montesano, Aberdeen, and Hoquiam. At the Terminal, the crude oil will be off loaded and stored in new tankage for delivery to marine vessels for unknown destinations. If it is US Crude, it is required to go only to US Refineries; however, if it is Canadian Crude Oil, it is allowed to go to world markets.

The Westway and Imperium DEIS issued August 31, 2015 details the Green House Gas Emissions in Metric Tons of C02 Equivalent for the Project Construction, Rail Transit, Rail Switching, Vessel Transit, Vessel at Dock, and On Site Operations. The total combined C02 Emissions are 77,968 Metric Tons Annually.

However, this is only part of the story as the limited scope of the DEIS only covers 59 miles of the PS&P Rail Road and 3 miles off shore of the Marine Dock at Hoquiam. The true picture is a 1,200 mile rail road one way trip and an estimated 500 mile marine transit to typical California and Puget Sound Refineries. Additionally, the crude oil could go to Alaska or Hawaii Refineries.

The revised CO2 Equivalent is 1,484,878 Metric Tons and is 19 times larger Green House Gas Emissions. What does the 1,484,878 Metric Tons of CO2 Equivalent mean in terms of Green House Gas?

Using the Green House Gas Equivalencies Calculator by the EPA, it helps to understand translating the abstract measurement into concrete terms that you can understand, such as the annual emissions from cars, households, or power plants. This calculator may be used in communicating your greenhouse gas reduction strategy, reduction targets, or other initiatives aimed at reducing greenhouse gas emissions.

1,484,878 Metric Tons CO2 Annually Equals

312,606—Passenger vehicles driven for one year

3,535,423,810—Miles driven by an average passenger vehicle

532,214—Tons of waste sent to the landfill

76,109—Garbage trucks of waste recycled instead of land filled

167,084,280—Gallons of gasoline consumed

1,594,928,034—Pounds of coal burned

19,657—Tanker trucks worth of gasoline

135,482—Homes energy use for one year

204,247—Homes electricity use for one year

7,962—Railcars worth of coal burned

38,840,649—Incandescent lamps switched to CFLs

3,453,205—Barrels of oil consumed

0.39—Coal-fired power plants for one year

38,073,795—Tree seedlings grown for 10 years Carbon Sequestered

1,217,113—Acres of US forests in one year Carbon Sequestered

11,465—Acres of US forests preserved from conversion to cropland in one year

Needless to say, these projects, Westway and Imperium, that seem small to many as compared to the many larger proposals in the Pacific Northwest have a SIGNIFICANT ADVERSE ENVIRONMENTAL IMPACT THAT CANNOT BE MITIGATED.

The Project Proposals for Westway and Imperium should be Denied.

Thank You for the Opportunity to express my professional engineering opinion on the Crude Oil Projects at the Port of Grays Harbor.

We Can Do Better.

Response GP98-1

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively, in the context of emission inventories and reduction goals. The Final EIS has been updated to include estimated emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP99, **Brake, William**

Comment GP99-1

November 28, 2015
City of Hoquiam – Brian Shay
Washington Department of Ecology – Sally Toteff

Subject: Westway and Imperium - Explosive Power of Energy and Other Comments for Grays Harbor Terminals

I live "Up-Track" in Vancouver Washington and am a retired Professional Engineer with a 35 year career in the energy business.

The explosive powers of the various energy proposals at the Grays Harbor are very catastrophic to the local communities and also in many cases to all the communities "Up Track" from the Facilities.

The Atomic Bombs that were detonated on Hiroshima and Nagasaki Japan and ended World War II were between 15 and 21 Kilotons of TNT. The Proposals at Grays Harbor can be **as much as 81 times more powerful than these atomic bombs** using the Environmental Protection Agency – Risk Management Program RMP*COMP used to determine the risk to the neighborhoods surrounding an industrial facility.

Three factors were used to calculate the danger using this program that were not done to protect and all communities and neighborhoods from the dangers of crude oil in the DEIS.

Over Pressure—at 1 PSI that shatters glass at body piercing velocities

Vapor Cloud Ignition—from a small 4 inch Diameter Hole (12.56 Square Inch) from broken piping or a simple act of terrorism

Heat Release—Boiling Liquid Expanding Vapor Explosion (BLEVE) with heat causing 2nd degree burns

The worst case scenarios are if the entire Westway Crude Oil Facilities were on fire with five storage tanks at 200,000 barrels of storage each and total loss of 1,000,000 barrels of crude oil.
Over Pressure—Every window would be shattered up to 4.8 miles from the site and significantly more damage at the source including fatalities.

Vapor Cloud Ignition—A 4 inch hole has to be promptly isolated within a 10 minute period to control the exposures to a 0.1 mile radius. If the incident is not controlled quickly, it can easily escalate to an uncontrolled fire.

Heat Release (BLEVE) —at a radius of 8.4 miles from the source, the heat is so intense that second degree burns are expected at the perimeter and worse burns and fatalities closer to the source.

The results are enclosed in my attachment BRAKE – Energy Potential of Grays Harbor Project.xls

It is recommended that these calculations be verified and included in the Final Environmental Impact Statement to present the dangers of crude oil and its relationship to the neighborhoods and communities.

Response GP99-1

The term "explosion" used throughout the Draft EIS, and the assessment of the likelihood and consequences of explosion incidents, refer to boiling liquid, expanding vapor explosions (BLEVE), vapor cloud explosions (VCE), and other types of explosive events that could result from releases of crude oil. As discussed in Final EIS Section 4.5, not all spill events would result in a fire (ignition), and not all fire events would result in an explosion. The Draft EIS proposes mitigation that would reduce the potential for oil spills, fires and explosions, but, as noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident and environmental impacts could be

significant. The approach and methods for analyzing risk of train oil spills, fires, and explosions in the Final EIS is discussed in more detail in Appendix M, *Risk Assessment Technical Report,* the Master Response for Environmental Health and Safety Analysis, and the Master Response for Risk Assessment Methods.

All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

Comment GP99-2

This is my final letter expressing my opposition to the proposed Westway and Imperium Terminals at Grays Harbor Washington and final comments are as follows:

Comment #1 - The Deputy Attorney General of the State of Washington (Essko) has commented on the PDEIS for the Tesoro Savage Crude Oil Terminal proposal and stated that the RULE OF REASON should be part of the DEIS. This RULE OF REASON is that all the engineering calculations and theory are meaningless if it doesn't make reasonable sense. To state that a potential metal component in an industrial facility has a failure rate of 20,000 years is not reasonable and common sense if that at best the component is good for 200 years if properly maintained. The RULE OF REASON should be applied to the Westway and Imperium Proposals for crude oil transfer at Grays Harbor.

Response GP99-2

Comment acknowledged.

Comment GP99-3

Comment #2 - The alternate proposals presented in the Grays Harbor DEIS are weak and do not adequately evaluate the pipeline alternative. The example that a crude oil rail car is 74,000 pounds of steel and there are over 50,000 crude oil rail cars in service in the US and Canada. If one rail car was melted down to make an 8 inch pipeline it is equal to 2,591 feet of pipe or one half mile. The 50,000 rail cars would be able to make close to 25,000 miles of 8 inch pipe and be a safer way of transporting the dangerous crude oil commodity. The cost is paid by the producers and not the taxpayers.

Response GP99-3

Refer to the Master Response for Project Objective and Alternatives for an explanation of the alternatives evaluated in the Draft EIS.

Comment GP99-4

Comment #3 - The Location of any crude oil terminal in an urban location is a disaster waiting to happen. It is not IF a disaster is going to happen, but WHEN. The Terminal needs to be located in a rural location that is 5 to 10 miles away from urban population centers. The American Institute of Chemical Engineers Facility Siting Guidelines is a basis to not only protect the employees working at a highly hazardous facility but it protects the neighborhood also by providing a safe distance. This has not been addressed in the DEIS.

Response GP99-4

Refer to the Master Response for Project Objective and Alternatives for an explanation of the alternatives evaluated in the Draft EIS.

Comment GP99-5

Comment #4 – Crude Oil is a raw upstream commodity with unpredictable chemical and physical properties totally different that the predictable world of refined petroleum products. When you pump gas at the gas station it is predictable on the product chemistry and physical properties. Crude oil can contain "Fracking Chemicals" that are not disclosed and classified as "Trade Secrets" that could be carcinogenic, radioactive, toxic, and dangerous in small quantities. When a new well is brought online, producers typically flush the chemicals out going directly into the crude oil tanks, pipelines, railroads and terminal facilities. The unknown Trade Secrets can kill humans at any location related to a release, spill, fire, explosion or BLEVE. This is not what I want for my community.

Response GP99-5

Comment acknowledged.

Comment GP99-6

Also, Crude Oil is allowed a 2.00 % Basic Sediment and Water (BS&W) and still be a marketable product.

Where does this 2.00 % Go – Into the bottoms of tanks to be drained off and go to disposal which could be a municipal wastewater treatment plant.

For the Westway Proposal 2.00 % equals 42,000 gallons per day of a mystery BS&W that needs handling.

For the Imperium Proposal 2.00 % equals 67,200 gallons per day of a mystery BS&W that needs handling.

It is concerning that as a private citizen, that I have been so actively involved in a project that is over 150 miles away from my home in Vancouver Washington because the DEIS for the Westway and Imperium failed to provide the basics needed to make an informed decision on these projects.

This is the 8th letter submitted as comments on the Westway and Imperium DEIS and the others are public record as The # 358, #401, #402, # 442, # 512, #552, and #561 and this one # ???.

Thank You for the Opportunity to make public comments on the Westway and Imperium DEIS.

We Can DO Better

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Response GP99-6

As noted in Draft EIS Chapter 3, Sections 3.3, *Water*, 3.13, *Public Services and Utilities*, and 3.14, *Hazardous Materials*, contaminated water, solid waste, and hazardous waste would be disposed of properly consistent with applicable regulations.

GP100, **Brake, William**

Comment GP100-1

FROM THE SEPA POLICY ACT HANDBOOK IN EIS IS THE FOLLOWING: 3.3. Purpose and Content of an EIS The primary purpose of an EIS is to provide an impartial discussion of significant environmental impacts, and reasonable alternatives and mitigation measures that avoid or minimize adverse environmental impacts. This environmental information is used by agency officials—in conjunction with applicable regulations and other relevant information—to make decisions to approve, condition, or deny the proposal. (See Using SEPA in Decision Making on page 73.) An EIS is not meant to be a huge, unwieldy document. The text of a typical EIS is intended to be only 30 to 50 pages. It is not to exceed 75 pages unless the proposal is of unusual scope or complexity, in which case it may not exceed 150 pages. The EIS should provide information that is readable and useful for the agencies, the applicant, and interested citizens. A readable document: • Is well organized; • Provides useful tools for the reader, such as a table of contents, glossary, index, references; • Is not overly technical (technical details necessary to support information and conclusions in the EIS should be included in appendices or incorporated by reference); and • Is brief and concise. A useful document: • Focuses on the most significant and vital information concerning the proposal, alternatives, and impacts; • Provides sufficient information about each alternative so that impacts can be compared between alternatives; and • Presents the lead agency's analysis and conclusions about the likely environmental impact of the proposal The Westway DEIS is 1,826 pages and the Imperium DEIS is 1,821 pages for a total of 3,647 pages is SIGNFICANTLY ABOVE THE REGULATORY GUIDELINE OF 150 PAGES. There is a fine line between what is too little and what is too much for a decision maker to make a decision, but in this case the documents are too long and too wordy to manage for the responding agencies, business, tribes, and public citizens. It is very difficult to read, understand, and respond to a DEIS in a short time period with the other priorities of life or business. If it is one project, a long DEIS is acceptable, however it is anticipated that close to 20 fossil fuel proposals are anticipated to get products to the Pacific Northwest Coastal Cities for transport on rivers and the Pacific Ocean to world markets. The Tesoro Savage (Vancouver Energy) Crude Oil Terminal DEIS has recently been released and is 4,556 pages. Thank You for allowing the public to comment on the Westway and Imperium DEIS.

Response GP100-1

The length of the Draft EIS reflects the amount and complexity of information deemed adequate for the full disclosure of impacts. Due to the size, other materials such as the *Summary* and fact sheets were prepared to convey impacts in a more condensed format. See response to previous comment regarding printed copies.

GP101, **Branshaw, Jon**

Comment GP101-1

Good evening. My name is Jon Branshaw, a lifelong resident of Grays Harbor and commercial fisherman from Westport, Washington. The proposed Westway and Imperium crude oil terminals that are in the planning and development phase for Grays Harbor is the biggest mistake the county can make.

I get it. We need jobs here, but the few hundred jobs these projects will provide are far outweighed by the economic disaster in the event of one oil tanker crashing on the south jetty.

Trust me, folks, I've been through one oil spill already. Anybody who remembers the EXXON VALDEZ in 1989. I was resident of Cordova, Alaska when that happened. Exxon said they will clean it up. But you can still dig down a foot on the affected beaches and find oil, almost 30 years later.

As a commercial fisherman I have a viable opinion on this project. But everybody loses in the event of a spill. Westway fails to mention of the 17 train loads of crude that will pass through the harbor each week. You think Walmart is tough now, just wait. There will be over 400 bar crossings, tankers crossing across the Grays Harbor bar every year. I urge all concerned harborites to oppose this project.

Thank you.

Response GP101-1

Comment acknowledged.

GP102, **Brantner, Maren**

Comment GP102-1

The Washington State Audubon society brought to my attention the negative impacts of the proposed oil terminals in an important bird area. To quote the WA State Audubon, "Proposed oil terminals in Grays Harbor estuary would endanger critical habitat for a host of migrating and resident bird species, including Red Knots and Marbled Murrelets. Grays Harbor is a site of hemispheric importance for shorebirds and supports six Important Bird Areas and a national wildlife refuge. The majority of the Pacific coast population of Red Knots congregates in the mudflats of Grays Harbor each spring to fatten up before heading on to breeding grounds in the Arctic. That means a significant portion of the population could be wiped out with a single accident or spill." I understand the need to balance development with environmental concerns, however, the risks of these alternatives seem to far outweigh any possible benefits. I am opposed to any alternative that increases the risk of damage and harm to the environment or bird habitats.

Response GP102-1

Comment acknowledged.

GP103, **Bray, Karen**

Comment GP103-1

Karen Bray
Earth Ministry
Olympia, WA 98206

I appreciate the effort being done to assess all the impacts that surround these expansion projects—Nothing has been noted however concerning the impact on our planet of burning 5 more million gallons of fossil fuels somewhere in the world. We need to address the global climate change Imperium should stay with just producing biodiesel and Westway with methane transport.

Response GP103-1

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively. Section 6.5.1.2 acknowledges that greenhouse gas emissions contribute to climate change and describes the projected impacts of climate change in the Pacific Northwest.

GP104, **Breuer, Sandra**

Comment GP104-1

I am opposed to crude oil facilities at Gray's Harbor

Response GP104-1

Comment acknowledged.

GP105, **Broadus, Jerry**

Comment GP105-1

I am a volunteer at Grays Harbor National Wildlife Refuge, where I perform shorebird censuses during migration. Even the relatively small portion of Grays Harbor known as Bowerman Basin performs an essential feeding role for migrating shorebirds. The remainder of Grays Harbor, especially along the north shore and at Bottle Beach, is the most important feeding area for shorebirds on their northerly migration along the Pacific Coast of the Northwest. I have helped with studies of blood lipid changes as shorebirds migrate. In a nutshell, if a shorebird on migration cannot stop at one of its feeding points along route, it will almost certainly never make it to the next stop. No bay on the Washington Coast is more important from this standpoint than Grays Harbor. All of the Pacific Coast race of Red Knots use Grays Harbor as a staging and feeding area during migration. They are declining already. Any large oil spill in impacting the north shore of the Harbor will impact this migration, and could easily drive this subspecies to extinction. There is no way to predict where or when an oil spill could occur. Even if a spill that reaches a shorebird feeding is cleaned up, it would have a long term serious and probably destructive effect on these areas. This could completely eliminate many vulnerable west coast populations of shorebirds. The DEIS

"technical fact sheet" for Environmental Health and Safety lists the likelihood of spill incidents from vessel collision, harbor entrance collision, and grounding-- using the "sliding scale" illustration--as closer to "likely" than "unlikely" for the first two and midway between "likely" and "unlikely" for the third. Risk from all three incident possibilities are severe. When added to the proposed size of the vessels, the amount of oil proposed to be carried, the narrowness of the Grays Harbor shipping channel, the strong currents in the Harbor, and the treacherous Bar conditions at the entrance--these risks are simply too high and potentially too devastating to allow. The only meaningful mitigation listed is the requirement of the use of tugs. That is not enough. The risk and the potential consequences should completely disallow permitting for this project.

Response GP105-1

For the reasons discussed in the Master Response for Risk Assessment Methods, the figures depicting risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, have been removed in the Final EIS.

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or within Grays Harbor, respectively. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including potential consequences to marine plants and animals and to sensitive areas including the Grays Harbor Shoreline and Grays Harbor National Wildlife Refuge (Bowerman Basin).

GP106, **Brockway, Abby (Rising Tide and Earth Ministry)**

Comment GP106-1

My name is Abby Brockway, and I'm with Rising Tide and Earth Ministry. I've partnered with Backbone Campaign 350, Seattle, Greater Church Council of Seattle, many organizations because we cannot do this alone. Washington state and actually North America is under attack from the fossil fuel industry.

I've attended every hearing I can. I'm a mother, I'm a business owner, and I believe that we have a small window to make change. I will submit my technical comments about how you can find the information you need to reject this proposal because there's been many arguments that have been said. But it comes down to the survival of our planet.

James Hanson just released a new ice melt paper, and our pathway to a safe and stable economy and environment. The window is closing. By 2013 we should have been at six percent reduction in carbon in the world.

We have got to be done with coal by 2030 and done with fossil fuels at 2050. And this makes absolutely no sense to drench these communities in fossil fuel. We are moving the wrong way, and I believe our backs are up against the wall.

And if these approvals get approved, I believe civil disobedience is my only option. And I can ensure you that everyone standing behind me is feeling the same way.

And I'm telling you now, I will go to jail. I'm fine to pay the price for our future generations. I am here and I mean it. I want you to see my face and my seriousness of how dire the situation is.

Thank you.

Response GP106-1

Comment acknowledged.

GP107, **Brooke, Phillip**

Comment GP107-1

Dear EIS Administrators: The Draft EIS for both the Westway and Imperium crude oil terminals in no way adequately addressed the areas of concern I detailed in my original written scoping comments. Where topics were addressed by name, the DEIS response was weak to non-existent. In the rare instance where the DEIS did respond to a topic, it was concerned with merely the parcels where the crude oil tank farms would sit, or the immediate area of the terminal, not the rail corridors. Where prevention and precaution was requested, the DEIS was focused on what would happen only after an incident. I have attached a copy of my original scoping comments for reference. Specifically, the Draft EIS did not address or inadequately addressed the following areas requesting consideration in my original scoping comments:

1. Bisecting our Communities, Accident Rates and Track Trespassings.

2. Cumulative Impacts to Historic Preservation, Historic Districts and Historic Architecture

3. Aging Infrastructure vis-à-vis Size and Weight of Crude Oil Trains.

4. Corrosiveness Impacts to Tanker Car Components and Railroad Tracks.

5. Hazardous Material Mislabeling (blind spot in federal law).

6. Schools and Vulnerable Populations.

7. Inadequate and Unsafe Existing and Re-designed Tanker Cars (blind spot in federal law).

8. Residential Neighborhoods Along Rail Corridors.

9. Lack of Tanker Car and Train Weigh-Ins (blind spot in federal law).

10. Elevated and Tunnel Track Systems.

11. Non-Accidental “Routine” Releases/Chemical Hazards.

12. Impacts of Sub-contracting and Lack of Joint Liability.

13. Bakken Crude Oil Pressures vs. Conventional Crude Oil (blind spot in federal law).

14. Hazard Communication, SDS, Benzene, Hydrogen Sulfide and (other) Carcinogens.

15. Accidents vs. Health Impacts of Long Term Exposures (10-fold Rule).

16. Crossing Times, Emergency Response and Economic Loss.

17. Vehicle Traffic Impacts (direct and indirect economic losses).

18. Limits to Future Size of Export Terminals and Foreign Oil Export.

19. Loss of Property Values and 'Takings'.

20. Risk to First Responders, Fire, EMS and Law Enforcement.

21. Emergency Response Plans.

22. Unsafe Rail Cars-Existing, Retrofitted and New.

23. Liability Insurance and Financial Responsibility.

24. Violating Permits and Inadequate Penalties.

Cumulative impacts of ALL fossil fuel rail terminal and refinery proposals currently under consideration, not just in Washington State, but those passing through Washington State (such as coal trains bound for the British Columbia Coal Export Terminal) must be considered in their fullness to understand the cumulative impacts to local communities and existing infrastructure around Washington State. I ask you to re-visit these topics in your Final EIS in order to adequately address the interests of those who live, work and recreate in so-called Pass-Through Communities around Washington State. On behalf of those impacted negatively by these proposed projects, I thank you for your thoughtful consideration of these critically important areas to us. Respectfully submitted, Phil Brooke, Centralia, WA Mailing address: PO Box 294 Wilkeson, WA 98396 253.531.3353 oldbrickhousefarm@yahoo.com

Grays Harbor Crude Oil Export Terminal Public Scoping Comment—Submitted September 23, 2014

Dear EIS Administrators:

Moratorium & the Precautionary Principle: This terminal approval process should not be allowed to advance until the absolute full impacts are known and impacted communities, as well as the natural environment are fully protected. The burden of proof and the entire expense should fall squarely upon those proposing these Bakken crude oil export terminals and not the U.S. Taxpayer. **For this & the below reasons, I & many others call on Governor Jay Inslee to call an immediate, retroactive & comprehensive moratorium on crude-by-rail export terminal schemes in Washington State**.

I'm a resident of Centralia, business owner in Winlock, farmer & am the director of risk management for a large employer by profession. Our whole family loves trains. I have family members who put in careers with Burlington Northern & I'm routinely interrupted by my 3 year old nephew, who wants to be lifted up to the window to see which train is passing by. Indeed, trains are one of the most environmentally sound methods to transport goods and people. But these proposals to transport extremely flammable Bakken crude oil in what rail industry officials are calling unsafe soda cans threatens this soundness & is simply put, a disaster waiting for all of us. As part of my scoping comments, I'm will also submitting separately the petition signatures of 450 of my neighbors & friends in opposition to these projects.

Response GP107-1

Refer to responses to detailed comments below.

Comment GP107-2

Bisecting our Communities, Accident Rates & Trespassings: Just in Lewis County, this crude oil will bi-sect & damage our 4 largest cities: Centralia, Chehalis, Napavine & Winlock. Centralia & Chehalis alone have 64 crossings between them. We know Lewis County has among the highest incidences of track trespassing in the State. Just because an oil executive says safety is their highest priority, does not mean Bakken crude oil can be shipped via railroad safely. It is not & cannot. The Manhattan Institute, a conservative pro-business think tank reports that crude oil rail accidents occur 34 times more frequently than pipeline accidents for every barrel of crude shipped comparable distances. We're seeing this play out in the news & have seen in the last year more crude oil train accidents than the last 4 decades combined.

Response GP107-2

Draft EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, addresses potential impacts on vehicle delay, emergency vehicle access, and safety in the study area from routine rail operations related to the proposed action. Final EIS Chapter 3, Section 3.16.8, *Would the proposed action have unavoidable and significant adverse impacts on vehicle traffic and safety?* clarifies that while implementation of proposed mitigation could reduce impacts on vehicle traffic, average and peak hour vehicle delays at the following grade crossings in Aberdeen would remain significant.

- Average hour: East Heron Street and Newell Street (Olympic Gateway Plaza area).
- Peak hour: Washington Street (Port of Grays Harbor area).

Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Chapter 5 acknowledges that routine transport in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and*

Mitigation. Final EIS Chapter 5 further describes the potential risks associated with rail transport in this area.

Comment GP107-3

Cumulative Impacts to Historic Preservation, Historic Districts & Historic Architecture: I am deeply involved in historic preservation in my personal life & have served for years on Historic Preservation Commissions. Much of Washington State's (& the nation's) historic architecture & built environment exists along railroad corridors, which are proposed to host crude oil trains. Sometimes the railroad came before the historic architecture & sometimes the railroad was built after. Indeed, when these trains bisect both small & large communities, it's usually in the historic areas. Both the Lynchburg, VA & Lac Megantic, Quebec disasters serve as poignant examples of this. These derailments & gigantic explosions occurred in the heart of historic districts. The nature of these historic areas & the condition of historic architecture will change fundamentally with the inundation of dangerous mile & a half long explosive trains, turning many areas into high risk rail yards prone to derailments even when the trains are not moving or moving at a very slow speed, as is common for derailments. Cumulative impacts from all crude oil trains must be studied on different levels:

- Immediate impacts to historic districts or those areas eligible for historic status will occur due to:
  - Derailments & other accidents/incidents.
  - Decline in business, as business interruptions occur due to blocked intersections, crossing times, noise, fumes & both real & perceived danger.
  - Higher crime, as areas parallel to railroad tracks carrying highly explosive crude oil will be reduced to all rental properties. Crime will increase. Neighborhood disintegration will occur.
  - Decline in local tax revenue to the city, county & state when properties lose value. Data already exists on decline of property values. this sub-topic, which should be accessed.
- Long-term impacts to historic buildings & properties, as property values decline as businesses & residents abandon historic areas & properties in light of the high risk posed with explosive trains. Ongoing maintenance & capital improvements will be neglected. I can tell you as a risk manager, vacant properties are at a significantly higher risk of fire, theft & water damage.

Cumulative negative impacts to historic preservation must be considered, understood & mitigated in the scoping. Our State's cultural heritage is dependent upon preservation of these many areas.

Response GP107-3

Draft EIS Chapter 3, Section 3.11, *Historic and Cultural Preservation*, describes the archaeological resources, historic resources, and culturally significant properties in the study area and identifies potential impacts from routine rail operations. Chapter 4, Section 4.7, *Impacts on Resources*, describes potential impacts on these resources from oil spills, fires, and explosions. Chapter 6, *Cumulative Impacts*, describes potential impacts on these resources from routine operations and risks of oil spills, fires, and explosions under cumulative conditions. Potential impacts on property values are addressed in Section 7.3, *Cost-Benefit Analysis.*

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP107-4

Aging Infrastructure vis-à-vis Size & Weight of Crude Oil Trains: The crude oil trains proposed will be up to 1.5 miles or 125 cars long, & as a result harder to control or stop, increasing the risk of something going wrong. Our area's rapidly aging rail and bridge infrastructure, much of it built on often saturated flood plains, has not been sufficiently assessed for suitability to this intensity of cargo with each & every tanker weighing up to 143 tons & the 4-5 locomotives weighing 190 tons each. We have seen 3 derailments in the Centralia to Grays Harbor line in the last 3 weeks for grain trains running at 10 mph, 6, mph & one at a complete stop. Slowing these crude oil trains is not going to prevent their derailment, as is suggested by Federal authorities. Ironically, Genesee & Wyoming propose to double the speeds on the Centralia to Grays Harbor line. Will scoping be conducting these infrastructure assessments to the satisfaction of local governments?

Response GP107-4

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP107-5

Corrosiveness Impacts: The corrosive nature of fracking liquids & materials in Bakken crude oil is well-known to cause premature corrosion to tanker cars; the interiors, fittings, hatch covers, valves & even the railroad tracks themselves (although Coal trains are surely helping). Your scoping must consider this as it relates directly back to human safety.

Hazardous material mislabeling: Scoping must consider the mislabeling & mischaracterizing of highly flammable crude oil under re-classification rules related to 'understood', but not 'actual' flash points.

Response GP107-5

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action that could occur as the result of various causal events. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Refer to the Master Response for Risk Assessment Methods for a discussion about the assumptions, data sources, and methods used in the assessment of risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, and Appendix M, *Risk Assessment Technical Report*.

Draft EIS Chapter 4, Section 4.5.3, proposes a mitigation measure to address concerns about the potential for mislabeled or mischaracterized crude oil. Specifically, the measure indicates that to improve the safe transport of crude oils with different volatilities and sinking tendencies, the applicant will not accept crude oil by rail unless the following actions have occurred.

- The applicant has received verification that a sample of the oil has been tested and properly classified and characterized.
- Where classification and characteristics of the oil are available in advance, the applicant has fully described this information and the implications for emergency response in its oil spill contingency plan.

Refer to the Master Response for Mitigation Framework.

Comment GP107-6

Schools & Vulnerable Populations: Scoping must consider all educational, child care, healthcare, vulnerable adult & critical infrastructure facilities within proximity of the radius of hazardous crude-by-rail trains. For example, in Winlock, WA, the Elementary School is just feet from the tracks.

Response GP107-6

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP107-7

Inadequate & Unsafe Tanker Cars: Scoping must consider the well-known safety issues for DOT-111's, retro-fitted DOT-111's, and newer DOT-123's. They must consider the need for pressurized tanker cars for this explosive material. It's a flammable gas, so pressurized cars only make sense. Bakken crude oil should be required to be transported and stored only in a safe manner, which does not cause 'imminent' threat as it does now to those living within radius of railroad tracks from North Dakota to their in-state destination. Roughly 5,000 of the worst DOT-111's were just made illegal in Canada. The rest will soon be illegal in Canada. Those are now likely to comprise the core of the crude oil tanker fleet in the United States, increasing the risk to all of us. This is considered a new weak spot in crude-by-rail safety.

Response GP107-7

Draft EIS Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* acknowledges the voluntary applicant measure for all new rail cars to meet or exceed the U.S. Department of Transportation Specification 117 design or performance criteria and the retrofitting of all existing tank cars in accordance with the U.S. Department of Transportation-prescribed retrofit design or performance standard (80 *Federal Register* 26643). However, as noted in Section 4.5.4, *Would the proposed action result in unavoidable and significant adverse environmental impacts related to rail transport*? the risks cannot be completely eliminated.

Comment GP107-8

Residential Neighborhoods: Scoping must consider the more conspicuous proximity of residential neighborhoods to the railroad tracks in smaller cities vs. cities like Lynchburg, VA, where urban growth has pushed residential areas out from the track radius (although higher density development is not occurring near tracks in urban areas). For example, the same derailment & explosion as the Lynchburg, VA derailment on 4/30 in a place like Centralia or Winlock, WA would have undoubtedly led to significant loss of life & property.

Response GP107-8

Final EIS Chapter 4, Section 4.7, *Impacts on Resources*, describes the potential impacts that could occur as the result of an oil spill, fire, or explosion, including potential impacts on humans.

Comment GP107-9

Lack of Weigh-Ins: Due to the length of unit trains carrying crude oil, they do not typically pass through weigh-in stations, so no one is tracking their weights. As a result, overweight cars will not be identified, much less tracked, creating more unnecessary imminent danger for communities. This is considered a blind spot in federal law.

Response GP107-9

As noted above, PS&P is required to adhere to all applicable regulatory requirements intended to ensure the safe passage of rail freight. Nonetheless, implementation of the measures described in Section 3.15.6, *What required permits and plans apply to rail traffic?* and Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident.

Comment GP107-10

Elevated & Tunnel Track Systems: The City of Spokane & many other areas have built their railroad lines on elevated tracks. Many others like Seattle have tunnels. Spokane has had cars fall from these tracks before. Scoping must study the result of highly flammable tanker cars being dropped from up to 80 feet elevations onto population centers.

- How does this enhance the explosion, resulting fires, scope/intensity of fire/explosion, loss of life, property damage & structural integrity of elevated areas?
- Will the entire train come down & explode when a crude oil tanker bomb goes off destroying the tracks?
- How would a tunnel or elevated accident decommission main lines for ALL train traffic, most especially local Washington State products?

Response GP107-10

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, and Chapter 6, *Cumulative Impacts*, address potential impacts in the extended study area, including the potential for increased risks, individually and cumulatively, respectively. The analysis of impacts in the extended study area is qualitative for the reasons discussed in the Master Response for Geographic Scope of the EIS. Final EIS Chapters 5 and 6 have been revised to clarify the potential impacts in the extended study area.

Comment GP107-11

Non-Accidental "routine" Releases/Chemical Hazards: Impacts from non-accidental releases of crude oil & VOC's must be scoped, quantified & understood. Hazardous materials testing studies must be considered for Bakken crude oil, to include all carcinogens, health hazards & fracking liquids not characterized in placards & safety data sheets. Trains WILL emit tons of VOC's annually into neighborhoods full of children & residents. For comparison, a small 2-aisle gas station emits 5-10 tons of VOC's annually just from people pumping gasoline. Using the precautionary principle, VOC emissions must absolutely be quantified & studied for these non-pressurized tanker cars. Due to oil & gas industry exemptions from Clean Air & Water laws, protections are non-existent.

Response GP107-11

The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, would reduce emissions of criteria and toxic air pollutants from onsite stationary sources. Draft EIS Chapter 3, Section 3.2, *Air*, presents emissions estimates of criteria and toxic air pollutants from onsite operations. Considering background concentrations, onsite emissions of criteria pollutants would not cause an exceedance of national ambient air quality standards. Emissions of toxic air pollutants related from onsite stationary sources would be below the state thresholds identified in WAC 173-460-150. As described in Draft EIS Section 3.2, these emissions are subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping for onsite stationary sources. Rail and vessel operators are required to adhere to all applicable regulatory requirements intended to ensure the safe passage of freight.

Comment GP107-12

Impacts of Sub-contracting: Will railroads, shippers, oil companies and tank car companies all be made **jointly liable** for accidents, health damage & spills, rather than simply sub-contracting away the most dangerous parts of crude-by-rail to 3rd party haulers, (LLC's without assets & very little insurance) who indemnify the parties above them? What other "disincentives" to safety, monitoring & maintaining safe operations exist within these business relationships? Sub-contracting the most high risk activities in an industry to a 3rd party is standard risk management practice across all industries & all governments. The effects of this should be scoped.

Response GP107-12

PS&P is required to adhere to all applicable regulatory requirements intended to ensure the safe passage of rail freight.

Comment GP107-13

Bakken Crude Oil Pressures: Scoping must include pressure tests for Bakken crude oil, which carries a relative pressure 3 times that of conventional crude oil. This is considered a blind spot in federal law.

Response GP107-13

The proposed facility would comply with the regulations described in Draft EIS Chapter 4, Section 4.2, *Applicable Regulations*. PS&P is required to adhere to all applicable regulatory requirements

intended to ensure the safe passage of rail freight. Final EIS Chapter 4, Sections 4.4.3, 4.5.3, and 4.6.3 identify additional mitigation measures to reduce risk.

Comment GP107-14

Hazard Communication/SDS-Hydrogen Sulfide & Carcinogens: I'm looking at the safety data sheet (SDS) for Bakken Crude & note this is nowhere near our grandfather's crude oil. It carries an NFPA flammability rating of 4, which is considered highly flammable & higher than that of gasoline, with a flash point of a hot day in July, as reported in the Lewis County Chronicle. It should be nowhere near barbeques, smoking, sparks or even static electricity. This oil also contains a baker's dozen of known or suspected carcinogens, such as benzene, hexane, ethylbenzene & xylene with a topping of fine particulates from the 4 to 5 locomotives required to pull these mile long loads. Benzene isn't a suspected carcinogen. It's known to cause leukemia in children. This isn't under debate. Incidentally, they're finding much higher levels of benzene in this stuff than was previously understood (up to 10 times higher), but it should be noted that according to current MSDS sheets, this crude already contains 10 times the legally allowed dose for an 8 hour shift. There are 12 other cancer-causing chemicals in Bakken Crude Oil. We know these tanker cars will vent & leak tons of pollutants into our neighborhoods annually. They have to vent, or they will explode. Thermal imaging cameras are documenting emissions locally. Federal officials in the Midwest are threatening to close down crude oil on-loading operations until lethal levels of hydrogen sulfide are brought under control. Oderless, hydrogen sulfide can simply kill you in high enough concentrations. It's heavier than air, so it will settle into the low points of our neighborhoods. Lewis County's flood plains have quite a few low points—especially in our cities.

Response GP107-14

The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, would reduce emissions of criteria and toxic air pollutants from onsite stationary sources.

Draft EIS Appendix D, *Air Data*, Table 5, reports onsite emissions of criteria and air toxic pollutants, including fugitive emissions during filling and draining and from storage tank valves and flanges, and emissions from annual storage tank cleaning, operation of the marine vapor control system during vessel loading, and onsite rail operations and vessel hoteling. Final EIS Table 5 reflects updated stationary source emission estimates based on the applicant's revised Notice of Construction application to the Olympic Region Clean Air Agency (ORCAA), which reflects requested ORCAA revisions to apply a more conservative crude oil Reid Vapor Pressure based on review of recently published Bakken crude oil data. Final EIS Table 7 reflects updated emission estimates for rail transport based on revised assumptions for rail operations (types and number of locomotives), based on information received from PS&P.

As noted in Draft EIS Chapter 3, Section 3.2, *Air*, prior to operation, the applicant will be required to obtain a permit from ORCAA, which limits the amount of emissions allowed by the applicant to safe levels.

Comment GP107-15

Accidents vs. Long Term Exposure: We know that in the American workplace, there are roughly 5,000 fatalities each year due to accidents, but more than ten times that number of deaths due to long term exposure to chemicals and other persistent health hazards. Our Children will be exposed

to these health hazards simply by playing in their back yards. Yet, they won't have the benefit of protective equipment, medical surveillance, occupational safety programs or workers' compensation like the employees working just on the other side of their fences. Will lead agencies be considering long term health effects of exposure to residents in Washington's pass through communities & what it will cost to provide personal protection, medical surveillance, & healthcare to residents experiencing persistent exposure?

Response GP107-15

Refer to the Master Response for Purpose and Focus of the EIS.

Comment GP107-16

Crossing Times, Emergency Response & Economic Loss: I want to thank Bill Schulte, Lewis County Commissioner & those involved in getting Lewis County & Chehalis a 3-year option on the Tacoma line. This keeps at least one pawn out of G&W's hands. But even with its purchase, crossing times will increase exponentially. I've seen cumulative impacts up to 12 hours a day in other traffic studies.

What we know are these mile & a half long trains will be managing a 90 degree turn in Centralia, then running at less than 5 miles per hour through our commercial & residential neighborhoods. Will traffic studies be conducted for ALL pass through communities in the State. Not just Centralia & Chehalis, to determine how much time crossings will be increased & perhaps more importantly, how this will impact emergency response services & local businesses?

Response GP107-16

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*, which presents a detailed analysis of potential impacts on vehicle traffic delay in the study area related to the proposed action.

Comment GP107-17

Vehicle Traffic Impacts: The direct and indirect economic and traffic impacts of traditional train cargo being forced to use roads and highways, because railroad routes are overwhelmed by crude oil trains should be carefully examined at all levels. Road may be inundated by cargo traditionally transported by train, exacerbating already difficult traffic backups & prematurely aging vehicle roads & bridges. This examination should include the impacts to the competitiveness of Northwest & American businesses, when these businesses are forced to utilize more costly transport methods when railroads become unavailable.

Response GP107-17

Draft EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, addresses potential impacts on vehicle delay and emergency vehicle access. The Final EIS section clarifies proposed mitigation and

potential significant and unavoidable impacts. Refer to the Master Response for the Purpose and Focus of the EIS.

Comment GP107-18

Limits to Future Size & Foreign Export: These proposals do not limit the size of their future operations. Concurrently with these proposals, they are pursuing dredging permits with the Army Corps, so they can bring super-tankers into Grays Harbor, making it the cheapest & most convenient deep water port in the lower 48 for export to places like China. The Army Corps in response is expressing profound skepticism to the terminal developer claims that oil export terminals will only be used for domestic refineries, instead of creating high paid refinery jobs in places like China. Nothing about these proposals is about energy independence. In fact, it's a fact spoken openly about in energy industry journals.

Response GP107-18

The proposed action does not include dredging. Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

Comment GP107-19

Loss of Property Values: Studies show property values will fall anywhere from 5 to 20% depending on where you live in relationship to these oil trains. Will home & business owners be reimbursed for the loss or "taking" of their property values? Will these companies buy homes & property from residents at pre-damage value?

Response GP107-19

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values.

Comment GP107-20

First Responders: Locally, we're cutting back on fire fighters & first responders. This is hardly a time to do something like this. When the train derailed in Quebec, causing so much death & destruction, residents had between 3 to 5 seconds to evacuate. From what I have read, many victims were simply vaporized when making the decision to walk outside their doors to escape. Will pass-through communities be provided with resources to plan evacuation routes & install early warning systems?

Emergency Response Plans: Washington State admits it does not have a plan or resources to adequately respond to a crude oil derailment & explosion. This should be considered in the scoping.

Response GP107-20

Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment GP107-21

Unsafe Rail Cars-Existing, Retrofitted & New: The Railroad Industry testified last week that not only are the DOT 111 cars unsafe for the transport of this highly flammable crude oil, but the new & retrofitted cars are no better. Carriers are finding the heat and vibrations associated with the train trip is actually causing the refining process to begin in these tanker cars, making the oil even more prone to ignition when it reaches our doorstep. Just like a can of soda in your backpack, or perhaps more appropriately, a meth lab. Railroad officials are recommending pressurized tanker cars be used, which makes sense. It's a flammable gas. Canada just voted to phase out DOT 111's. The railroads are telling the oil companies they need to build pressurized cars with thicker walls and electronic brakes. The oil companies are blaming accidents on unsafe railroad tracks and lax safety. The need for re-designed cars, thicker walls, electronic brakes, unsafe tracks & elimination of lax safety should all be scoped.

Response GP107-21

Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport*, presents the analysis of risk of oil spills, fires, and explosions during rail transport related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident along the PS&P rail line.

Comment GP107-22

Liability Insurance & Financial Responsibility: Crude oil carriers typically can only buy $25 million in railroad liability, which is a drop in the bucket compared to the potential for loss. Damages in the Lac Megantic disaster are approaching a combined $5 billion dollars. As a taxpayer, I oppose paying for rail improvements oil companies should be funding (such as the Tiger grant), but I really oppose paying for their negligence, especially when most carriers are limited liability corporations using leased tanker cars. Are lead agencies ensuring these developers & their carriers have the financial resources to take financial responsibility for their actions, which I understand is a requirement of state law?

Response GP107-22

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP107-23

Violating Permits/Inadequate Penalties: Our existing local export terminal, Global Partners, which is operating out of Clakskanie, Oregon was just caught violating the terms of their permit exporting six (6) times their legally permitted crude oil amounts. Incidentally, they ship from a former bio-fuel

terminal paid for by taxpayers. In 2012, they paid $1.6 million dollars in federal taxes on revenue of over $17 billion. That's a tax rate of less than 1%. They paid a $117,000 fine for violating their permit, which amounted to a mere penny per barrel. Breaking the law is quickly becoming the cheapest way to conduct business for these companies.

Response GP107-23

Refer to the Master Response for Purpose and Focus of the EIS.

Comment GP107-24

Conclusion: ALL negative cumulative impacts of ALL fossil fuel rail terminal & refinery proposals currently under consideration, not just in Washington State, but those passing through Washington State (such as coal trains bound for the British Columbia Coal Export Terminal) must be considered in their cumulative fullness to understand the cumulative impacts to local communities & existing infrastructure around Washington State.

In closing, Robert Kennedy famously cautioned us not to excuse those willing to build their lives on the shattered dreams of others. In the case of crude-by-rail export terminals, we should not. Too much is at stake for our local communities. I love Lewis County & many communities around this area. I care deeply for many people who will have their lives & livelihoods directly impacted by these terribly dangerous crude-by-rail proposals. **These proposals do absolutely nothing but damage to our communities.**

Thank you in advance for your thoughtful consideration of all of the above scoping requests.

Respectfully submitted,

Phil Brooke,
Centralia, WA

Mailing address:
PO Box 294
Wilkeson, WA 98396
253.531.3353
oldbrickhousefarm@yahoo.com

Response GP107-24

Comment acknowledged.

GP108, **Brosman, Wes**

Comment GP108-1

Thank you for this opportunity to speak to you. My name is Wes Brosman. I live in Aberdeen, Washington. I moved here 15 years ago for health reasons related to asthma and allergies.

It was the clean air of Grays Harbor that brought me here. But if these projects are allowed to move forward, it would mean a shorter life span for me or I will have to move.

These projects are proposed for locations -- some for directly across the river from me and about three miles as the crow flies directly within the path of prevailing winds. Leisure Manor is where I live, along with 200 other senior citizens, and we would be downwind and most of us would not hear the warning sirens even though one is located nearby.

Even a minor spill during these projects would result in negative effects for us. And even if we could hear the warning, many of our residents are unable to evacuate in a timely manner. The rail line is less than two miles from our home and that rail line uses mostly 100-year-old construction materials that force the trains to travel no more than five miles per hour.

The tracks utilize wooden ties and old spikes without the placement of steel bases on sectional rail segments. No other rail system uses the antiquated and dangerous construction materials we see here.

I want to know how the residents will be notified in the event of a fire. Will the residents be compensated for loss of home value? Will the rail line be brought up to modern standards? How will the rail line be protected against earth movements? And how will elderly residents reach the hospital if the streets are blocked?

These problems cannot be mitigated and the permits should be denied

Response GP108-1

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP109, **Brosman, Wes**

Comment GP109-1

Westway and lmperium Terminal Services Expansion Projects EIS.

My name is Wes Brosman and I live in Leisure Manor Mobile Home Park, Aberdeen, Washington. I moved here 15 years ago for health reasons related to asthma and allergies. It was the clean air of the Grays Harbor area that brought me here, but if the above projects are allowed to go forward my health will likely cause me to either move away or face a much shortened life span. These projects are proposed for a location that is almost directly across the river from Leisure Manor, about three miles as the crow flies, and directly in the path of prevailing winds.

Leisure Manor is where I live along with more than 200 other senior citizens. We will be downwind from these dangerous projects and most of us cannot hear the warning sirens even though one is located nearby. Even a minor spill near these projects could result in negative health effects for us. And even if we could hear the warning, many of our residents are physically unable to evacuate in a timely manner.

The rail line to serve these projects is less than two miles from our homes. That rail line uses mostly 100 year old construction techniques that force the trains to travel no more than 5 miles per hour. The tracks utilize old wooden ties and old style spikes often without the use of placement steel base retainers on sectional rail segments. No modern rail system uses such antiquated and dangerous methods of railroad construction. Continuous rails with concrete ties have been standard in Europe for over thirty years. And even if the rail line were modernized, it must pass through areas of geological instability that have resulted in numerous landslides. On-going earth movement is currently threatening the rail line near the Lakeside Industries yard within Aberdeen City limits.

1. How will residents of Leisure Manor be notified and/or evacuated in the event of a spill, fire or the release of airborne suspended particles?

Response GP109-1

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment GP109-2

2. Will residents be compensated for loss of home values due to proximity to these projects?

Response GP109-2

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values.

Comment GP109-3

3. Will the rail line be brought up to modern standards?

Response GP109-3

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP109-4

4. How will the rail line be protected against earth movement?

Response GP109-4

Refer to Section 3.1, *Earth*, and the above response regarding ongoing inspections of the PS&P rail line.

Comment GP109-5

5. How will our elderly residents south of the river be able to reach the hospital if the streets are blocked by oil trains.

Response GP109-5

At-grade crossings would be blocked during the passage of trains going to or coming from the project site. Refer to Chapter 3, Section 3.15, *Rail Traffic*, for the estimated time a train would occupy at-grade crossings. Refer to Section 3.16, *Vehicle Traffic*, for the vehicle delay impacts related to the passing of these trains.

Comment GP109-6

I contend that these problems cannot be mitigated and permits for the projects should be denied. Please favor me with a written reply. Wes Brosman, 21 Meander Way, Aberdeen WA, 98520

Response GP109-6

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP110, **Brown, Keith and Teresa Robbins**

Comment GP110-1

In reviewing the Draft Environmental Statement on the impact of an Oil Spill and Fire along the rail lines numberous times in the document (section 4.7 and section 5) it is stated that: " ... no mitigation measures can be implemented that will completely eliminate the possibility of a large spill, fire, or explosion, nor are there any mitigation measures that will completely eliminate the adverse consequences of a large spill, fire, or explosion." This serious and unavoidable negative adverse impact needs to be further studied as to the unique impact it would have in the West End of Skamania County. My wife and I live in Skamania County in the heart of the incredible Columbia River Gorge and its National Scenic Area, rated #6 in the world for sustainable beauty destinations by National Geographic Traveler. The EIS must take into account the impact of the oil trains during transport through this exceptional area. It needs to include the likelihood of increased fires as a direct result of derailment (possibly exacerbated by coal deposits along the tracks loosening the rails) and additional train traffic. As former volunteer firefighters and a former fire commissioner during the past 12 years, we have fought first-hand, fires ignited by rail traffic in the Cape Horn region of the National Scenic Area. On a dry day with high east or west winds that frequent this area, a fire could easily sweep out of control and up the slopes of Cape Horn and into the tree canopy – destroying homes, lives, and wildlife habitat. We were distressed to see that the assessment of fire danger did not address the specifics of our area. On July 9th, 2015 Fire District no.4 passed a resolution (attached) calling upon our congressional representatives to work with federal agencies to STOP the rail transport of the highly flammable and volatile Bakken crude oil through Skamania County and the gorge at large…until railroad companies demonstrate the capacity to suppress the all–too-frequent devastating oil fires. Current practice is simply to let them burn themselves out, which represents a "clear life and safety danger to the residents". A fire of this size, type and duration in the West End of Skamania County would be nothing short of devastating. The fire dangers and ability of gorge local volunteer community fire departments to adequately respond must be documented as part of this EIS. There are numerous homes in the West End of Skamania County that will be totally cut off from Emergency Response services as the mile and a half long oil trains travel through on an all too frequent basis. As former EMT's, we know this 15 to 20 minute delay for each train can literally be the difference between life and death. We have been intricately involved in developing the Cape Horn Trail and Recreation area for the past 10 years.

This excessive train traffic will dramatically increase noise, the likelihood of a train derailment (due to build-up of coal on the tracks), and could result in significant crude oil spills and toxic degradation to what has been a pristine and treasured environment and experience. More fully investigate, as part of this EIS, the contamination that will certainly result from crude oil washing into the Columbia River, its tributaries and its many wildlife refuges. Do not allow this scenic treasure and sensitive wildlife to be destroyed.

Skamania county's economic health and future depends heavily on the draw this area has for tourists because of the National Scenic Area and the recreational opportunities that exist here. For example, 72% of all retail sales in Skamania County come from tourists. The additional oil trains will cut Stevenson off from their waterfront area, discouraging tourists, the docking of passenger ships and the holding of special events. The negative economic impact on and potential loss of jobs within gorge communities must be more fully articulated in the EIS. Keith Brown and Teresa Robbins

Response GP110-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP111, **Brown, Ray**

Comment GP111-1

Name: Ray L. Brown

City/State/Zip: Westpoint, WA 98595

My comments relate to both the Westway and Imperium Draft EISs.

These projects will bring much needed jobs and commerce to the area. In addition these companies have many people in leadership that have expertise in economic development. Plus they have networks that stretch around the world, energy is a universal language. Economic development skills, jobs, networking sounds good to me! Mitigation is a simple mater of engineering. Stop with the fear mongering already!!

Response GP111-1

Comment acknowledged.

GP112, **Brown, Ray**

Comment GP112-1

Good afternoon. My name is Ray Brown, I live in Westport, Grays Harbor Canyon, United States of America.

I fully support these projects, all three of them actually. And it goes well beyond the jobs and, you know, the temporary jobs, the permanent jobs. These companies are loaded with leadership that has a lot of skill and economic development, and they have that pretty much go around the world.

That would be of tremendous benefit. We can leverage that knowledge here in Grays Harbor County, I believe, and bring a lot more economic development to the harbor, not just the immediate jobs that will come from these projects.

I think it's ironic that we stand here in the rubble of an energy project that was defeated by the engineers many years ago. We've seen the disaster that resulted from that and the loss of revenue, the loss of jobs, prestige. I mean, we could have been the center of the universe in terms of the nuclear power of these projects and continue.

It's unfortunate that they did not, but we can correct that mistake by continuing this project. I think mitigation is the simple matter of engineering. I think any and all of those problems are easily overcome.

Again, I'd like to see these projects go ahead. I'd like to work with the companies that are going to bring these projects to town, to the county, and I think it would be a tremendous benefit to everybody in the county if we did that. Thank you.

Response GP112-1

Comment acknowledged.

GP113, **Brown, Ray**

Comment GP113-1

Hello, my name is Ray Brown. I live in Westport, which is actually a part of Grays Harbor County. What are we really talking about here? We are talking about adding a few more tanks to already existing tank farms. Most would be hard-pressed to tell the difference when the construction is complete.

This project will not go from zero to 60 instantly. This will develop slowly over a period of time. We need to calm down here. As permits are issued, contracts will be signed with the promise of future business financing can be arranged. Construction can begin and it takes a certain amount of time. Rail companies will see more business coming their way and operations will increase. Trains will go as they always have, carrying hazardous material as they always have. As issues crop up, there will be plenty of time to deal with them and figure things out, because the hysteria surrounding this issue is just that, hysteria.

There are over 70,000 living in this county and all of them will be benefitted by this project, some directly, some indirectly. We need these jobs. We need the business. More importantly, we need the economic development that these companies will bring with them. Energy is an international language and these companies speak that language fluently. I urge you to issue the permits.

Thank you very much.

Response GP113-1

Comment acknowledged.

GP114, **Brownell, Basilia**

Comment GP114-1

Oct. 6, 2015

To whom It May Concern:

Re: Expansion of the Grays Harbor Facility

I am opposed to the expansion of the Grays Harbor facility. We are dangerously close to a irreversible tipping point for global warming. We must keep more fossil fuel in the ground. We have a unique position to close the gate.

Sincerely, Basilia Brownell

Seattle, WA

Response GP114-1

Comment acknowledged.

GP115, **Browning, Linda**

Comment GP115-1

Please do not put our areas at risk--once these environment killing storage centers are built, they are there to stay, and we will not be able to prevent the damage that will come from leaks and accidents. Please consider the future, rather than short term profits and gains. Thank you.

Response GP115-1

Comment acknowledged.

GP116, **Bruton, Peggy**

Comment GP116-1

I am addressing the cumulative impacts portions of these documents. I do not think it is appropriate to suggest that the incremental carbon footprint of these facilities could be constrained by federal laws banning export of crude oil, or limiting refining capacity, because any assumption that these laws will withstand the extreme pressure now being brought to bear to secure their repeal. Nightly ads on national network TV make this point. These laws are tenuous, and cannot be seen as possible checks on the carbon footprint of these projects.

Response GP116-1

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

GP117, **Bruton, Peggy**

Comment GP117-1

The chapter on cumulative impacts appears to minimize the contribution of these projects to global warming, based on the U.S. prohibition of crude oil export and the limitation by law on refinery capacity. These laws can be removed at any time, and are under massive attack at this moment. It would seem to me there is no way these projects, should they be permitted, could avoid contributing significantly to global climate change, and to the perpetuation of global reliance on fossil fuels, at a time when all efforts should be focussed on switching to clean renewables.

Response GP117-1

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

GP118, **Burgoon, Susan**

Comment GP118-1

My name is Susan Burgoon. In mid September the Amtrak Cascade, just outside of Bellingham, trains conform to the posted speed of ten miles per hour. The oil cars that occupy main tracks, it necessitates slow speed on secondary track. It is a fact that the number of trains on the PS&P rail line will increase into Grays Harbor if the terminals are approved. However, these trains on BNSF rail lines and connect to the PS&P have not been addressed in environmental impact statement. The Amtrak Cascade operates on BNSF line. The impact on passenger rail service is unknown.

In Chapter 5, Extended Rail and Vessel Transport, page 4, the EIS states, Crude oil shipped by rail in Washington is currently going through the Columbia Gorge, but could transit over other rail routes. Same chapter, page 17, the DEIS states, BNSF has not specified a train route for crude oil unit trains in Washington state.

In 2010, Washington state received approximately $782 billion in federal bonds to improve high speed rail service on the section called the Pacific Northwest Cascade Corridor, one of the less high speed rail corridors designated by the federal government.

Pacific Coast Leaders for Americans Demand Justice for High Speed Rail, rail, particularly high speed rail, can deliver specific benefits to the region including energy conservation, congestion reduction, and job creation for citizens of region.

The absence of detail concerning Grays Harbor in an expanded study area demand comprehensive review of the impact on passenger rail. The safety response from federal government to improve high speed rail services, with those funds it seems to be responsible stewardship and the legal responsibility to safeguard . . .

Thank you.

Response GP118-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

GP119, **Burke, Denise**

Comment GP119-1

I am not finding information on the study of residential real estate prices and taxes for those homes within a half mile radius of a rail line. What have other areas experienced regarding the ability to sell a home? How does the addition of the rail line impact taxation? I submitted these questions during the review process and do not see this specifically addressed using the search tool. Thank you.

Response GP119-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values. Draft EIS Section 7.3.3.2, *Fiscal Revenues to the City of Hoquiam*, discusses property and leasehold excise tax, sales and use tax, business and occupation tax, utility and other taxes, licenses, and permits.

GP120, **Burnes, Thomas**

Comment GP120-1

4623 Village Ct. SE Olympia, WA 98501 October 12, 2015 Westway & lmperium Expansion Projects DEIS clo /CF International 710 Second Avenue, Suite 550 Seattle, WA 98104

SUBJECT: Comments Regarding The Westway & lmperium Expansion Projects DEIS

To Whom it may Concern,

The following are my comments regarding the Westway & lmperium Expansion Projects DEIS in addition to the PS&P Rail service to the proposed expansion sites. Specific Comments: Chapter 3. 15 Rail Traffic There is a significant discrepancy to the length of the PS&P rail line in the study area. The Executive Summary cites 59 miles; however, Chapter 3.15.4.2 cites that the line runs from Centralia

at Rail Mile (RM) O. O to RM 70. O at the Port of Grays Harbor. Footnote b states that Mile Post 13. 3 to 39. 8 is skipped? That is 26. 5 miles of skipped track in the study area.

Please clarify the length of affected rail line.

Response GP120-1

As described in the notes at the bottom of Table 3.15-2, PS&P Subdivisions (Draft EIS Chapter 3, Section 3.15, *Rail Traffic*), the milepost numbering skips a section from milepost 13.3 to 29.8, resulting in the physical track miles being less than the notated signage. The PS&P rail line begins at milepost 0.0 in Centralia and the track ends at milepost 75.2 in Hoquiam. The distance is approximately 59 miles.

Comment GP120-2

Chapter 3.15.4.2. Cites: The PS&P line between the BNSF main line in Centralia (MP 0.0) and its terminus in Hoquiam (MP 72.6) has 55 rail bridges (including box culverts). There are 52 rail bridges (including box culverts) between Centralia and the project site. All bridges cross waterways (sloughs, rivers, creeks, or intermittent streams)."

Is there an inspection schedule for these "rail bridges", i.e., water crossings? What are the current conditions of these structures? How often do they require removal of debris?

I suspect that Hi-Rail inspection does not adequately address maintenance needs at water crossings. For example, does a PS&P person physically get out of the Hi-Rail vehicle, walk down a steep fill slope and actually looks in the culverts before and after high flow events (especially at night) for occlusion (blockage by debris)? Without this address, water crossings, i.e., culverts, become plugged with debris resulting in water pooling up at the culvert inlet, saturating the rail road fill and compromising the rail crossing.

Nowhere In the DEIS Is there a mention of the current condition of the 55 rail crossings nor the Inspection, maintenance and the probability (which is real) of rail line failure especially during high flow events, a seismic event and/or a landslide. A complete inventory of all 55 documented rail crossings is needed as to their condition and ability to pass a 100 year flood event along with a soil study of potential fill failure at these crossings in the event of such a flood event.

WDFW currently maintains a Fish Passage Data Base on such crossings and should have inventoried all water crossings on SR 12 where the PS&P rail line runs alongside. I suggest you request a copy of PS&P owned water crossings that may exist on the data base.

The PS&P rail line is a century old (119 years to be exact). It was not designed to carry up to six fully loaded trains (120 cars/train) per day on fill within the Chehalis River flood plain and associated wetlands.

Each rail tank car weighs in excess of 286, 000 pounds fully loaded with 30, 000 gallons of crude. What is the potential that the rail line on a saturated fill will fail leading to a derailment? The likelihood of this happening is real as witnessed by the three derailments in 2014 in a two month period on this very same line. A geo-technlcal study is needed to determine if the rail line can safely handle the increase in crude oil transport.

General Comments: The PS&P Website: http://employees.org/-c/avlsonlpspl cites several concerns I have in general to the 100 year old railroad infrastructure and PS&P's ability to carry hazardous cargo, e.g., crude oil. The company cites the following:

Maintenance

Since the creation of the PS&P, the railroad has been gradually improving the maintenance facilities at Elma. A locomotive servicing pit was installed and plans include a shop building over that pit.

A mobile crane is in use on the railroad. The unit appears to be fairly old and was formerly owned by the US Navy. The crane is used primarily for track maintenance and can frequently be viewed in Elma. While the PS&P does not have major maintenance facilities and has been resourceful in working around this limitation. In the summer of 1998 they exchanged trucks from PS&P 3005 and AZ&CA 3802 in the Aberdeen yard."

I gather from the above that the existing maintenance facility would not be adequate to address increase rail traffic and that the Company has had to be resourceful in working around the limitations of not having a major maintenance facility. In addition the Company has to rely on a fairly old mobile crane that is used for track maintenance.

The Company's own website, leaves little doubt In my mind that PS&P cannot safely transport crude oil nor should It be allowed to under Federal Regulators governing such commerce.

In the event of a fill fa/lure and potential derailment of a loaded tank car at one of the water crossings, what is there to prevent harm to the public or aquatic life, i.e., fish In the event of a spill?

Response GP120-2

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for information about the analysis of emergency planning and response capabilities.

Comment GP120-3

Chapter 3.16 Vehicle Traffic & Safety Chapter 3.16.3.2 Impact Analysis cites:

Emergency Access "An increase in vehicle delay at PS&P grade crossings could affect emergency access and response time. A qualitative analysis was conducted to identify potential impacts on emergency vehicle response and access under the proposed action at PS&P grade crossings. The analysis identified areas along the PS&P rail line where the emergency vehicle response and access would substantially change."

Increase rail traffic and train length will (not could) affect emergency access and response time in looking at the various Tables within Attachment L-1 Vehicle Traffic Modeling threatening human life. Let's look at one example, a one-way in, one way out road such as Moore Road, ID 096648. Upon review of Google Map, 39 Farms/Residences are located behind the one-way rail crossing. If a member of one of these residents were to suffer a heart attack or a life threatening injury due to a farm accident, the cited delay for first responders would be 6. 58 minutes or longer in order to wait out a mile long train.

Time is of the essence in getting first responders to a person suffering from a heart attack or a life threatening injury.

How many one-way crossings exist on the rail line where first responders would be blocked from responding to a life threatening situation such as Moore Road?

The DEIS should succinctly state that Increase rail traffic and delay time for first responders will affect emergency access and response time resulting at times in loss of human life.

In Summary: The above comments are just a few of many of the high risks posed by The Westway and lmperium Expansion Projects. Having gone through the pages of the DEIS, I found that the overall risks to human health, terrestrial and aquatic life and long term impacts to the environment from the construction, on/off site(PS&P) operations and/or a spill have been downplayed in this document.

Both Westway and lmperium officials have been quoted in the past as stating that "if the projects were to pose a high risk to public health and safety, the projects would not go forward."

I recommend that Westway and lmperium take a no-action alternative to their plans to expand their existing facilities due to the aforementioned risks.

Thank you for considering my comments. Thomas Bums

cc: Governor Jay lnslee Senator Kevin Ranker Sally Toteff, WDOE Brian Shay, City of Hoquiam The Surfrider Foundation The Friends of Grays Harbor Washington Environmental Council Earth Justice

Response GP120-3

As described in Draft EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, increased vehicle delay from trains related to the proposed action would also increase emergency vehicle delay at grade crossings. Delays would affect emergency response times if an emergency vehicle was blocked at a grade crossing occupied by a proposed action train. The potential for the proposed action to affect emergency response would also depend on whether the dispatched emergency vehicle would need to cross the PS&P rail line and the availability of alternative routes if a train occupies the crossing at the time of the call.

Average vehicle delay would slightly increase compared to the no-action alternative at grade crossing between Centralia and Aberdeen. Vehicle delay at grade crossings in Centralia would be greater; however because emergency response providers are located on both sides of the PS&P rail line, emergency response calls could be dispatched to stations that would not be blocked. The most significant vehicle delay would occur in Aberdeen from rail switching operations near Poynor Yard can block access to the Olympic Gateway Plaza and Port of Grays Harbor areas. Final EIS Section 3.16 reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These

procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

GP121, **Burns, Daniel**

Comment GP121-1

I am in support of the project. 1. Rail is the safest mode of transportation of goods and services. 2. This will bring money and jobs to the Harbor. 3. This oil is going somewhere, so we are not protecting the environment by stopping the Grays Harbor proposal, the oil will just go elsewhere, to another community and bring them money and jobs so lets bring the money to Grays Harbor where it is desperately needed. 4. If the QIN can put a Gas station on the edge of the Wishkah river then the QIN have no basis to stand against this project over environmental concerns. Please allow this project to continue.

Response GP121-1

Comment acknowledged.

GP122, **Bussmann, Krissy**

Comment GP122-1

THE TIME TO ACT IS NOW. Unfortunately, by the time the effects of carbon emissions are apparent, we have already done lasting and expensive damage to our planet. Please do not expand our dependency on fossil fuels!

We also desperately need to limit the risk of severe oil spills.

The Columbia is already threatened by nuclear waste at Hanford and the already ongoing warming trends are killing fish and creating environments favorable to toxic algal blooms. Please do not contribute to the waste of our home and our environment.

Response GP122-1

Comment acknowledged.

GP123, **Butler, Quinn**

Comment GP123-1

Westway and Imperium Terminal Services Expansion Projects EISs are absolutely not worth the risks of negatively impacted the environment and way of life of so many people. The risk of an oil spill or accident is not theoretical; we have seen oil trains explode across North America, including the tragic accident in Lac-Mégantic, Quebec, that killed 47 people in 2013. We have seen oil spills all along the rail route. And in 1988, one year before the Exxon Valdez, the Nestucca barge 231,000-gallon spill of heavy oil off Grays Harbor fouled beaches from Oregon to Vancouver Island and killed 56,000 sea birds. Washington's ocean, waves and beaches are vital recreational, economic and ecological treasures that will be polluted by an increase in the transportation of fossil fuels thru sensitive ecological areas.

Instead of pursuing transient and environmentally harmful ways to meet America's energy needs, we should seek comprehensive and environmentally sustainable energy solutions, including energy conservation.

As a citizen of Earth and a self-appointed spokesperson for those who are not physically capable of writing this to you for a myriad of reasons (one being he/she may not be born yet), I strongly urge you to not be selfish and greedy, and instead make the right decision for your life, your kids' lives, your neighbors and friends and family, and the rest of the global community and shutdown these proposals once and for all. HAPPY HOLIDAYS!

Response GP123-1

Comment acknowledged.

GP124, **Callos, Duane**

Comment GP124-1

I have lived at my current address (2217 Morgan St. Aberdeen, WA) for over thirty years and have always felt safe and pleased with my neighborhood and surrounding environment. In view of all the derailments and explosions that have happened to "crude by rail" in the recent past, I will be forced to move my family to another, safer location if this project is approved. I realize there are plans for safer rail cars (that have shown that they also may explode), improved first response, and improved clean-up. Even if all these things happen, in the event of a derailment, none or all of them would help myself and my family as our home is located just 95 feet from the rail line. It would be very difficult for us to move. The value of our house would plummet because nobody would choose to live in an unsafe environment Please do not approve this project so that my family and our neighbors can sleep at night without concern and continue to live in the homes we love in a safe environment.

Response GP124-1

Comment acknowledged.

GP125, **Campbell, Kevin**

Comment GP125-1

I have operated and managed tugboats in Grays Harbor for 30 plus years. At the beginning of my career Grays Harbor received twice as many vessel calls per year as we currently do. During the years of 250 plus vessel calls plus tug and barge traffic we never have had an incident in the Grays Harbor channel which proves that Grays Harbor is a safe harbor for increased vessel traffic. Brusco Tug and Barge within the last two years has positioned State of the art ASD tractor tugboats that substantially increases safety and provides escort tugboats that are capable of being tethered to vessels while underway. I believe that Grays Harbor is very well suited for increased vessel traffic including oil tankers and ATB vessel and in need of the increased traffic to utilize the equipment that is presently available to vessels calling Grays Harbor

Response GP125-1

Comment acknowledged.

GP126, **Campbell, Rebecca**

Comment GP126-1

REMARKS TO THE WASHINGTON STATE DEPARTMENT OF ECOLOGY ON CRUDE OIL TRAINS, ABERDEEN PUBLIC HEARING-OCTOBER 8, 2015

I recently moved from Seattle to Olympia, Washington State. One of the reasons I made this move was, that I was living in an apartment on a rise right above the iconic Pike Street Public Market. This put me within the potential 200-yard blast zone of mile-long crude oil "bomb" trains moving several times a day thru the century-old tunnel directly beneath the Pike Place Market and the Seattle downtown historic district, as well as within 20 yards of the two much-frequented sports stadiums in the South Downtown neighborhood. This was manifestly endangering the valuable urban built environment/infrastructure of Seattle, and the even more precious lives of tens of thousands of people, including my own.

The fact that Berkshire-Hathaway -- read billionaire Warren Buffett -- -owned -- BNSF Railroad is continuing to operate these catastrophes on wheels through the thickly populated Columbia Gorge/coastal areas of Western Washington is a crime against nature and humanity being perpetrated by BNSF and the federal and state corporate governments continuing to allow this "a-bomb-i-nation". The magnitude of this crime is not in any way mitigated by claims of state and federal officials that they are attempting to regulate it; such a crime does not need to be ***regulated*** -- it needs to ***eliminated***. Its perpetrators need to be held accountable and charged with criminal malfeasance and reckless public endangerment, including BNSF corporate executives/owners, as well as the federal and state government officials who have enabled this crime against nature and humanity to continue. This is despite the forewarnings given by numerous destructive crude oil train derailings throughout North America over the past several years, including the decimation of Lac Mecantique in Quebec Province, Canada killing 47 people in a village business district the size of the Pike Place Public Market in July 2013.

Here are a few other of the numerous aspects of this crime against nature and humanity being presently enabled by BNSF executives/owners, as well as by federal and state officials, including, so far, by the Washington State Department of Apology:

1. BNSF, as previously mentioned, refuses to curtail running mile-long crude oil "bomb" trains 20 yards from the Seattle stadiums filled with tens of thousands of people during sporting and other entertainment events;

2. BNSF refuses to provide local officials, including local first responders and planners, with schedules of when these "a-bomb-i-nations" will be running, declaring this to be "proprietary information", while continuing with the gross criminal malfeasance and reckless public endangerment cited in Point No. 1;

3. BNSF, with the approval so far of federal and state officials, has continued to do this without catastrophic insurance coverage adequate to cover any disaster their crude oil "bomb" trains may cause to the people, natural environment and/or infrastructure of Washington State, grossly and needlessly endangering the people of Washington State not only physically, but financially as well;

4. BNSF, with the approval so far of federal and state officials, refuses to run its crude oil "bomb" trains on the sparsely populated Northern Transcontinental Railroad Route through the Cascade

Mountains, insisting instead on using the heavily populated Columbia Gorge/Washington State coastal routes. This constitutes, on the part of BNSF management/owners and its enabling federal/state officials, deliberate denial of remedy indicating collusion in criminal conspiracy;

5. BNSF, with the approval so far of federal and state officials, has continued to violate treaties made with the Swinomish, Quileute and Lummi peoples concerning trespassing railroads rights-of-way on their lands and waterways since the mid-19th century.

This fact of law should have immediately induced federal and state government officials to shut down BNSF's operation of crude oil "bomb" trains from their beginning on the coast of Western Washington State. The fact that these sovereign Indian nations are having to file lawsuits in US federal courts to enforce these long-standing tribal treaties, rather than federal and state officials using their designated authority to enforce them, shows the massive degree of corruption that has permeated corporate-controlled government at all levels in our country, including, as often recently demonstrated, our federal courts of law.

Therefore, if the United States government, the government of Washington State and, finally, the federal courts, refuse to take action to enforce these treaties -- contracts that, if actually enforced, could effectively shut down the criminal malfeasance and reckless public endangerment of BNSF's crude oil "bomb" train operations in Washington State -- another type of cost-and time-effective but powerful legal action outside the corrupt federal corporate court system will need to be employed. Anyone interested in potentially taking such alternative legal action should see me before I leave the hearing hall this tonight. Thank you and good evening.

See original attachment for photos

[Photos reviewed but not reproduced.]

Response GP126-1

Refer to the Master Response for Purpose and Focus of the EIS.

GP127, **Campbell, Rebecca**

Comment GP127-1

Rebecca Campbell, Olympia. The running of oil bomb trains through the western Washington area and other areas are crimes against humanity and nature. The responsibility of public officials is not to regulate such crimes or mitigate such crimes, but eliminate such crimes.

BNSF railroad refuses to curtail mile long crude oil bomb trains yards from Seattle stadiums filled with tens of thousands of people during sports and other entertainment events.

The BNSF refuses to provide local officials, including local first responders or planners, with schedules when these abominations will be running while continuing with the criminal malfeasance and reckless public endangerment mentioned in point number one.

The DEIS, with the approval of federal and state officials, including the State Department of Ecology refuses to run its crude oil bomb trains on the sparsely populated Northern Transcontinental Railroad route, instead using the heavily populated Columbia Gorge, Washington state coastal

routes. This constitutes on the part of BNSF's management, and owners, and enabling state officials deliberate denial of remedy, entertaining pollution and criminal conspiracy.

BNSF with state officials has continued to violate treaties made to the Sequimish, Prairie, and Lummi peoples by putting trespassing railroad passageways on their lands and waterways since the mid 1970s.

Therefore if this state government and the federal officials cannot make a decision just and true, preservative of its earth and its people, then other means, besides the courts, must be found. If this happens see me afterwards. There's another way it can be dealt with legally.

Thank you.

Response GP127-1

Comment acknowledged.

GP128, **Cannady, David**

Comment GP128-1

Hello. First of all, I would like to thank you all for coming. I know your time is valuable, taking away from your families. So, I want to say thank you for coming.

My name is David Cannady. Unlike most of the people that are in the audience, I was not raised in Grays Harbor. My wife and I were imported into the U.S. Navy. And, but, I'm also a UW graduate, and I'm accountant by trade, my wife is a professional. We choose to live in Grays Harbor like a lot of these folks. We could live anywhere in Washington state pretty much, and we chose to live here.

And as young professionals, we built a business. We believe in Grays Harbor and we believe in the future of Grays Harbor. If I mention the business, it's highly popular in this area that we own. And I would like to say I hugely support what the residents are saying.

And the last thing I want to say, as an accountant, the probability of an oil spill goes up. Year after year after year, the probability has to be at some point not if, but when. And I mean, we all know that there's always risk.

But for the people that work here and live here, as the probability factor goes up, it's imminent it will happen. Imminent. And I value this area or I wouldn't be here.

And I encourage the young adults in the area to come back to the area, but why would they want to come back to something happening that will destroy the area.

Thank you.

Response GP128-1

Comment acknowledged.

GP129, **Canny, Maureen**

Comment GP129-1

Name: Maureen Canny
City/ State/ Zip: Olympia, WA 98516

Please deny permits for the nearly infinite number of reasons stated by more eloquent speakers—reasons I am unable to list.

Protect lives, our ecosystem, the "commons" (air, water, soil…) and our future generation.

Denial of these permits will also help to move our economy away from a fossil-fueled based system to a more sustainable basis.

Thank you.

Response GP129-1

Comment acknowledged.

GP130, **Capozzelli, J**

Comment GP130-1

Westway and Imperium Terminal Services Expansion Projects EISs c/o ICF International 710 Secorrd Street Suite S50· Seattle, WA 98104

RE: Westway and Imperium Crude Oil-by-Rail Terminal EISs

I am writing because I have read that the findings in the DEISs for Westway and Imperium oil terminal proposals in Grays Harbor-show that the risks of oil spills cannot be fully mitigated and that environmental damage to marine habitat and wildlife could be significant. Similar findings exist for waterway contamination, train accidents, increase train and oil tanker traffic, air pollution, noise, harmful impacts on tribal culture and resources, and vehicle delay at railroad crossings.

Response GP130-1

Final EIS Chapter 3, Section 3.2, *Air*, has been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analysis predict lower emissions; the updated level of increased risk is not considered significant. Therefore, the Final EIS concludes no potential unavoidable and significant adverse impacts on air quality.

Comment GP130-2

Due to such numerous and enormous risks, I join with those in Washington State who ask you to reject the Westway and Imperium oil terminal proposals. I Critical coastal estuaries could face devastating consequences for birds if the oil industry is successful in expanding operations in Grays Harbor-a site visited by hundreds of thousands of migrating shorebirds every year. Three proposed new oil terminals would store roughly 91 million gallons of toxic crude, most of it for export to

China. Birds rely on this Pacific coast estuary to rest and refuel during migration. One oil spill would devastate this fragile marine ecosystem.

Grays Harbor is a site of hemispheric importance to birds. Surrounded by six Important Bird Areas, Grays Harbor is host to hundreds of thousands of resident and migrating birds that rely on this Pacific Coast estuary. Several species protected under the Endangered Species Act are likely to be harmed by these projects, including the Marbled Murrelet, Snowy Plover, and Streaked Horned Lark.

Recent research by the Washington Department of Fish and Wildlife shows that the Pacific population of the Red Knot uses the North Bay of Grays Harbor almost exclusively as its one refueling site during its long migration from Mexico to breeding grounds in Alaska and beyond. One oil spill could have devastating effects on this species' survival. One oil spill or accident in Grays Harbor could wipe out a significant portion of the Red Know population in the Pacific Flyway. Furthermore, the cumulative release of toxic chemicals and oil leaks is known to have negative effects on endangered salmon and other small fish upon which birds rely.

Response GP130-2

Draft EIS Chapter 3, Section 3.5, *Animals*, addresses potential impacts of construction and routine operation of the proposed action on animals, including birds such as red knots. Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant.

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

Comment GP130-3

There are better ways to meet our energy needs. Instead, Washington State could continue to lead the nation on safe, renewable clean energy solutions and say no to more oil and coal. Building more infrastructure for yesterday's energy would be moving in the wrong direction. (And most of this project is for export to China.)

I support the protection of Grays Harbor, its marine life, and its people, and ask you to reject the proposed Westway and Imperium oil terminals.

Thank you for your consideration.

Yours truly, J. Capozzelli New York, NY

Response GP130-3

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States,

West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP131, **Carlson, Joel**

Comment GP131-1

Fossil fuel spills would devastate our pristine Puget Sound and surrounding environment for many years. We must not allow transport of fossil fuels through the Pacific Northwest! Global warming fossil fuels must stay in the ground so we don't destroy life on earth in our current sixth great mass extinction. Almost all life on earth disappeared in previous mass extinctions. We must very quickly switch to renewable energy including solar. Electric vehicles keep costing less while going farther on a charge so fossil fuel vehicles must be eliminated. Wood construction including large multi-story projects sequesters a lot of carbon. Many trees must be planted. Now is the time for action! See https://www.youtube.com/watch?v=sRGVTK-AAvw .

Response GP131-1

Comment acknowledged.

GP132, **Carlson, Joel**

Comment GP132-1

We must not destroy our pristine environment in the Pacific Northwest with dirty fossil fuels that could explode and kill millions! Global warming fossil fuels must stay in the ground so we don't destroy life on earth in our current sixth great mass extinction. Almost all life on earth disappeared in previous mass extinctions. We must very quickly switch to renewable energy including solar. Electric vehicles keep costing less while going farther on a charge so fossil fuel vehicles must be eliminated. Wood construction including large multi-story projects sequesters a lot of carbon. Many trees must be planted. Now is the time for action! See https://www.youtube.com/watch?v=sRGVTK-AAvw .

Response GP132-1

Comment acknowledged.

GP133, **Carol**

Comment GP133-1

Dangers from and projected accidents due to Vessel traffic increases of 450% of crude oil storage and shipping in Grays Harbor have not been fully considered, nor mitigated in this DEIS.The vessel traffic, including tankers 3 football fields long will displace other traffic-pure and simple. Interfering with marine resources and exacerbating shell fish-all fish with increases fuels, spillage and leaking into waters hosting crab nurseries. To say this will not be harmful is pure nonsense.

Response GP133-1

Draft EIS Chapter 4, Section 4.6, *Environmental Health Risks—Vessel Transport*, presents an analysis of potential impacts from increased risk of vessel collisions, groundings, allisions, and related consequences (e.g., release of crude oil) under the proposed action and proposes mitigation measures to reduce the likelihood of a vessel incident.

Comment GP133-2

DEIS Appendix N-page N-3-lacks reliable data" uses data from previous estimated rivers." Also, The considerations for resulting disastrous oil spills -as applied to tidal flows in Grays Harbor are not calculated by considering the true flows of The Chehalis R. Rather tides are based on models-not the Chehalis River Estuary and thus are wholly incorrect, invalid and inaccurate.

Response GP133-2

Refer to the Master Response for Oil Spill Modeling Methods for a discussion of the purpose of and limitations to the oil spill modeling.

GP134, **Carter, Al**

Comment GP134-1

My comments are for both Westway and Imperium EISs. I work for Ocean Gold Seafoods Inc in Westport Wa. We support annually 400 to 500 jobs processing fish. An oil spill of any kind would put our business a risk for closing. Just the knowledge that an oil spill occurred within our waters would cause our customers to delay or cancel buying our products for fear of contamination.

Response GP134-1

Comment acknowledged.

Comment GP134-2

Both sites are within the liquifaction areas of Grays Harbor They are on unstable soils within the areas that would be affected by earthquakes. Under current rules the safety factor for holding tanks is 110% of one tank. Both projects have multiple tanks and hold millions of gallons of oil. The proposed tank farms are within 70 miles of Cascadia Subduction zone. An earthquake and the tsunami that will follow could cause those tanks to rupture and the resulting influx of massive amounts of water will push oil into the upper reaches of our many rivers, estuaries and habitat for endangered salmon.

Response GP134-2

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP134-3

We are an International flyway for millions of shorebirds every year. Any oil spill will be spread across the very mudflats that are critical to the survival of many of these species of birds. A recent Port of Grays Harbor study states 2200 jobs and over $220,000,000 annually come from fishing activity in Westport. A 2012 NOAA study on the importance of our nation's economy identified 67,000 in Washington state that are based in seafood related commercial and recreational activities. Grays Harbor is a major nursery area for dungeness crab and supports both tribal and non-tribal fishers that deliver on average $44,000,000 each year and support over 600 fishers, and contributes an estimated 80 to 150 million dollars in economic value to the state.

Response GP134-3

Comment acknowledged.

Comment GP134-4

These two projects will increase the vessel traffic by 450% adding 728 annual large tanked vessel bar transits. This amount of increase will likely increase conflicts with current fishing operations as the larger vessels are given the right of way and will close the harbor during their transits.

Response GP134-4

Draft EIS Chapter 3, Section 3.17, *Vessel Traffic*, discusses potential impacts on commercial fishing and proposed mitigation measures that would reduce impacts.

Comment GP134-5

Currently we have only one rail line that enters Grays Harbor. Many sections of this line are nearly 100 years old. The tracks have not been maintained to handle the increased loads of crude oil or the weight of such train cars. We have had 4 derailments in the last year caused by nothing more than the annual rain fall and the weight of grain cars sitting in the rail yard. Tidal currents in Grays Harbor reach 3.5 knots on over 100 days per year. According to the International Tankers Owners Pollution Federation limited and the Governors Oil Safety Study recovery of oil in that type of environment results in 10-15% recovery of spilled oil. The rest will not sink in fast moving water it will be spread across every estuary and waterway in Grays Harbor and up and down the coast. I own approximately $250,000 in property in Hoquiam.

Response GP134-5

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not

completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP134-6

If an oil spill happens, who will cover my loss of income, loss of property value and loss of use of my property? The draft EISs do not account for who will be paying for the equipment, manpower and clean up of an oil spill. These are limited liability companies. They are designed to limit the liability of the owners and push the cost off onto the public and local taxpayers. Many people like myself have invested in Grays Harbor. All we have is invested here in what we own. These companies are buying crude oil, leasing train cars, leasing tank farms, and leasing barge or ships to transport the most dangerous crude oil yet discovered through our backyard. They are not invested here, they only want to use our facilities to transport through. They make all the money and we take all the risks. Please rejects these draft EISs as inadequate and insufficient and deny the permits to use Grays Harbor as their dumping ground for toxic crude oil.

Response GP134-6

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP135, **Carter, Albert**

Comment GP135-1

My name is AI Carter, I live at 315 Lawrence Drive, Hoquiam.

I am a former Grays Harbor County commissioner. I own five properties in Hoquiam so I am invested here.

When the inevitable happens and we have an explosion of train cars, a spill during transferring of oil, or worse a collision in our harbor, my property values will go to zero. Who will compensate me for the loss of my investments?

Response GP135-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP135-2

On the Port of GH website they state that there are 5204 jobs supported by Port activity. More than 2000 of those jobs are in the fishing, shellfish growing and fish processing industries. To put at risk over 2000 existing jobs for a promise of 73 jobs is reckless and a bad business decision.

An oil spill of any kind would do unmeasurable damage to our fishing industry, tourism industry, and possibly destroy an international migration route of hemispheric importance for the world's population of shorebirds.

Response GP135-2

Comment acknowledged.

Comment GP135-3

As county commissioner, I cut the ribbon on the Biodiesel plant. Westway Terminals soon followed. The county supplied the economic development money for the (5 rail crossings) at the Port of GH. So I am a supporter of the Port and economic development.

I work for Ocean Gold Seafoods as the Safety and Compliance Manager.

The fishing industry is one of the most highly regulated industries in America. As a Safety and Compliance Manager, I deal with the DOE every day. We test our storm water, waste water, and all chemicals used in our processing and the air quality emitted from our plants. We must account for everything we do. We are responsible for everything we do and must do so in the open under scrutiny by numerous agencies. That does not seem to be the case with the oil industry or the railroad industry.

The city of Hoquiam and the DOE made the decision these projects were of Non-significance to the environment. It took a lawsuit by the Quinault Nation to force our public decision makers to make these projects go through the EIS process.

The proposed Oil Terminals are Limited Liability Corporations. They are structured to limit the liability of the people who operate them.

They buy crude oil, rent train cars, and rent terminal facilities and rent barges or ships to transport the oil. They will ship this highly volatile, unstable and explosive crude oil through our community. They make the profit and we take all the risks.

This is very simply, bad leadership by the Port of GH, the city of Hoquiam and the Dept. of Ecology.

Response GP135-3

Comment acknowledged.

Comment GP135-4

These proposals to expand and ship crude oil should be rejected as unsafe and too risky for the inhabitants and the environment of Grays Harbor County.

Response GP135-4

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP136, **Carter, Judy**

Comment GP136-1

My name is Judy Carter. I'm from Hoquiam. And my husband spoke earlier. We have property. We've invested quite a bit into our properties. It's a big part of our retirement. And we are really concerned about how a project like this can affect our real estate value.

But more importantly, I'm talking as a citizen. I've lived here my entire life. I raised my family here. We still have all sorts of people that live in the area, people we care about. We live here for a certain lifestyle.

This type of project is going to have dramatic impacts on those of us who like to go out and watch the birds. I'm really concerned about the wildlife refuge, as I'm sure has already been mentioned.

But I'm also concerned about what the perception of what our town is going to look like to other people. Are they going to want to move into an area that is going to be affected by possible explosions? Not only these issues, but also the leakage, the impact to traffic, all of those other issues that affect our quality of life in this area.

If people don't want to move here because they're perceiving us as a dirty oil town, it's not going to be good for our communities and for our children who grew up here. And we want our children to stay here, get an education and come back and contribute to our area.

But if this is a dirty, dying town, who wants to do that? Instead of a community that's dying we need to grow. And I would like you to consider the long-range impact on the lifestyle of the people that live here, which is part of the environment and all the other concerns that you should be looking at, but I think the quality of life of the citizens is really important.

So, thank you.

Response GP136-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values.

GP137, **Cates, Eddy**

Comment GP137-1

Hello, my name is Eddy Cates. I'm a member of the Washington State Medical Association, and I'm a practicing family doctor in Lacey. I come before you today to urge you to deny the permits of the oil transport terminal in this county.

Why I took time out to address this board, I'm here because this is a pressing issue that has important implications for the health and safety of our communities. The urgency of this topic proposal is so strong, so strong impact on September 27 the Washington State Medical Association passed a resolution in its annual meeting ten days ago to address concerns raised by all those in the community.

The WSMA resolution charged the organization to support their position works to prevent or minimize potential health effects related to the transportation of coal and oil by train through Washington state.

And secondly, to make a comment and express the health and safety concerns to the proposals for oil and coal terminal and their infrastructure. That's why I'm here today.

Why is the community wrapped so strongly around this issue? We have done so because we recognize the known risks associated with oil by rail transport, oil tank storage, oil transport by vessel. These risks are unacceptable for human safety.

Doctors are deeply troubled by the safety -- health and safety of these proposals. The impacts of oil by rail transport storage, oil tank storage at the Port of Washington are well documented. They include air pollution, specifically diesel, diesel particulate matter are associated with a number of health risks. Increased water pollution, delays in emergency vehicles across rail transits.

In summary, I'm here to make it clear that these projects are not concerning only to environmentalist, fisherman, and the local community, but also the broad medical community and the Washington State Medical Association.

Response GP137-1

Comment acknowledged.

GP138, **Chapin, David**

Comment GP138-1

Comments on:

Westway and Imperium Expansion Projects
Draft Environmental Impact Statements
Comments by:
David Chapin, Ph.D.
17826 NE 27th St.
Redmond, WA 98052
dchapin84@hotmail.com

The Draft Environmental Impact Statements for Westway and Imperium Expansion Projects provide a multitude of reasons why these projects should not go forth. I oppose these projects because they would:

- increase air pollution from site facilities in the Hoquiam/Aberdeen area and from diesel engines along the entire rail route from North Dakota Bakken oil fields and the Alberta tar sands;

- expose communities in along the entire rail route to the risk of massive explosions in the event of train derailment;
    - the expansion of these facilities endangers people from the west coast to North Dakota by increasing the frequency and volume of oil trains;
- disrupt transportation and access by emergency vehicles in Hoquiam/Aberdeen with increased train traffic;
- pose a high risk to very valuable and sensitive marine resources in Grays Harbor and the Washington coast line due to transport and storage of highly toxic crude oil;
- result in major increases in tanker traffic to Grays Harbor, increasing the risk of an oil spill to sensitive marine resources;
- greatly increase the impacts of spilled oil resulting from an earthquake and tsunami from the Cascade Subduction Zone.
    - The DEIS states an earthquake having a 30-50% probability of occurrence for 6.0 magnitude event and a 10-12% probability for a devastating 8.0 magnitude event; with these probabilities, the idea of expanding the oil transport facility in Grays Harbor is ludicrous.
- increase global warming as a result of bringing Bakken and tar sands crude to potential markets in the U.S. and Asia
    - The DEIS is incorrect in saying that "there is reason to believe that much of the crude oil being transported to the new facility would replace crude oil that was previously transported by tank ship." (3-2-20) Existing oil delivered by tank ship is mainly coming from Alaska, where oil production is dropping dramatically. These sources will continue to decline. So oil transported by rail will definitely replace oil previously transported by ship.
    - The DEIS is incorrect in saying that " Even if the proposed facility is not built, additional GHG emissions from end use may still occur over the course of the analysis period. This is because the product could be transported to another facility for use or exported depending on the source of the oil, the type of oil, and the final point of delivery." (3-2-21) This assumes that oil ports elsewhere on the Pacific Coast will expand to accommodate Bakken and tar sands oil delivery. With the Keystone XL pipeline off the table and no expansion of west coast oil ports, these oil sources will not have additional outlets to bring their oil to market and will therefore be much more likely to be left in the ground. There is no basis to assume that other west coast oil ports will expand or that other pipeline will be built to allow the oil intended for these facilities to go elsewhere.

For these and other reasons, the expansion of the Westway and Imperium oil transport facilities makes no sense. We need to, and are, transitioning away from fossil fuels toward an economy based on renewable energy. With that transition well underway, there is no need to continue building infrastructure for the fossil fuel industry. <u>The only reason to build these facilities is to allow the oil industry to make more profits.</u>

<u>The only sensible alternative is the "no-action" alternative.</u> While some of the direct impacts of the project on the immediate environment of the facilities can be partially mitigated, risks of oil spill, explosions, and climate change - all of which would be catastrophic - cannot be mitigated adequately to make these projects acceptable.

As stated in the DEIS web site (http://www.ecy.wa.gov/geographic/graysharbor/factsheet-safety.html), "*A large oil spill, fire, or explosion would likely include unavoidable and significant adverse environmental impacts*." So the question becomes, does the benefit of more oil being brought to these terminals outweigh the very real and large risks to people and ecosystems? The benefit of more oil, except to the oil industry, is nil, whereas the risks are high. The answer to the question is obvious: the benefits do not outweigh the risks. These facilities should not be built.

Response GP138-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access.

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP139, **Chappell, Lisa**

Comment GP139-1

I am concerned that if these are approved my property value will decrease and I will not be able to sell my home, how will I and others in the community be compensated for this loss? Deny the permits.

Response GP139-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values.

GP140, **Chappell, Lisa**

Comment GP140-1

Currently, trains that are stopped cut off some communities. There have been children who have not been able to get home after school because trains have blocked their access and there is no way around this, even for vehicles. At times parents are not able to get to their children who are stuck on the other side of a stopped train. Children, alone or in groups, have been seen crawling under stopped trains as their only route to get home. Children of any age should not be put at such risk this is far too dangerous. Children should not be forced to wait for a train to move in order for them to get home, especially in inclement weather. Parents need a way to be able to access their children when they are stuck on the other side of a stopped train. How will this be prevented? Deny the permits.

Response GP140-1

Comment acknowledged.

GP141, **Chappell, Lisa**

Comment GP141-1

When a train explodes or derails, there will be damages that cannot ever be repaired or recovered, specifically the loss of human life. Who will take care of families who have lost their main provider or providers as a result of death or injury due to a train derailment or explosion? Deny the permits.

Response GP141-1

Comment acknowledged.

GP142, **Chappell, Lisa**

Comment GP142-1

A derailed or exploded crude oil train in Grays Harbor County will be a monumental disaster as has been witnessed in Lac Megantac. First Responders, victims who live through the disaster, individuals who come in to help rescue wildlife or other animals (pets, livestock, etc), and those who have lost family members or place of employment or their homes and all of their possessions, will all be traumatized. Children will be left without parents, parents will be left without children (especially

since schools are so closely located to the proposed sites in Hoquiam, and families will be left homeless. The traumas caused by this reckless action will not be unlike that of those who have survived a war. As a provider of services to victims of violent crimes, I have seen the devastating effects of Post Traumatic Stress Disorder (PTSD; commonly the impacts of PTSD last a lifetime and negatively effect the quality of people's lives. Who will be financially responsible for the psychological effects of a crude by rail disaster on all of the aforementioned groups of people and others which I have not included? Please, deny the permits!

Response GP142-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Final EIS Chapter 4 has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

GP143, **Chappell, Lisa**

Comment GP143-1

I live in Hoquiam, in the blast zone when a crude by rail disaster would occur if this permit is approved. If I survive this disaster but my home is destroyed, who will pay for my relocation and the replacement of my possessions? Many of my possessions are irreplaceable, this cannot be mitigated. Please deny the permits.

Response GP143-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP144, **Chappell, Lisa**

Comment GP144-1

I live in Hoquiam, in the blast zone when a crude by rail disaster would occur if this permit is approved. If I survive this disaster but am maimed, who will provide for my medical costs, my future financial needs, and my future medical care? Please deny the permits.

Response GP144-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP145, **Chappell, Lisa**

Comment GP145-1

I live in Hoquiam, in the blast zone when a crude by rail disaster would occur if this permit is approved. If I survive this disaster but my means of transportation are destroyed, who will pay for the replacement of my vehicles? This is especially a concern if the corporations involved are able to immediately declare bankruptcy and will then not be held liable for losses such as this and other losses. Please deny the permits.

Response GP145-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP146, **Chappell, Lisa**

Comment GP146-1

The potential for disaster from a crude by rail explosion or derailment is significant anywhere along the rail line. In the event of a disaster who will be held financially responsible for the tremendous losses that will occur? Are the companies going to be able to declare bankruptcy as they did in Lac Megantac? The current insurance requirements do not even begin to cover the potential cost of such losses. Who will be liable for the costs of a crude by rail disaster? The permits must be denied!

Response GP146-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents

for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP147, **Chappell, Lisa**

Comment GP147-1

I live in Hoquiam, in the blast zone when a crude by rail disaster would occur if this permit is approved. If I survive this disaster but my means of transportation are destroyed, who will pay for the replacement of my vehicles? This is especially a concern if the corporations involved are able to immediately declare bankruptcy and will then not be held liable for losses such as this and other losses. Please deny the permits.

Response GP147-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP148, **Chappell, Lisa**

Comment GP148-1

Hi, I'm Lisa Chappell. I live in Hoquiam in the blast zone. My professional career has been spent with victims of violent crime, all these men, women, children permanently scarred by the horror they have experienced.

Most of these victims many will suffer from PTSD for the rest of their lives. Victims of the bomb train explosion will also suffer from PTSD. There is nothing in the DEIS that addresses who will attend to the immediate and lifelong psychological scars that the victims of a crude oil disaster will experience, from people who have lost family members, homes, jobs, those who have been injured, and the rescue workers will come to the aid of humans and wildlife.

And on a more personal note, Brian, who will comfort your newborn and your older children when a bomb train explodes and Hoquiam City Hall is incinerated and your children are left without a father? This room is filled -- or was filled with my friends and my neighbors. People that I love. I cherish this community.

Another issue that was not addressed in DEIS is what will happen to those of us who happen to survive the coming disaster, but we have lost people we love and everything that we own. I also want to add that I prefer my wildlife and my natural habitats not coated in toxic crude oil. There's only one thing you can do to protect us and that is to deny these permits.

Thank you.

Response GP148-1

Comment acknowledged.

GP149, **Cheatham, North**

Comment GP149-1

I know what oil spills can do to a community. Many of my relatives live in Lynchburg VA, the site of one of our nation's numerous spill disasters. Regardless of precautions and assurances the community, it happened back in 2014, and similar incidents continue to recur throughout the country from time to time. Due to the frequency and long haul of oil trains from the point of extraction through the Columbia River Gorge to the proposed terminal locations in Vancouver and near the WA coast, the potential environmental cost too high to justify the consequences of a disaster. I urge that these terminal siting proposals be declined.

Response GP149-1

Comment acknowledged.

GP150, **Christ, Peter**

Comment GP150-1

It is totally dangerous and unreasonable to allow more oil terminals in Washington State, which will increase train traffic through the beautiful Columbia Gorge. Residents of Gorge communities (Washougal, Camas, Stevenson, Vancouver, etc.) are already subject to almost continuous streams of oil and coal trains. These trains are dangerous and destroy the serenity of the Gorge. Health problems are an issue.

Where there is no overpass, the trains cause delays of traffic which are not only inconvenient but could be a real safety hazard int he case of a fire or police vehicle not being able to cross the train tracks. Please do NOT increase this traffic by building more oil terminals.

The supposed prosperity from these terminals is a red herring. First there are very few workers at each terminal and over time the degradation of the area will decrease the value of the area.

Response GP150-1

Comment acknowledged.

GP151, **Chudy, Cathryn**

Comment GP151-1

EARTH - There is a 30 % to 50 % probability of a Magnitude 6.0 or greater earthquake in the area in the next 50 years - this makes the risk too great for siting oil terminals.

EARTH - The Westway and Imperium Terminal Facilities are built on extremely poor soil of dredged and fill material. A viable terminal would require that significant engineered steel pipe pilings be built between 75 and 130 feet below grade.

Response GP151-1

Comment acknowledged.

Comment GP151-2

SAFETY – The project area from Centralia to Hoquiam lacks a Hazmat team in the immediate vicinity, so a serious spill, explosion, or fire will require a 2-3 hour wait for specialized teams to arrive from Tacoma or Olympia. This is an unacceptable safety risk.

Response GP151-2

Final EIS Chapter 4, Section 4.2.3, *What framework provides responses to an incident?* has been updated to better reflect existing response capabilities and resources are within the study area. Section 4.7, *Impacts on Resources,* has been updated to better reflect potential impacts on emergency service responses from the proposed action. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment GP151-3

SCOPE - I live in Vancouver and am concerned that the impacts of this project go well beyond Grays Harbor and its communities. The railroad hauling this explosive crude goes right through the heart of two of Washington's largest cities, Spokane and Vancouver. The consequences of an explosive derailment in my community and other rail cities/towns would likely result in many deaths and the destruction of infrastructure. Liability issues and who will pay for whatever losses occur (which could be catastrophic)is not clear and is likely to be at best not determined sufficiently to assist victims should catastrophe occur. The profits are capitalized while losses are socialized at the expense of our state and local residents.

Response GP151-3

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP151-4

SCOPE - I am deeply concerned about the imminent problem of global climate change. One of the major contributors is the use of fossil fuels. These projects involve building out risky infrastructure in a dying industry and is antithetical to seriously addressing the impacts of climate change.

Response GP151-4

Comment acknowledged.

Comment GP151-5

HUMANS - Humans will be affected by spills or burning of oil: Inhalation of vapors resulting from exposure to a spill can cause irritation of the respiratory system. Inhalation of high concentrations of hydrogen sulfide released into the air poses a potential health risk, especially for children and the elderly. Concentrations (well in excess of 10 ppm) could be immediately dangerous to workers due to respiratory paralysis. At levels between 700 and 3,000 ppm, benzene can cause drowsiness, dizziness, rapid heart rate, headaches, tremors, confusion, and unconsciousness. When crude oil is burned it emits chemicals that affect human health.

Response GP151-5

Draft EIS Chapter 4, Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including potential impacts on human health from inhalation of toxins released during a fire or explosion.

Comment GP151-6

ANIMALS - I am worried about the range of species that could be affected by a significant oil spill. These include: Fish, Crabs, shellfish, double-crested cormorants, pied-billed grebe, belted kingfisher, Caspian tern, Western sandpiper, Dunlin, and Sanderling, Bufflehead ducks and common goldeneyes, common mergansers, harbor seals, sea lions, killer whales, sea turtles, humans! (Yes, we can suffer mucous membrane inflammation from the oil or its fumes), pink-footed shearwater, black footed albatross, northern fulmar, beavers, river otters, bald eagles (can be exposed by feeding on injured or dead fish), clams, mussels, barnacles, snails, algae and plankton, salmonids protected under the Endangered Species Act, migratory birds, frogs, perhaps others unnamed.

Response GP151-6

Draft EIS Chapter 3, Section 3.5.4, *What animals are in the study area*? describes animals and habitats in the study area that could be affected by construction and operation of the proposed action. Chapter 4, Section 4.7, *Impacts on Resources*, describes impacts on animals that could result from potential oil spills, fires, or explosions and clarifies that while impacts would depend on the circumstances of the incident, the resources described in Chapter 3 could be affected.

Comment GP151-7

PLANTS - Plant tissues are fragile and can be damaged or destroyed by Crude oils and heavy refined oils. a typical recovery period for salt marshes (like those at Grays Harbor)would be 3 to 5 years. This affects the base of the estuarine and marine food web, resulting in broader ecological damage. A spill could destroy plants' ability to photosynthesize (which affects air quality as well). Fire from explosions would also result in plant mortality.

Response GP151-7

Impacts on plants that could occur in the event of a spill, fire, or explosion are addressed in Draft EIS Chapter 4, Section 4.7, *Impacts on Resources*; specifically, Section 4.7.1.2, *Plants* (for oils spill impacts) and Section 4.7.2.3, *Plants* (for fire or explosion impacts). Final EIS Section 4.7 has been revised to acknowledge the potential for more lasting impacts as the result of a spill.

GP152, **Clark, Dan**

Comment GP152-1

This is the first DEIS I have read. I am impressed with the effort and thoroughness that went into the making of this document. I do have, however, 3 observation/suggestions: Observation 1: a. I notice that your home webpage identifies climate change as a significant threat. It presents arguments for a number of remedies/mitigations that Washington state might take. b. The DEIS makes no mention of climate change. Since the oil passing through these terminals will be burned somewhere (why else to ship it?), it will certainly contribute to climate change. The question is: how much? Suggestion 1: a. Identity the amount of greenhouse gases likely to be released into the atmosphere over the next 10 years from the burning of the oil contained in all these trains. Also identify the likely reduction from all measures proposed in Washington state to reduce greenhouse gases. The DEIS should present these estimates to permitters so they can compare and properly judge the impact of the activity associated with the use of these terminals to Washington's stated environmental goals. I think we're all coming to the realization that the threat of climate change anywhere (e.g. China) is a threat to climate change everywhere (Washington).

Response GP152-1

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively, in the context of emission inventories and reduction goals. The Final EIS has been updated to include estimated emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the likely sources and destinations of crude oil shipped through the proposed facilities.

Draft EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, *Climate Change*, acknowledges that greenhouse gas emissions from the cumulative projects would contribute to global greenhouse gas emissions, which contribute to climate change, and describes the projected impacts of climate change in the Pacific Northwest.

Comment GP152-2

Observation 2: a. There are extensive descriptions of the impacts of train activity (1 to 2 hour delays, etc.) the Grays Harbor area; there are also numerous, useful charts detailing the risk of spills. b. These descriptions, however, are limited to about a 60 miles radius of Grays Harbor. The trains carrying this oil will be traveling the entire length of Washington state—from Spokane through Pasco (my own area) through the Columbia Gorge, Vancouver, and so on. All of the concerns identified in the Grays Harbor area impact every community through which the tanks cars travel. Suggestion 2: Include the total and cumulative negative impacts and risks on communities and natural environments throughout the state that might accrue from the activities directly connected with these two terminals. These impacts need to be included to enable permitters to take the broadest perspective and to make the best decision for our state. Observation 3: Your website shows that the EIS process is partly complete. The Department of Ecology has the opportunity to adjust the DEIS before the final draft. Suggestion 3: This DEIS must include a broader perspective in order to assist the permitters to make the best, most informed decision. There is still time to make

adjustments that include impacts outside the Grays Harbor area. I appreciate all the effort the Washington Department of Ecology has put into this DEIS so far, and I appreciate this opportunity to give input. I urge you to take these suggestions into consideration during the revision process. We all want the best decision possible for our entire state.

Response GP152-2

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

GP153, **Clark, Sharon**

Comment GP153-1

Please deny the proposed expansion of there 2 companies. The potential risk of spill either in the area or as these products come to the proposed terminals is too high. Additionally, we continuing to encourage and promote the use of fossil fuels in the far East rather than the promotion alternative energy sources, we are harming our own environment through continued drilling, fracking etc. The risk for us both locally and for the planet is too great. Please vote No on these proposals.

Response GP153-1

Comment acknowledged.

GP154, **Clark, Sheri**

Comment GP154-1

I stand with my granddaughter at Titlow beach and we watch the oil trains roll through. She pronounces them “scary” and they are in many ways she doesn’t understand. I have helped to clean oiled sea birds and watched them suffer and die. Really???? Are our only two options to pay the now-chaotic Middle East for petroleum products or else to endanger the public, the oceans, the life on earth by sending what is produced in North America to Asia? Haven’t we learned from the harm done by the Exxon Valdez and the BP spills that one spill is one too many? How can we create a system that protects us and prevents spills when all systems are prone to corruption? Let’s think of a better way: plan C.

Response GP154-1

Comment acknowledged.

GP155, **Clarkson, Jim**

Comment GP155-1

We often visit the Columbia Gorge often along with many like us from all over the world. Tourism is huge because of the almost untouched beauty and serenity--some might say: God’s majesty. Have you ever hiked or driven to a lookout in any part of the Gorge or even enjoyed the river from

Vancouver and points beyond? Must we put industrial enterprises on every piece of land? They bring air pollution, water contamination--someone always finds industry ignoring, accidentally perhaps, or evading EPA regulations. Much of what makes these regions special would be put at risk. A single major oil spill could devastate the enterprises of tourism, the area's maritime economy, productive fisheries, tribal cultures and economies, spectacular coastal waters, sensitive habitats and protected lands and waters in the Columbia River Gorge--not to mention the poor communities along the way that reap none of the so-called benefits but must put up with additional trains and the potential for oil spills. So who's receiving lobbying money to push this through? Let's sell a culture that can live with less growth, so much of which benefits so few. Let's sell the Pacific Northwest as the last bastion free from industrial sprawl.

Response GP155-1

Comment acknowledged.

GP156, **Clendenin, The Rev. Evan Graham**

Comment GP156-1

I believe Jesus sent us a spirit to renew the whole creation, which means working both conservatively and restoratively on behalf of the land, all creatures and the human communities it supports. Our work on behalf our local communities and the land that supports us must look to this image and hope. Shipments of crude oil-by-rail thru Grays Harbor pose multiple risks of irremediable consequence for the well-being and economies related to water and land, as well as to the human communities who reside here. These far outweigh the already small economic gain to be had, which would narrowly benefit a relative few people in this immediate region, with the wealth not shared and invested in the long-term, common good of the region. I pray that the short-sighted efforts at development, and specifically the shipment of crude-oil by rail, be stopped, and more durable and broadly restorative investments in the local common good be pursued.

Response GP156-1

Comment acknowledged.

GP157, **Clifford, Margaret**

Comment GP157-1

Co-Lead Agencies; City of Hoquiam Administrator Brian Shay, and Department of Ecology

Director Maia Bellon ,

I strongly oppose the expansion of crude oil projects in Grays Harbor because they pose extreme risks to human life and the environment while providing little benefit to the citizens of the state. Adequate mitigation is not feasible for this project. For these reasons the permits should be denied.

All three crude oil projects should be considered together before a decision to permit any one project. The risks to public safety and to the environment, the actual economic costs and reduction in the day to day quality of life elements, such as delays of transportation, noise, vibration, air pollution, must be based on the impacts from all projects combined. Expansion of these storage

facilities would not be considered without construction of the Port of Grays Harbor terminal. All of the risks and impacts from transporting crude oil to and from these storage facilities by rail and ship, respectively have to be identified and assessed by this DEIS. SEPA requires related projects to be considered as a whole. Impacts and risks are a function of the volume of crude oil transported over the rails. The entire DEIS risks and impacts are based on a volume of crude oil provided by the proponents. It is critical to understand, however, that there are no restraints on the volume once this project is approved. Over and over in past SEPA documents, we have seen one volume proposed, only to increase when economic incentives prevail. All impacts projected in the DEIS are based upon the proposed volume and therefore, to the extent that this is underestimated so are the actual impacts.

Response GP157-1

Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of cumulative impacts. Refer to the Master Response for Connected or Similar Actions for additional information about the consideration of other projects. Refer to the Master Response for Cumulative Impact Analysis for additional information about the scope of the cumulative impacts analysis.

Comment GP157-2

The DEIS states in several places that mitigation is not possible. Which brings us to a key point- if mitigation is not possible, then why are we considering permitting this proposal? There are extremely high risks and little benefit. This proposal puts the Bowerman Basin, a National Wildlife Refuge and national treasure at risk of not only killing the birds, marine mammals, crab larvae and salmon as a result of a large spill, but contaminating the Harbor and coastal shorelines for perpetuity. It puts thousands of children in the blast zone, not only in Aberdeen and Hoquiam, but all along the route, at risk of incineration. It is true, there is no mitigation for such risks. Therefore these projects must be denied.

As long as mitigation is not possible, this project should not be permitted. The DEIS has tried to explain mitigation for burning train cars. However, it acknowledges that the sole method to deal with tank train fires is to stand back and let them burn.

The addition of storage of this quantity of hazardous oils requires additional terminal capacity. Therefore, this DEIS must examine the primary project risks; delivering crude oil to the harbor via rail and exporting the same by ship. A derailment or major spill would be a catastrophe, most likely including a major fire, and oils that are impossible to clean up once spilled into the Chehalis River or Grays Harbor. This DEIS does not provide for adequate prevention, response, cleanup or mitigation. The reasons for this are basic: it is not possible. If any such measures were possible they would be so costly that these projects would not even be considered.

Response GP157-2

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 to reduce the likelihood of a spill reaching the environment and the potential impacts if an incident occurs at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water

flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP157-3

This is the one chance to get this decision right. There are a few permits to be issued and the building of tanks that caused the SEPA to be engaged. This SEPA opportunity is the only time that the full rail impacts will be assessed. Even if the trains derail with the attendant horrors, and the corporations fall to bankruptcy as has been described in many scenarios, that won't stop the continuation of this rail traffic. Another company could take over operations of the storage facilities since the construction has already been permitted. This is the one chance to secure our future by saying no to the dangerous and deadly rail traffic upon which this project depends.

The Grays Harbor watershed which drains over 2,500 square miles is the largest system accessible to anadromous fish in Washington State outside the Columbia Basin. The harbor is a national treasure that provides habitat essential to important fish and wildlife populations that support the local and state economy. These oil storage projects will cause irreparable harm to these resources and the dependent economies. If these projects are permitted, future generations will wonder why we traded sustainable fisheries and a tourism economy based on a healthy environment for a crude oil portal.

Sincerely, Margaret Clifford 1617 Columbia St. SW Olympia, WA 98501

Response GP157-3

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP158, **Cochran, Julia**

Comment GP158-1

Hi. My name is Julia Cochran. I'm from Port Townsend, Washington. I'm a blogger. I'm incredibly uncomfortable in front of an audience. I am here -- I retired in June from being a classified employee in the public school district because I wanted the children who I was teaching, the 37 teenagers I've raised, my biochild, to have a future because I believe climate change is real.

And the scientists all say, leave it in the ground. So that's (inaudible.) (Inaudible) says no matter what all these people are saying, agree with them, but leave it in the ground.

Anything that is taken out of the ground and putting out there is going to kill our children, our grandchildren, our great-grandchildren, and then there won't by any more after that. So please, leave it in the ground.

Response GP158-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP159, **Cole, Robert**

Comment GP159-1

I strongly oppose both of these projects. I do not want long oil trains traveling near where I live. I oppose exporting oil and coal to Asian countries because of the very negative effect on climate change. I care deeply about the world my grandchildren will live in, and I don't want to support more fossil fuel going to Asia. I understand that the people of Grays Harbor County are strongly opposed to this project. Your DEIS must consider what the local people want, since they bear the bulk of burden of oil trains.

Response GP159-1

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP160, **Connally, Patricia**

Comment GP160-1

My name is Patricia Connally. I'm against the proposal for the crude oil transit. I was born and raised on the harbor, raised by commercial fisherman. My whole family has lived and basically been raised by fishing, the fishing industry, and most of my friends and family have too.

And I just think the negative impacts of transporting crude oil is way too risky for how many people really rely on the natural resources that this town provides. We just really can't risk it, so I do not support it. Thank you.

Response GP160-1

Comment acknowledged.

GP161, **Connor, Robert**

Comment GP161-1

I'm opposed to expanding terminals!

Response GP161-1

Comment acknowledged.

GP162, **Cool, Debbie**

Comment GP162-1

To whom it may concern, I moved to Montesano eighteen years ago to work and live in one of the most beautiful and pristine areas of the world. The rain forest is our backyard, the oceans and rivers our food source. Here the pace is slower, people depend on their backyard gardens, and recreation is something you do outdoors. Having read the DEIS I am particularly concerned that you believe you can adequately mitigate for noise, pollution, natural disasters, and human error. Your report is saying that the State of Washington believes the hazards to the people along the train route and in particular to Grays Harbor residents is outweighed by the income the state estimates it will take in. For me, the balance rests on the quality of life that will be impacted. You cannot mitigate enough to overcome the barriers to health, safety and the environment. It's time to end US reliance on oil. No oil/no trains. Sincerely, Debbie Cool

Response GP162-1

Comment acknowledged.

GP163, **Cornelison, Peter**

Comment GP163-1

Hello, my name is Peter Cornelison. I'm from Hood River. I'm on the Hood River City Council and I represent the City of Hood River in my remarks today.

Our council passed a resolution in 2014 opposing oil trains in the Columbia River Gorge National Scenic Area. And I would like to describe two of the impacts in our region from additional oil trains, such as we put forth by this proposal.

We have two major concerns. Number one is fire. You may have heard of the winds that happen both in the summer and winter. In the Columbia Gorge they're quite strong, 30 to 40 mile-an-hour winds at times.

An oil train that caught fire in the Gorge could send a fire downwind or upwind and at a very fast rate through the Gorge threatening both sides of the river, Oregon and Washington, because the sparks would easily go over to the other side of the river.

The other sort of nightmare scenario is one that was put forth by the Army Corps of Engineers, which is if an oil spill happens near one of the dams, the high end hydrocarbons go down and impregnate into the concrete of the fish ladders. The salmon would no longer use those fish ladders.

So either one of those scenarios, fire or oil spill, presents with real dire consequence, and we hope that this proposal will be rejected.

Thank you.

Response GP163-1

Refer to the Master Response for Geographic Scope of the EIS and the Master Response for Environmental Health and Safety Analysis.

GP164, **Corr, Nancy**

Comment GP164-1

I`m opposed to the oil transport terminals being proposed or increased in the Grays Harbor area, as the oil is not for use locally, but to be exported and of no value to anyone but the oil companies.

Response GP164-1

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP165, **Covert-Bowlds, Chris**

Comment GP165-1

Name Chris Covert-Bowlds, M.D.
Organization St. Patrick's Catholic Church Social Justice Committee
City/State/Zip Seattle, WA 98103

Coal & oil export terminals are a threat to local and global health & environmental safety. Corporations that profit from these projects have not been paying the full price of such projects. Please consider all effects, including on salmon, people around the world, birds, the entire ecosystem. This could devastate the local economy, dependent on healthy fisheries.

Response GP165-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP166, **Cozzetto, Bonnie**

Comment GP166-1

My Name is Bonnie Buchanan-Cozzetto & my Grandparents, on both sides, immigrated to the US Drectly to Grays Harbor ~ They came here for the Beauty & OutDoor Splender this area had to offer! My Father was a Boom Foreman, walking on logs floating in our water ways, always Loving & Respecting the Outdoor Immenities, this area had to offer! Those jobs, along with many other Wood Product related Jobs are gone now, but the pristine waterways & wildlife remain. The Fishing, Crabbing, Clambing & Oaster Bed are also still here and I believe chancing losing those things is NOT worth anthing Imperium & Westway might say our area might Gain. Grays Harbor has been through some 'Rocky Times' over the last 15yrs, having said that, "That is NO EXCUSE to disrespect our Beautiful Area. Chancing Oil Contamination &/or Explosions & Fires caused by Future Rail Accidents w/Oil Contents on Trains! Yes, Gray Harbor Economy may gain a few badly needed jobs, but overall

the damage that rail accident may cause are just not worth the risk! Please Respct this Beautiful Enviroment & Don't Allow Permitting of fthios Project!

Response GP166-1

Comment acknowledged.

GP167, **Crawford, Dennis**

Comment GP167-1

My name is Dennis Crawford. As an Emergency Management Specialist from Western Washington, I wish to comment on the dangers of the Westway and Imperium expansion projects as currently conceived. The location of these projects next to the bay is most concerning as they relate to the predicted seismic shift in the Cascadia Fault running a few miles off the Pacific Coast.

The Washington Department of Emergency Management has held numerous workshops to help prepare the public for a large earthquake with a magnitude of up to nine that has a ten percent chance of occurring in the next 15 years accompanied along the coast with a possible 80-foot tsunami.

The devastation that will occur at some point in the future will be massive along the coast. It will be much more destructive for the environment and coastal marine life if there is spillage from ruptured oil, gas, and chemical tanks situated on soils that are subject to liquefaction during an earthquake.

The proposed projects are located on soils which are known to liquefy in large earthquakes. As an alternative -- if there is to be one, an alternative would be to select sites for these where they would be on a nearby hillside above 80 feet where the underlying material is igneous rock, less subjective to fissures and more stable in earthquakes.

To move the stored oil products from the tanks to the harbor for loading would be accomplished with pipelines that would automatically close when an earthquake occurs.

Thank you.

Response GP167-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

As noted in the Master Response for Project Objectives and Alternatives, the EIS analyzes the potential impacts of a private project on a specific site; the objectives and proposal are defined by the applicant.

GP168, **Crawford, Dennis PhD**

Comment GP168-1

As an Emergency Management Specialist from Western Washington, I wish to comment on the dangers related to the Westway and Imperium Expansion Projects as currently conceived.

The location of these projects next to the bay is most concerning as they relate to the predicted seismic shift in the Cascadia fault running a few miles off the Pacific Coast. The Washington Department of Emergency Management has held numerable workshops to help prepare the public for a large earthquake with a magnitude of up to a nine that has a ten percent chance of occurring in the next 15 years accompanied along the coast with a possible 80-foot tsunami. The devastation that will occur at some point in the future will be massive along the coast.

It will be much more destructive of the environment and coastal marine life if there is spillage from ruptured oil, gas, and chemical tanks situated on soils that are subject to liquefaction during an earthquake. The proposed projects are located on soils which are known to liquefy in large earthquakes.

An alternative to the sites selected for these projects would be on nearby hills above 80 feet where the underlying material is igneous rock, less subject to fissures and more stable in earthquakes.

To move the stored oil products from the tanks to the harbor for loading could be accomplished with pipelines that would automatically close when an earthquake occurred.

Submitted by Dennis Crawford, PhD, 2580 Crest Avenue, Port Townsend, Washington 98368.

Response GP168-1

Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events.

GP169, **Culhane, Tom**

Comment GP169-1

I would like to go on record as strongly opposing both the Westway and Imperium Expansion Projects. My main objections all relate to the insanity of shipping such large quantities of crude oil by rail. Obviously the proposed expanded use of the rail lines would increase the vibration and noise experienced by those people living near the line, and the backed up traffic at railroad crossings would cripple the mobility of locals and emergency responders.

Then there is the real possibility of a spill of Bakken crude oil – extremely flammable fuel with the incendiary potential to destroy large swaths of the cities and towns it is travelling through. Explosions of Bakken Crude oil have occurred and if one of these takes place near a community, either by chance or due to a terrorist act, many people would die and there would be tremendous destruction. No adequate mitigation for these problems was proposed, truthfully because no adequate mitigation for these concerns are possible.

From a western Washington perspective the social costs and economic liability of these projects would far outweigh any gains, and it would be a travesty if any of the government agencies involved were to allow either of these proposals to move forward.

Response GP169-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP170, **Cummings, Roger**

Comment GP170-1

I wish to express my complete opposition to these projects for reasons already stated by public safety experts. *These projects are in a highly seismic region of the world subject to quake and tsunami risk.

These projects only promote increased fossil fuel consumption and do nothing to mitigate resultant climate change.

Existing infrastructure (bridges, rail systems) are inadequate to manage the high load of rail traffic that would result and long rails trains will impact response time for local emergency vehicles by blocking traffic routes for extended lengths of time.

Effective response plans in an emergency are lacking and inadequate.

The projects have potential, disastrous environmental risks to wildness areas and waterways and to natural fish runs and ocean harvest. *The industry promoting these projects have poor record in preventing spills or even enhancing local economies. I stand with many the citizens of this state against this enterprise. The risk of harm is far to much. Thank you.

Response GP170-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for additional information about the analysis of emergency planning and response capabilities.

GP171, **Cunningham, Lynda**

Comment GP171-1

While Grays Harbor might seem far from the Columbia Gorge, the potentially explosive Bakken crude-oil trains serviced by these terminals would travel through, and directly threaten, the Columbia River Gorge National Scenic Area. Why are we allowing these dangerous crude oil trains to go even close to such a national treasure as our beautiful Columbia Gorge. Please, let us move forward and out of the old days into cleaner, healthier energy choices. Thank you.

Response GP171-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

GP172, **Curry, Stephen**

Comment GP172-1

Westway and lmperium Expansion Projects EIS c/o ICF International 710 Second Ave., Suite 510 Seattle, WA 98104

My name is Stephen L. Curry. I currently reside at: 5039 Brenner Rd. NW, Olympia, Washing ton, 98502.

The following is my testimony regarding both Westway and lmperium Expansion Project Draft Environmental Impact Statements, both affecting Grays Harbor and the Chehalis River estuary.

I am a Natural Resources Scientist, forest inventory specialist, retiree from the WA State Dept. of Natural Resources. While a resident of Aberdeen, Washington between 1971 and 1984 I was employed by Boise Cascade Corp. whose office was located at 1321 Sargent Blvd., the present location of the Rotary Log Pavilion. This location is adjacent to the southwestern boundary of Think-of-Me hill and the eastern boundary of the Olympic Gateway Plaza Shopping Mall.

Think-of-Me Hill Concern.

Think-of-Me hill has a notorious history of sliding which I witnessed many times over the years. Sliding is a concern because the main and only highway into Aberdeen is from the east. Both the highway and the rail line are sandwiched between the Chehalis river and Think-of-Me hill. The Think-of-Me hill slides have been mitigated to some extent over the years but not eliminated. Storms with heavy rainfall and/or coupled with an earthquake event would create a catastrophic, explosive slide if an oil train were passing through. With several trains projected to pass through per day the risk is high. Extensive slope stability studies on Think-of-Me hill with the above in mind must be done to even consider transporting hazardous materials through this corridor.

Response GP172-1

Based on the recent landslide occurrences that exceeded the predicted landslide flow distance, Final EIS Chapter 3, Section 3.1, *Earth*, reflects the acknowledgement of the distance that debris flow has traveled in the past. Despite the recent landslide events that exceeded the predicted landslide flow distances, the rail and road segments for 12 of the 19 miles described are estimated to have the same level of risk for interruption by landslides as previously described in the Draft EIS.

Comment GP172-2

Olympic Gateway Plaza Shopping Mall Concern.

An additional concern is the location of the Olympic Gateway Plaza Shopping Mall. Westward bound trains with up to 120 cars full of explosive contents, if stalled, would block all cars and people from evacuating the shopping mall. The Chehalis river blocks escape to the south, the Wishkah river blocks escape to the southwest, the rail line blocks escape to the northwest, north, and east. This concern alone should be reason enough to deny permits for both projects.

Response GP172-2

Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

Comment GP172-3

Oil Storage Tank Concerns.

Increased recent knowledge regarding the Cascadia fault suggests that there is a 10 percent chance of experiencing a magnitude 9 earthquake in the next 15 years. Emergency planners in Washington and Oregon are incorporating this information in their planning. The Department of Ecology needs to decide whether it likewise will include this information in their decision criteria. Of great concern is the location of existing and proposed additional oil storage tanks. That location sits on unstable fill that is subject to liquefaction resulting in violent shaking and tank structural failure during an earthquake. In addition to the shaking there is the danger of a tsunami wave overtopping the pad the tanks sit on and destroying the tanks.

Response GP172-3

Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Earthquake Probabilities for an explanation of how the probabilities of strong earthquakes reported in the Draft EIS relate to those identified in recent studies. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events.

Comment GP172-4

I attended the early afternoon 'Westway and lmperium Expansion Project DEIS' hearing in Aberdeen on October 8, 2015. Speaker number 3, Dennis Crawford, an emergency management specialist, testified about his concern regarding these very issues. Speaker number 21, Arney Martin of Hoquiam, testified regarding the inadequacy of 75' piling lengths not reaching stable bed rock and therefore being ineffective. Even with adequate piling length the overtopping issue remains.

Response GP172-4

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP172-5

Oregon Field Guide, an Oregon PBS program, produced and aired an excellent program, "Unprepared: An Oregon Field Guide Special", regarding these issues on October 1, 2015 and what Oregonians need to do to mitigate some of these catastrophic dangers. Portland, Oregon is in the unfortunate position of having a huge petroleum tank farm sitting on fill subject to liquefaction. The tank farm supplies most of western Oregon with petroleum products. Tank destruction due to earthquake would not only impact supply of petroleum to western Oregon but release an unimaginable amount of oil down the Columbia River and out to sea and along the Pacific cost impacting birds and wildlife.

Response GP172-5

Comment acknowledged.

Comment GP172-6

We in Washington have a choice and an obligation not to add to the problem and instead pro vide an oil free habitat to the coastal creatures that need it.

<u>WA DOE Mission and Responsibility</u>.

A search of the the WA DOE web site reveals its Mission/Vision Statement which states: "The mission of the Department of Ecology is to protect, preserve and enhance Washington's environment, and promote the wise management of our air, land and water for the benefit of current

and future generations. In order to fulfill our mission and move Washington forward in a global economy, the Department of Ecology has three goals: to prevent pollution, clean up pollution, and support sustainable communities and natural resources."

The WA DOE web site also includes sections related to: Climate Adaption Knowledge Exchange (CAKE) and Institute for Catastrophic Loss Reduction, a Canadian entity.

WA DOE's mission statement and sensitivity to preventing catastrophic environment and human loss are laudable. There is no mention regarding supplying jobs or keeping corporations profitable in WA DOE's mission statement. To be consistent with these stated values and goals, both Westway and lmperium Expansion Projects should be denied.

Thank you for the opportunity to render testimony.

Sincerely, Stephen L. Curry

5039 Brenner Rd. NW

Olympia, Washington, 98502

360-556-6815

Response GP172-6

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP173, **Curtz, Thad**

Comment GP173-1

My wife and I love to go see the migrating shorebirds in Bowerman Basin. There are only a limited number of these stopovers sites available on the flyway. Please don't approve these projects and expose that important site to the risk of a major oil spill. Yours, Thad Curtz, Ph.D.

Response GP173-1

Comment acknowledged.

GP174, **D, Dave**

Comment GP174-1

I think it's great to see the harbor get more opportunities for family wage jobs. It seems to me that those that are oppose to oil, factories or any other jobs that pay well are the people paying minimum wages to the majority of there employees. I don't remember a comment period when the Quinault tribe decide to bury large diesel and gas tanks in the bank of the Wishka river? As far as oil tankers I think we need the business. Make safety a priority but stop blocking the ports ability to grow. We have lost hundreds of family wage jobs in grays harbor and I don't think tourism or casinos paying minimum wages is going to turn things around. We need to stand up against these people putting their special interest ahead of the common good these industries can bring to us. I have three

children raised here on the harbor and they are all looking to go elsewhere because of the lack of good jobs and wages. We need jobs. Stop killing good opportunities or all our children will be leaving.

Response GP174-1

Comment acknowledged.

GP175, **Dahlquist, Brynn**

Comment GP175-1

My name is Brynn Dahlquist. I'm from Washington, Klickitat County, and I'm here on behalf of all the tiny towns that exist in the Columbia River Gorge along the tracks. I spent most of my life in those small towns and all of them grew up because the tracks were there, which means those tracks run through downtown.

The one-mile radius that is referred to as the blast zone is this town. There are schools and grocery stores, Main Street City Hall. Darn near everything is within a mile of the tracks and that is not addressed in the DEIS.

Response GP175-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP175-2

It states in the job assessment dozens of job loss are basically null and void. It will be no jobs loss.

Response GP175-2

Draft EIS Chapter 7, Section 7.1.4.2, *Proposed Action,* describes the estimated impacts on employment associated with the construction and operation of the proposed action, including the number of direct, indirect, and induced jobs that would be generated as a result of the project.

Comment GP175-3

In the event of an accident, which is bound to happen, that the Department of Transportation said ten trains on average will derail each year if the current rate of traffic stays the same.

There is no assessment at all for the fact if there is a disaster. We all have volunteer fire departments. We can't afford the necessary machinery, the necessary chemicals, the necessary anything to stop destruction in the event of a fire. Who is going to cover any of the issues that arise? It's not shown in the DEIS.

Response GP175-3

Final EIS Chapter 4, Section 4.2.3, *What framework provides responses to an incident?* has been updated to better reflect existing response capabilities and resources in the study area. Section 4.5.3,

What mitigation measures would reduce impacts related to rail transport? proposes additional mitigation measures to address gaps in emergency preparedness planning and response capabilities. These measures include the provision of additional fire-fighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions.

Comment GP175-4

These small towns, it all comes down to recreation. People come to recreate, sailboarding, kiteboarding, windsurfing. In the event of an oil spill, that is not covered. Jobs would be lost. Recreation is why people come now. None of those are covered in the Draft Environmental Impact Statement. The issues need to be addressed in order for the proposals. . . .

Thank you.

Response GP175-4

Draft EIS Chapter 4, Section 4.7, *Impacts on Resources,* describes potential impacts on recreation as a result of an oil spill, fire, or explosion.

GP176, **Dahlquist, Daeuthen**

Comment GP176-1

Hi, my name is Daeuthen Dahlquist. I'm 11 years old from a small town in the Columbia Gorge, Klickitat County. It's important that we don't act hastily from a point of instant gratification, but that we reflect upon the longer consequences of what could happen. The DEIS needs to consider all the threatened and endangered species and the habitat or lifestyle we are destroying, oil train.

According to the National Columbia River Gorge Natural Scenic Area Active Management Plan, there are 114 state and federally recognized endangered or threatened species where I live. The marine and rail transportation study only -- reports that only 14 percent at best of an oil spill is recoverable. That means 86 percent coming to steelhead and their spawning grounds. Eighty-six percent of the bald eagles, and the habitat of the Osprey.

The DEIS needs to address the necessity of this area for species other than humans. The economic cost/benefit analysis of the DEIS does not recognize the negative impacts of an explosion, spill, or derailment. Forty percent of my town -- of our town is employed by an industry directly on the tracks. In the event of an explosion I guarantee jobs will be lost, lives will be lost.

Response GP176-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

Comment GP176-2

Lastly, I recognize climate change is a moral decision. It requires to look past facts and into your conscience. I am asking you to do what you feel is just, only not for this moment but future generations, for the earth, the animals, and the youth of the world.

We need to stop burning, and drilling, and using the planet as a commodity. Our future, my future is sacred. Thank you for being responsible for my future.

Response GP176-2

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP177, **Dale, Garry**

Comment GP177-1

Department of Ecology and City of Hoquiam,

RE: Westway and Imperium Oil Expansion Projects DEISs

State of Washington through Washington State Department of Ecology and City of Hoquiam as SEPA Leads are responsible for accurate presentation of direct, indirect and cumulative impacts of these proposals as well as mitigation measures to lessen impacts.

The State and City are responsible for Public Health Safety and Welfare and protection of air quality, water quality, and public resources and human health through any permits that might be issued for these projects at completion of environmental review. Since the potential impacts from both projects are similar, I will offer one comment letter and submit it for both projects.

Since projects are on previously developed lands, greater potential for impacts are off-site and secondary in nature. They include potential risks of accident, spills, derailment that exists because of distance of volatile Bakken oil and/or jet fuel on rail line infrastructure that is aged, crosses waters and hydric soils and in areas that experience earthquakes.

I'm writing because **I oppose** the proposed Westway and Imperium bulk liquid storage terminal expansion projects proposed at the Port of Grays Harbor.

I believe that the risk posed by increased oil traffic, particularly by dangerous oil trains running through our communities, is unacceptable, and the Draft EIS doesn't go far enough to consider those and other risks. In particular:

The Draft EIS does not adequately address the impacts to the rail communities and water bodies in the extended area.

The DEIS inexplicably only studied the last 59 miles -- less than 5% -- of the route.

The last few years have seen an enormous expansion in the amount of highly volatile crude oil shipped by rail, and there has been a corresponding spike in the number of derailments, fires and explosions. State and federal regulation of crude-by-rail transport doesn't go nearly far enough, so

more oil train traffic through our communities increases the risk of loss of life, property damage, and pollution from oil spills.

Response GP177-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

Comment GP177-2

The Draft EIS also failed to adequately consider a number of other important issues, including, but not limited to:

Why is Bakken crude oil more prone to ignite than motor oil?

The potential of even low-speed train car derailments, punctures, spills, fires and explosions.

Risks to endangered or threatened species.

Statewide traffic impacts especially first responder delays.

Full statewide economic impacts of an oil train disaster.

Inadequate preparedness of first responders.

Adequacy of insurance. You assume in the event of an accident, responsible parties will be able to pay for damages and do so in a timely manner.

Rail inspection failures.

Risks of fire spreading beyond one train car or oil storage tank in the event of a leak, fire, or explosion.

Risks posed by outdated and insufficient oil barge regulations.

How this proposal would increase Washington State's contribution to carbon pollution and climate change.

Please also do a full accounting of the flaring and fugitive emissions of greenhouse gases in the oil fields, in the gathering areas, in the loading areas, and from the tank cars during transit and unloading.

I urge you to ensure that the Final EIS makes a more comprehensive and rigorous analysis of all aspects of safety, environmental and economic risks posed by these proposed oil terminal expansions and the increased rail and barge traffic that they would enable. **These proposals are guaranteed to produce significant and unavoidable adverse impacts to our communities, our state, or our environment**. Because of this, the permits should be **denied outright**.

Thank you.

Garry Dale

Response GP177-2

Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils.

As noted in Master Response for Environmental Health and Safety Analysis, the risk assessment considers the potential for oil spills, fires, and explosions of various sizes regardless of the specific causal events.

Risks to endangered and threatened species are addressed in Final EIS Chapter 3, Section 3.4, *Plants*, and Chapter 4, Section 4.7, *Impacts on Resources*.

Refer to Response to Comment GP177-1 for information about the analysis of impacts in the extended study area.

Refer to the following Master Responses:

- Emergency Response and Planning Gaps
- Environmental Health and Safety Analysis
- Purpose and Focus of the EIS
- Crude Oil Extraction, Transport, and Combustion

GP178, **Dale, Garry**

Comment GP178-1

Thank you for giving me an opportunity to comment on the DEIS for the Westway and Imperium proposed oil-by-rail terminals. Much of what makes Grays Harbor special would be at risk if these proposals were permitted. A narrow, shallow shipping channel and strong currents put Grays Harbor at high risk of an oil spill. There is no way to mitigate the risks and dangers of these crude oil terminals. The DEIS doesn't identify insurance coverage for these trains.

This leaves important questions unanswered: Is it even possible for an oil shipper to get the coverage it needs for worst-case scenarios? What assurance is there that the companies involved will not declare bankruptcy?

Response GP178-1

Draft EIS Chapter 4, *Environmental Health and Safety*, Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP178-2

The DEIS barely touches on threats to Tribes, especially to the potential damage of traditional fi?shing areas from a spill into the Chehalis River and Grays Harbor

Response GP178-2

Draft EIS Chapter 4, Section 4.7, *Impacts on Resources*, describes potential impacts on tribal resources as a result of an oil spill. The Final EIS section further clarifies these potential impacts.

Comment GP178-3

There is also a absence in the DEIS to address the concerns of the Washington Dungeness Crab Fishermen's Association, Coalition of Coastal Fisheries, Westport Charterboat Association and the Willapa/Grays Harbor Oysterman's Association. I strongly object to the exclusion of scoping comments by the marine industries and the Quinault Indian Nation in the DEIS. I have been a farm owner in the Wynoochee Valley for 15 years and a fisheries biologist who worked with the marine industry for 13 years. I truly believe that this proposal would put the health and safety of the people, the local economy and the resources that we all depend on at serious risk. Again, there is NO WAY to mitigate the risks and dangers of these crude oil terminals. The permits must be denied!!

Response GP178-3

The co-leads reviewed and considered all scoping comments. Final EIS Appendix A, *Scoping Comments*, provides a catalog of all comments received during the formal scoping period.

GP179, **Dale, Garry**

Comment GP179-1

Questionable assumptions in the DEIS's

1.In your economic summary, you make a chart of economic benefits and costs assuming there would be No job losses and no accidents.

Response GP179-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2, has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP179-2

2. You assume sparks are almost absent at 25 MPH.

Response GP179-2

Refer to the Master Response for Risk Assessment Methods for a discussion about the assumptions, data sources, and methods used in the assessment of risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, and Appendix M, *Risk Assessment Technical Report*.

Comment GP179-3

3. You assume the impacts to property values of an oil train , is the same as the impacts to property value of a general freight train.

Response GP179-3

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values.

GP180, **Damike, Tammy**

Comment GP180-1

Continuing with Candy's letter. Our own people are becoming addicts and need treatment but they continue to be arrested and sent to jail while the two perpetrators of the crimes keep slipping away, only to bring more drugs, guns, and crime.

I can't even begin to describe to you the heaviness in my heart, having buried my brother's beautiful 28-year-old step-daughter just a few weeks ago who could not stop using heroine, which destroyed her body so much we had to have a closed casket.

We found my little cousin's body in the lake this spring. He disappeared last fall after last being seen with two known MS-13 gang members. His death was ruled an accidental drowning and the case was open and shut.

Just this past week two armed robberies occurred at two separate downtown businesses on our little main street.

Take these words that have been read here today and quadruple the horrors and maybe then you might be able to begin to get a sense of what's happening to us in our communities on Fort Berthold in North Dakota as a direct result of our country's addiction to fossil fuels and fracking.

It's sick and it's sad, and I would never in my life wish this kind of horror on anyone else, if you have a choice to do what you can do now to help us stop this kind of devastation from spreading. We need help. Will you help us?

Do not support fracking. The social and environmental impacts from it are negatively life altering, and those impacts are spreading across this country like a disease. Please, from one compassionate human being to another, help us and do not support fracking. (Speaking Indian). Thank you.

Response GP180-1

Comment acknowledged.

GP181, **Davis, Edith**

Comment GP181-1

Nov. 15th 2015

Dear Gray's Harbor Folks—

Recently, I was enjoying a beautiful sunny day in Cankeek Park in NW Seattle. Standing close to the beach, I observed several freight trains pass by and was reminded of the proposed expansion of oil terminals in Grays Harbor and Anacortes. Exposing the citizens of this NW community to serious problems such as train derailments, and leaking fossil fuels is a risk not worth taking in my opinion.

I would implore you, before our desire for economic gain gets galloping ahead of our heads and hearts, to bring sound judgement and prudence to the fore...let the innovative and visionary spirit of the Pacific Northwest guide us in seeing that there can be another way to live, grow, and prosper without our continuing dependence on fossil fuels.

Thank you for your consideration.

All the best,

Edith Davis

Response GP181-1

Comment acknowledged.

GP182, **Davis, Kelley**

Comment GP182-1

I live in the Columbia River Gorge, and am very active in the Pacific Crest Trail Association as a caretaker for a section of the PCT. I see the oil and coal trains every day, and am very concerned about the impact they have on this special, wild place I call home. We have a fragile and magical environment here as a National Scenic Area, offering recreation opportunities and places to find refuge away from city life. I feel it is our duty to protect this special place and all of the valuable creatures that live here, including the Columbia River salmon. Please, please do not allow these hazardous oil and coal trains to continue polluting the Gorge!

Response GP182-1

Comment acknowledged.

GP183, **Davis, Major Tom E.**

Comment GP183-1

My name is Major Tom E. Davis. I live at 604 3rd Avenue in Aberdeen, 98520. And I have resided within Grays Harbor County for just under 30 years. I have experience with oil and gas leasing of tribal and individual trust properties in Oklahoma. I am a tribal member of the Choctaw Nation of Oklahoma. I'm a tribal elder and I used to monitor oil and gas leasing within the state of Oklahoma for the Federal Government Department of Interior.

What concerns me about this public hearing—I hear a lot of people talking about concerns of damage to life and property. But what concerns me more so is these public hearings. Are they really a guise to help promote something and we're just attempting to pretend that we're getting due process as a community? And while allowing lobbyists and the big money people to negotiate deals, we just use these public hearings as a pretext?

What I'm wondering is if we really will make any difference within our community. I hope that we do. I don't mean to sound like a pessimist, but that's really my concern, is who has the big bucks compared to the individual citizens that just want to look out for their families, community, and properties.

Now, once upon a time, there was an attorney general, Christine Gregoire, governor of the State of Washington, who said, We, the people of the State of Washington, do not yield our sovereignty to our elected officials, our hired hands. It seems like we haven't really yielded our sovereignty, but we just don't have the big bucks of the corporations.

And so I guess in closing, what I would like to say is make sure that the silent majority or the concerned citizens have as much weight as the lobbyists and big money corporations. Otherwise, this would create an unlevel playing field for the citizens of the state of Washington and our elected officials will have failed their citizens.

Thank you so much for your time. I do appreciate the opportunity.

Response GP183-1

Comment acknowledged.

GP184, **Davis, Tom**

Comment GP184-1

My name is Tom Davis. And have bad hearing, so if I bust your eardrums, it’s because I can’t hear you. I’m a member over there in Choctaw Nation in Oklahoma, tribal elder. I’ve lived in the area for 30 years. And I can’t say anything any better than what’s been said. Hopefully the right folks will get the right message.

But what I would like to do is present it in a different twist, if I may, and read a letter sent to me from Congressman Derek Kilmer. And I will do this in the remaining time frame, but if I don’t, and I will give you a copy.

Dear Mr. Davis, thank you for contacting me about H.R.702, a bill that will lift a 40-year ban on U.S. crude oil exports. I appreciate you taking your time sharing your thoughts with me. Like you, one of the reasons I enjoy living in the region is because I value the richness of our environment.

As a man, I feel strongly that we have an obligation to be responsible stewards to our environment so we can maintain the pristine beauty and diversified wildlife that the Olympic Peninsula is known for.

Recent years have seen extensive expansion of oil and gas extraction efforts in our nation. While some of these efforts have expanded energy supplies, there are legitimate concerns regarding the impact these activities has had on our national environment.

I've got about another page to read. I'm not going to make it, so what I'm going to say is maybe instead of bashing -- to be continued perhaps.

Thank you for your time.

Response GP184-1

Comment acknowledged.

GP185, **Dawning, Desdra**

Comment GP185-1

My name is Desdra Dawning and I come from Olympia Washington.

I am here today to appeal to your better instincts and your deeper wisdom and intelligence.

The process that has so far been taken to determine the environmental impact of crude oil terminals in Grays Harbor is terribly incomplete. Much has been left unexamined and the alarming safety record of explosive crude oil train derailments in North America in recent years has been largely discounted.

I remember seeing footage of the horrible devastation that happened to the people of lac-Megantic, Quebec just two years ago when an oil train careened into their downtown, exploded, and wiped out many blocks of homes and businesses, killing 47 people in its fiery wake. My heart wept for them.

Many people live along the train routes for these terminals proposed for Grays Harbor, from Hoquiam to Centralia, and all the way to the oil sources in North Dakota and Alberta, Canada. With about 16 crude oil trains passing them every week, it would only be a matter of time before something similar or worse would happen to them.

Response GP185-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an

incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP185-2

The habit of relying on oil and coal for our energy needs is fast becoming a dinosaur. It is time to get creative, wise up and begin embracing renewable sources to meet our energy needs and respond to global warming. We need to shift into the perspective of the wise elders of First Nations People and start considering how our decisions today will affect our descendants 7 generations from now. Will we be their conscious, intelligent, foresighted ancestors, or will our decisions bring more destruction and decay to an already-suffering planet?

Thank you for considering my thoughts. Please take them into your heart and do what you know to be right.

Response GP185-2

Comment acknowledged.

GP186, **Day, John**

Comment GP186-1

My name is John Day. I live in Seattle and am retired. I am a lifetime resident of Washington State. I am retired from the marine repair and services industry.

I am very concerned about the vulnerability of the proposed oil terminal projects in SW WA and the close proximity of the rail lines and storage terminals to our state's waterways. The DEIS does not do very good job of describing the risks along the Columbia River rail corridor and in particular the risk to these projects from Tsunami and Earthquake in Grays Harbor and along our coast. A recently released study from Oregon State University cites a 40% chance of a major earthquake along the Cascadia Subduction Zone during the next 50 years. The quake could have a similar intensity to the Japanese quake in 2011. The prescription for fortification of the terminal sites will not measure up to the destruction that would follow such an event. The DEIS states on numerous occasions that the risks from these projects cannot be mitigated--if the risks cannot be mitigated the projects should not be permitted.

Response GP186-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP187, **Dayton, Gary**

Comment GP187-1

Name: Gary Dayton
Organization:
City/State/Zip: Vancouver, WA, 98665

This afternoon I listened to 35 speakers speak against the proposed oil terminal and trains. They spoke about the chance of a train accident and the disastrous effects on the environment and the communities. They spoke about the chance of a major earthquake and how it would damage trains and terminals. They spoke about how few jobs would be created and how the oil companies and their insurors [sic] do not carry sufficient coverage to pay for the damages or the enormous price of the cleanup. I agree with all of them. Now I will write about something that was not talked about. I don't like to but I believe it must be said. These trains and terminals could become a target for terrorists. If you think this is absurd then please consider these 3 questions.

1. Is the United States at war with ISIS and Al Quada? [sic]

2. Do you believe ISIS and Al Quaida are at war with the United States?

3. Are there other terrorist groups who hate the United States?

If we are at war with terrorism and I believe we are then from a military standpoint oil trains are long, slow, highly flammable, unguarded, targets. Terminals, refineries and oil fields are large stationary targets. If you believe terrorists groups don't have the ability to attack then I would like to remind you that 14 years ago terrorists captured 4 civilian airliners in flight and rammed them into 3 buildings. A feat far more difficult than blowing up a few trains or setting fire to a terminal.

Response GP187-1

Comment acknowledged.

GP188, **Deakin, Dave**

Comment GP188-1

We need growth in the harbor most of our jobs at least the ones that pay good have gone away like the timber industries. if you were trying to open a new mill we would have the same protesters fighting that. My point is this we need to allow expansions of these companies and others. We can't all work for minimum wages and expect our community to survive. We all know that oil is flammable and yes sometimes it even explodes in very rare cases. So does gas, propane and saw dust. Safety is what I'm concerned about we need to allow the companies that want to ship oil make the upgrades to our aging rails. Some of the bridges are so rusted that I don't even fish under them due to the rusted out beams. But who's got the money to fix the problem? big oil. I say fix the rails, use safe tank cars and if you have any openings give me a call I have three people unemployed in my house that want to work for more than minimum wages. Pump away and stop listening to people who don't pay taxes to our county, port or city. We need good jobs bring in a couple refineries too I'm serious thanks for your time

Response GP188-1

Comment acknowledged.

GP189, Denison, Marcia (Pacific Rainforest Wildlife Guardians)

Comment GP189-1

The EIS fails to say that the areas beyond the proposed terminals are prone to severe flooding, like earlier this month. The possibility of loaded tank cars floating away from the tracks and causing a spill is great in low areas the tracks pass through. Thank you.

Response GP189-1

Draft EIS Chapter 3, Section 3.3.4.4, *Floodplains*, lists the locations of floodplains along the Grays Harbor shoreline and along the PS&P rail line. The floodplain information is based on the Federal Emergency Management Agency's (FEMA) floodplain mapping, which is based on an extensive floodplain study. FEMA's Federal Insurance Rate Maps are the official maps on which FEMA delineates the special flood hazard areas for regulatory purposes under the National Flood Insurance Program. Special flood hazard areas are also known as the 100-year floodplain, which are areas that have a 1% annual chance of flooding. A special flood hazard area (or 100-year floodplain) is the area where the National Flood Insurance Program floodplain management regulations must be enforced.

The Draft EIS acknowledges flooding as an environmental factor that can contribute to potential impacts from an oil spill incident in Chapter 4, Section 4.3.2, *What environmental factors contribute to potential impacts from an incident?* In addition, Section 4.5.2.1, *Oil Spills*, addresses the movement of spilled oil in the Chehalis River during flood conditions; this information was incorporated into the oil spill model (Appendix N, *Oil Spill Modeling*). The potential impacts of exposure to spills are addressed in Section 4.7, *Impacts on Resources*.

GP190, Dennehy, Casey (Surfider Foundation)

Comment GP190-1

My name is Casey Dennehy. I work for the Surfrider Foundation and I actively advocate for protecting the spectacular marine resources in our region. I am a surfer, a fisherman, a clammer, a bird watcher, and I personally enjoy our natural surroundings every day. All these things that I love dearly could be lost with one oil spill. I chair the Grays Harbor County Marine Resource Committee and have been appointed by Gov. Inslee to represent recreational interests on the Washington Coast Marine Advisory Council. I also serve on the Olympic Coast National Marine Sanctuary Advisory Council. I am not representing these organizations in this letter. Rather, I am demonstrating that I spend considerable time and energy to protect our marine resources so that myself, my family, my friends, and future generations can enjoy Washington's glorious coastline. All that work, and the work of countless other individuals to keep the Washington coast pristine and wild, could be undone with one accident. Numerous impacts have been identified throughout the DEIS and determined to have no means for mitigation. How many valuable resources must be put at risk before these projects are denied? Why should these projects move forward when there are risks to the community that cannot be mitigated? Those who would benefit do not share the risks our

community would face. When will a cost/benefit analysis be done to accurately compare the risk with the purported benefits? The burden of risk is placed entirely on the local population and resources, while many others would profit handsomely without having to bear any significant risk. This math doesn't add up for our community. I am also a highly trained wildland firefighter and know a thing or two about anticipating and managing risks. The first rule is: if the threats are too great, avoid them. Do not drop that match because once you do, you can't take it back. These projects should follow the same rule. If they were approved there would be no going back. The proverbial fire would be on our doorstep and all we could do is hope and pray for no accidents. Unfortunately, this industry's track record gives us no reason to be hopeful. These projects, if approved, threaten to destroy the great things that belong to Grays Harbor and Washington State residents. And when an accident does occur, our community will pay for it. A legitimate cost/benefit risk analysis would show that these projects are not a good deal for the citizens of Grays Harbor county or Washington State. Deny these projects. Choose the no project alternative.

Response GP190-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP191, **Denney, Casey (Surfider Foundation)**

Comment GP191-1

My name is Casey Dennehy. I work for the Surfrider Foundation, and I actively advocate protecting our marine resources in our region.

I'm a surfer, fisherman, clammer, a bird watcher. I personally enjoy our natural surroundings every day. All these things that I love can be lost with one oil spill. I'm a member of the Grays Harbor Marine Research Committee. I've been appointed by Governor Inslee to represent recreational uses on the Washington Coast Marine Advisory Council.

In other words, I spend considerable time and energy to protect our resources so that myself, my family and friends, and future generations can enjoy Washington's glorious coastline. All this work can be undone with one accident.

Two minutes is woefully inadequate to address the EIS statements, so I will summarize. Numerous impacts have been identified and determined there are no means for mitigation. How many valued marine resources can be put at risk before these projects are denied? I say none. In this case there are many.

Those who would benefit do not have the risks our community would face. The burden rests entirely on us while many people who are not in this room cash in at our expense. This does not add up for our communities.

I'm also a highly trained wildfire fighter anticipating and managing risks. The first rule is if the threat is too great, avoid them. These projects should follow the same rule. If they're approved there would be no going back. The proverbial fire would be on our doorstep.

And I hope and pray there's no accidents. Unfortunately, given this industry's track record, there is no reason to be hopeful.

These projects, if approved, threaten to destroy the greatest things that belong to Grays Harbor and Washington state. And when an accident does occur, our community will pay for it. Deny these projects and choose the no project alternative. All it takes is one accident.

Thank you.

Response GP191-1

Comment acknowledged.

GP192, **Dickason, Pat**

Comment GP192-1

Hello, I'm Pat Dickason. I'm president of League of Women Voters, but I'm speaking from my own point of view. The League is nonprofit membership organization, which neither supports or opposes candidates or parties. However, The League developed positions in multiple public policy areas.

And among these positions we support policies that ensure public safety in communities, protect public health, maintain environmental policy, protect streams and estuaries, and reduce toxic air pollutants.

Based on these positions, we are particularly concerned about the contamination risks to Olympia's water supply should an oil train shipment on the rail lines derail or spill.

Response GP192-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP192-2

The League is concerned about the project's identified such as vehicle traffic delays, tsunamis, air pollution, major train accidents, oil spills, water contamination, fires and explosions, impact of noise and vibration, and likely impact of global climate change of these proposed projects, just to name a few.

We further suggest that policy makers at all levels need to be aware of the urgent warning of that there is no time to waste in reducing the carbon footprint, avoiding the most serious consequences of global climate change that can no longer support our civilization.

The League urges that these permits be denied.

Response GP192-2

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP193, **Dickerson, Michael**

Comment GP193-1

My name is Michael Dickerson. I do not believe that the current DEIS contains sufficient information to be able to make a determination on these projects. Let me give you a couple of examples. The DEIS says that in the future it's likely that oil sands will come into the harbor with increase of pollution over what was projected in the DEIS. The oil sands projection is not just a little oil increase, but a major increase.

I spent a month with the CIO projects in the tar sands in Alberta. The problem with trying to mitigate the oil sands, tar sands as we call them, because they have to go to through factories, to -- each location involves onto the trains, off of the trains, and into the pipelines. This is not something that DEIS mentioned. It will be worse.

Response GP193-1

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil and the potential for the proposed action to induce production at those sources, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Mod*eling, refer to the Master Response for Oil Spill Modeling Methods. To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill.

Comment GP193-2

The second thing I would like to mention, the DEIS assumes that the spills will be combined. They come into the ground. It doesn't talk about the environment in which they will spill. The environment in which they will spill contains ethyl alcohol and diesel fuel. I'd like to know the mitigation for a fire at that project at that yard. It seems to me that that's very difficult.

Response GP193-2

Practices and procedures to prevent and respond to fire and explosion events at the project site are described in Draft EIS Chapter 4, Section 4.4.2.2, *Fires or Explosions*. Oil spills at the project site would likely occur in the concrete paved containment areas for the railcar loading and unloading area or within the geotech (clay)-lined storage tank containment area. Storage and handling of oil would be segregated from storage and handling of methanol to minimize such risks. Additionally, Section 4.3, *What mitigation measures would reduce impacts related to terminal operations at the project site?* includes applicant measures to further address these risks. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP193-3

And lastly, to give you an example of human potential for catastrophe such as (inaudible) the Cascade, it cost over $1 million to build it. And the old bridge across the street, that would need to be replaced to give the railroad right of way. And it's inadequate for the project. So I think its difficulty with this is real. Rethink this.

Thank you.

Response GP193-3

Comment acknowledged.

GP194, **Dickerson, Michael**

Comment GP194-1

My name is Michael Dickerson, D-I-C-K-E-R-S-O-N. I live at 200 West 10th, Aberdeen.

I have concerns that an agency from the EIS, as proposed, could not make a valid decision. I will give a couple of examples.

One, the EIS says that in the future we could receive oil sands, commonly called tar sands into these terminals. The EIS says that will cause a significant increase in pollution. It doesn't measure this nor does it preclude it.

Those facilities require heating the railcars and heating the storage facilities to keep the tar sands liquid enough to have them transported. It is common knowledge that this is not easily mitigated, the smell, because the heat has to be vented, and there is not presently a capture method that captures a significant part of the fumes from the heating process.

In Alberta, where most of this is now originating, the difficulty of getting the oil out of their system and into railcars is something that is causing a smell in excess of four kilometers from the facility, and it is severe.

Response GP194-1

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil and the potential for the proposed action to induce production at those sources, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Mod*eling, refer to the Master Response for Oil Spill Modeling Methods. To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill.

Comment GP194-2

Second problem, the EIS addresses spills and potential fires. It does not address the environment of a spill in the Aberdeen yard. The Aberdeen yard stores ethyl alcohol cars. The ethyl alcohol cars are far more volatile than either Bakken crude or the other things that are stored there, which is canola oil and diesel fuel.

If a derailment should puncture an ethyl alcohol car, that would cause a number of problems. One, the heat would be severe, and every instance where an ethyl alcohol car has been punctured, it has caused a fire, and the fire usually spreads to all of the other cars in the immediate vicinity.

There was one within a month on the Burlington in which one car derailed and blew up the other four.

If you punctured one here and you had the number of cars being stored here as are stored now, it would be a major disaster. If you had the increased storage of cars, since neither Imperium or Westway can't take the entire train at one time, they have to store the cars in the Aberdeen yard, the fire potential is severe and has not been addressed in the EIS at all. It has only addressed a fire in an isolated location, not in the environment that would be the most likely place to have a fire.

As an example, last year, the PS&P had four derailments. Two were in yards, two were outside of yards. The likelihood of a derailment in the yard is therefore 50 percent of all derailments and the likelihood of a derailment in the yard is therefore something that needs to be studied.

The EIS anticipated that the trains would be traveling at between five and ten miles an hour which, in the case of a derailment, is not a significant speed. What it fails to address is that the power on the trains is four diesel engines on a spill that they had at the east end of the yard, PS&P last year. The train pulled the cars almost 200 feet before it stopped, and that was traveling at five miles an hour. All the cars -- and the cars were on their side and they were actually pulled on their side. It happened to fall on the north side of the track.

If that had fallen on the south side of the track and had been on the east throat of the yard rather than the west throat of the yard, those cars would have taken out five ethyl alcohol cars which were standing on the adjacent track.

Those are my comments. I am not intrinsically in favor or not in favor of the project. I would just like to see all of the issues clearly presented so people can make an informed decision on what needs to be done and what the cost would be if the worst things happened. Thank you.

Response GP194-2

The proposed action is specific to the handling, storage, and transport of crude oil and would not result in changes to existing operations. The approach to the risk analysis is to consider different spill scenarios of crude oil that could occur related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, a spill could occur at any location. Scenarios were chosen based on operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. Nonetheless, mitigation would not completely

eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

GP195, **Dietz, Kimberly**

Comment GP195-1

Dear Washington Leaders, Neighbors, and Friends, I beg you to consider the long-term possible impacts of this decision. Consider all aspects of sustainability and resiliency for people as well as for the environment. Think also of future generations - particularly, the ability of your great grandchildren to thrive. In doing so, you will likely realize that neglecting our natural resources and placing natural ecologists in harms way, this proposal should be rejected. It is not a matter of measuring fuel-related disasters by their likelihood but by the level of impact and destruction the accidents inflict. It is not a matter of if but a measure of how failed ecosystems ever have an opportunity to be safe, long-lasting, healthy, and cherished. Please, do what is good for all. With hope, Kim

Response GP195-1

Comment acknowledged.

GP196, **Dilsaver, Erin**

Comment GP196-1

I am in support of this project. it would mean jobs for the area and oil transportation by train is the safest way to transport. if people really cared about it negatively they would stop driving cars and they don't.

Response GP196-1

Comment acknowledged.

GP197, **Dilworth, Erin**

Comment GP197-1

The Draft Environmental Impact Statements on the proposed Westway and Imperium oil-by-rail terminals do not address several significant factors. The Washington State Department of Fish and Wildlife has stated, “Grays Harbor is an area particularly sensitive to the adverse effects of oil spills.” The DEISs do not address the potential impact an oil spill would have on migratory marine mammals, birds or salmon. The Grays Harbor estuary is a extremely important stop-over area for migrating waterfowl, a nursery for commercial shellfish populations, and a throughway for endangered Chinook and coho salmon.

Response GP197-1

Draft EIS Chapter 4, Section 4.7.1.3, *Animals*, identifies potential impacts to marine animals, including potential impacts to sensitive areas within the study area. Sensitive areas identified in Section 4.7.1.2, *Plants*, include the Chehalis River Sure Plan Natural Area and the Grays Harbor National Wildlife Refuge, and critical habitat areas for the federally listed bull trout, green sturgeon, and marbled murrelet. Section 4.7.1.3 also identifies that the Grays Harbor National Wildlife Refuge supports migrating shorebirds and identifies potential impacts to birds foraging on invertebrates in spill-affected areas and potential effects to birds of physical contact with oil. Section 4.7.1.2 also identifies potential impacts to salmonids from oil spills, including effects on the survival of eggs and larvae and fish mortality.

Comment GP197-2

This DEISs fail to consider the significant impact any scale oil spill would have on tourism dollars, commercial and recreational fishing dollars, ecosystem values of marine mammals, shore birds, anadromous salmon, a functioning estuary, and the inherent value of all forms of life in Grays Harbor.

Response GP197-2

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP197-3

Additional research into the impact of various sized oil spills on fish, wildlife, and ecosystem services of Grays Harbor needs to be conducted prior to moving forward with any facet of these proposals.

Response GP197-3

The approach to the risk analysis is to consider different potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. Nonetheless, mitigation would not completely

eliminate the possibility of an incident. Depending on the specific circumstances of an incident, the environmental impacts could be significant.

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

Comment GP197-4

The DEISs claim the proposed oil terminals would have no significant impact on Tribal nations. This finding clearly fails to acknowledge the fact that an oil spill of any scale has the potential to reach the Usual and Accustomed fishing grounds granted to the Quinault, Hoh, Quileute and Makah Tribes in 1994. Additionally, an economic study commissioned by the Quinault Indian Nation found that a major spill could cause a direct loss of as much as $20 million in wages and up to $70 million in revenue for affected businesses. These potential significant impacts need to be addressed in the DEISs before moving forward with any facet of these proposals.

Response GP197-4

Draft EIS Chapter 4, Chapter 5, and Chapter 6 state that the proposed action has the potential to result in significant environmental impacts from increased risk of an oil spill, fire, or explosion. Because the consequences would depend on the specific circumstances of the incident, the potential impacts are described in general terms in Section 4.7, *Impacts on Resources*, and include the potential for significant impacts on tribal resources.

Final EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* reflects additional information on the economic and social costs of oil spills. This includes information on derailments and other accidents involving trains carrying crude oil and information on a crude oil spill during marine transport; however, the scope of the economic analysis is limited to the costs and benefits specific to the City of Hoquiam. Refer to the Master Response for the Economics, Social Policy, and Cost-Benefit Analyses.

Comment GP197-5

A 2014 study conducted by the Surfrider Foundation, along with other partners, found that in 2014, Washington residents spent $481 million on recreation on the coast, where more than 1/3 of the associated trips were spent in Grays Harbor County. The current DEISs fail to acknowledge the significant impact an oil spill of any scale would have on recreation in Grays Harbor County, and how a loss of substantial tourism dollars would affect the local economy. Further research on potential revenue loss caused by removal of recreation opportunity due to an oil spill needs to be conducted prior to moving forward with any facet of these proposals.

Response GP197-5

Final EIS Chapter 4, *Environmental Health and Safety*, Sections 4.4.4, 4.5.4, and 4.6.4, have been revised to clarify that in the event of a spill, fire, or explosion, there is the potential for impacts on all resources in the study area addressed in Chapter 3, *Affected Environment, Impacts, and Mitigation*, including recreational resources. Potential impacts on recreation from oil spills are described in Final EIS Chapter 4, Section 4.7.1.5, *Recreation*, and impacts from an oil fire or explosion are

described in Section 4.7.2.6, *Recreation*. Refer to the Master Response Economics, Social Policy, and Cost-Benefit Analysis.

Comment GP197-6

Lastly, both DEISs provide only a No Action alternative. Other alternatives that explore solar, wind, and other clean, renewable energy sources, infrastructure and jobs should also be considered and addressed in these DEISs.

Response GP197-6

Refer to the Master Response for Project Objective and Alternatives for an explanation of the alternatives evaluated in the Draft EIS.

GP198, **Dolph, Phyllis**

Comment GP198-1

Please pay special attention to the comments made by Tim Manns of Skagit Audubon and all comments made by Washington Audubon. Birds are at risk but it is not only birds which are at risk. All plants and animals, including people, are at risk when it comes to oil spills. Infrastructure and oil clean ups will not be paid for by the oil industry, but by tax payers.....which is wrong. We need desperately to learn how to wean ourselves off oil. Therefore, these oil projects should be denied. Phyllis Dolph

Response GP198-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP199, **Domike, Tammy**

Comment GP199-1

The DEIS for crude oil terminals in Grays Harbor is a deeply flawed document. I am a lifelong Bookseller, and it reminds me of particularly bad “self-published” books. It is imperative that the final document be rid of the many flaws that are rampant in the DEIS. Some instances of the problems are:

It very much needed both a proof reader and an editor.

There are non-existent quoted passages, and looking for the referenced page number leads nowhere in many cases.

The grammar and spelling alone make it not a document to be taken seriously.

A very telling error, is that the people preparing this document were unable to get their own mailing address correct. I certainly hope the Seattle Post office is able to get all the comments to you.

Making this document such an unwieldy size, made it cost prohibitive for public ownership, those for whom this was supposedly being prepared. It is not easy to read through repetitive, technical banks of paragraphs. This made it inaccessable to many general readers.

Response GP199-1

The commenter does not provide sufficient details to allow for a response.

Comment GP199-2

The electronic portal was not working between Nov 6 and Nov 10. It took much pressure from the public for this to be addressed and no relief for the loss of comments has been proposed.

Response GP199-2

The issue was fixed and a phone support line was established to provide assistance 24/7 through the end of the comment period.

Comment GP199-3

The research on many topics, such as the Chehalis River data are based on faulty assumptions. If you did not have records for the Chehalis, you should have studied the Chehalis, not simply use a sleight of hand and insert data from some other river that is kinda sorta like the Chehalis. The tidal data is woefully off, as we saw in this past month's storm, when the Chehalis river reached 21.1 feet at flood stage, and with sustained winds of 45 to 65 mph, your data is completely inadequate.

During these same storms we saw landslides in Grays Harbor and there was a mudslide across the tracks between Nisqually and Tacoma, 45 feet long and 15 feet tall. This shut down the rail to freight and passenger service for 2 days. Locally, many rails were in 4 inches of standing water.

Response GP199-3

The information presented in Draft EIS Chapter 4, Section 4.3.2.3, *Water Flow*, is intended to generally describe the range of water flow conditions that can occur within the study area. Draft EIS, Appendix N, *Oil Spill Modeling,* presents the assumptions used relative to wind conditions and water currents within the study area. Wind, tide, and other factors affecting water flow used in oil spill modeling are further described in the notes section of Table 1 (see p. N-5 of Appendix N) and in the Master Response for Oil Spill Modeling Methods.

Comment GP199-4

This past month also saw an earthquake in Grays Harbor, just ahead of where Grays Harbor Rail Terminal is asking to be permitted. The 2.4 magnitude quake occurred at 3:36am, November 13th, west of Bowerman Field and Grays Harbor Wildlife Refuge. This shows that Grays Harbor very much has fault lines, and an earthquake is not some 500 year danger, but a very real daily one.

Response GP199-4

Refer to the Master Response for Earthquake Probabilities for an explanation of the probabilities of earthquakes reported in the Draft EIS. Refer to the Master Response for Seismic Risk and Design

Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events.

Comment GP199-5

Many others will provide you with scientific evidence why this is a flawed document and that your assessments and conclusions are in error. It is a joke of a document if it is supposed to protect the people and ecology of Grays Harbor. This month also saw a Supreme Court Judge, find in favor of a Children's lawsuit, that yes, young people of our state do have the right to inherent a clean environment. It also directs the Dept of Ecology to use Best Science when making your decisions. How will you comply with that finding, while using this badly executed document & the research therein?

Please deny these permits. The dangers are too great and you say so often, there is little or no remediation. Don't make Grays Harbor the Sacrifice Zone for private Oil profits.

Tammy Domike
Hoquiam, WA

http://www.spokesman.com/stories/2015/nov/14/small-earthquake-hits-grays-harbor/
http://kbkw.com/flood-warning-continues-near-freezing-temperatures-expected-thursday-night/
http://westernlaw.org/our-work/climate-energy/dirty-energy/Protecting-Washington-Atmosphere-as-a-Public-Trust

Response GP199-5

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP200, **Doull, Bryan**

Comment GP200-1

Oil trains should travel caravan style, in three parts, to increase safety. Here is one approach. Ahead of any oil train between a mile and three miles ahead of the oil train should be a short scout train whose function it is to find any problems before the oil train passes over those tracks and would tell the oil train to stop if there were any problems. The second part of the caravan would be the oil train or trains. Taking up the rear would a separate train that has a complete oil spill response team and all the equipment needed to handle a oil train spill or derailment. No waiting for any local emergency crews to arrive. A team and equipment stays one to five miles behind the last oil train car.

Response GP200-1

Comment acknowledged.

GP201, **Downing, Beulah**

Comment GP201-1

God created our earth and now we are messing it up. We should not be using these dirty fuel sources - they should remain in the ground. And we are putting a death threat to those who live near the train line or the export building.

Response GP201-1

Comment acknowledged.

GP202, **Drumheller, Susan (Idaho Conservation League)**

Comment GP202-1

Thank you. My name is Susan Drumheller. I'm with the Idaho Conservation League. And I live in the blast zone near the main BNSF line near Sandpoint, Idaho.

I realize that you're making decisions in Washington for Washingtonians but I hope that your decisions will impact people outside of the state.

Sandpoint is at the top of the funnel, where all westbound rail track conversions. All the Bakken oil trains roll by my house, and that's after they cross Lake Ponderay.

So while I worry for the safety of my family and my friends, I also worry about the risk torturing our waterways, which are a big part of the economic life flood of North Idaho.

This week our county first responders, Idaho Department of Homeland Security, Idaho DEQ, and the EPA and other agencies practiced a full-scale exercise that simulated the derailment of a unit oil train off the trestle over Lake Ponderay. They practiced because they recognize a derailment is a real risk. But no matter how much they practice or how fast they respond, they cannot prevent irrepairable damage to our lake, which is critical habitat for nature trout, provides drinking water for thousands of people, and is the premier asset for our tourism economy.

These trains also travel along the Kuni River, which is home to endangered sturgeon, and across the Rathdrum Prairie Aquifer, which is the drinking water source for half a million people in North Idaho and Eastern Washington.

A spill in any of these critical water sources would be devastating to North Idaho's economy and quality of life, and cannot be mitigated. Therefore, the only solution is prevention. We cannot allow increase in oil train tracks and the risks that they bring. So it's imperative that you deny these permits. Thank you.

Response GP202-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in

the extended study area under existing conditions, the no-action alternative, and the proposed action.

GP203, **Dunlap, Fredric**

Comment GP203-1

Name: Fredric C. Dunlap
Organization: Presbyterians for Earth Care
City/State/Zip: Issaquah, WA 98029

It does not seem very intelligent to build oil shipping terminals in the Grays harbor area because of the catastrophic effects of spills from accidents and/or geographical and atmospheric events that are probable in the future to that area. Grays Harbor sits in a major earthquake and tsunami zone. The earthquake in Japan near the nuclear power plant is an example of poor planning that should be a warning against building sensitive facilities near ocean shores (in tsunami zones).

Response GP203-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP203-2

Another reason to protect Grays Harbor from oil spills is to protect the fish and wildlife that live in that area. The Washington State Fish/Wildlife Dept. believes that Grays Harbor is particularly sensitive to any oil spills. An ·oil spill could devastate marine resource jobs which support more than 30% of that areas workforce. A recent study found that an oil spill could put more than 150 commercial fisherman from the Quinalt Indian Nation out of work resulting in as much as $20 million in wages, and $70 million in revenues for affected businesses.

Because of the recent poor Safety Record of Oil Trains, and the worsening of the Earths atmospheric conditions, I strongly recommend rejection of these proposed oil shipping terminals.

Response GP203-2

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP204, **Durr, Becky**

Comment GP204-1

I'm Becky Durr. I live in Aberdeen. Our children grew up here and now their children are growing up here. We are surrounded by this beautiful, bountiful land and we'd like to pass it on intact.

In 1988, the Nestucca spilled heavy fuel oil offshore. Oil spread from Ocean Shores south to Oregon; north to British Columbia; and east to Dungeness Spit. The Ocean Shores Convention Center was used for cleaning up oiled birds.

Our children were in grade school and they wanted to help so we went there to volunteer. Rescue crews could use the sheets and towels we brought, but children were turned away because it was too dangerous.

I believe this oil spill and explosions were omitted in the EIS. Such catastrophes should have been cited as examples of environmental impact from them. We know oil spills cannot be contained. Oil spills kill marine life. Oil fires cannot be extinguished. Oil explosions demolish property and kill people.

There's never enough money and there will be no complete recovery in our lifetime.

From both of environmental impact statements I quote, The cumulative projects would have unavoidable and significant adverse environmental impact on noise, tribal resources, vehicle traffic, and environmental health and safety. Isn't this reason to deny permits? It's too dangerous.

Response GP204-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP205, **Durr, Rebecca**

Comment GP205-1

This is a comment about the proposal to halt operations for 2 weeks each year, near the time of peak shorebird migration north. This is totally inadequate to protect shorebirds which migrate in this hemisphere. If there were a spill at any time it would affect shorebirds. They eat creatures from the shores and mudflats all around the harbor. Those creatures would surely be covered with oil and smothered by a spill. I don't know how you plan to clean up a spill which would be moved to the shores by action of the tides and wind. There are shorebirds present here at all times, with many migrating together in the spring and scattered migrations in the fall. A spill at any time could have an impact on the survival of shorebirds for many years, as we have seen with previous spills. If their food is wiped out by a spill at any time of the year, it would impact many members of the chain of life in our harbor, and it could be devastating to some, including shorebirds which might not be able to continue on their journeys without the necessary food they are accustomed to finding here. If you propose halting operations during 2 weeks in order to protect shorebirds, then think again, and do not allow any transport of oil here. That would protect shorebirds. Ceasing operations for only 2 weeks would only prevent all the visitors to our Shorebird Festival from witnessing an environmental disaster.

Response GP205-1

Although ceasing vessel-loading operations for 2 weeks during the Grays Harbor Shorebird Festival would reduce risks related to oil spills that could affect migratory birds during this migratory season as well as other species in the area, the Final EIS clarifies that the applicant's primary intent in committing to this voluntary measure is to recognize the importance of the annual Grays Harbor Shorebird Festival to the community and those attending the festival and to eliminate the chance of a spill from vessel-loading operations during this time. The measure has been moved to Final EIS Chapter 3, Section 3.10, *Recreation*, to reflect this clarification. Potential impacts on resources in the event of a spill, fire, or explosion are addressed in Chapter 4, Section 4.7 *Impacts on Resources*. Final

EIS Section 4.7 has been revised to indicate that the mechanisms for potential adverse impacts also include secondary impacts on shorebirds from loss of food sources. Chapter 4, *Environmental Health and Safety*, acknowledges (in multiple sections) that oils spills are not completely preventable even with the regulatory requirements and mitigation measures that would reduce the risk of an oil spill; Chapter 4 further states that that the potential impacts from an oil spill could be significant.

GP206, **Durr, Rebecca**

Comment GP206-1

This is a comment about the proposal to halt operations for 2 weeks each year, near the time of peak shorebird migration north. This is totally inadequate to protect shorebirds which migrate in this hemisphere. If there were a spill at any time it would affect shorebirds. They eat creatures from the shores and mudflats all around the harbor. Those creatures would surely be covered with oil and smothered by a spill. I don't know how you plan to clean up a spill which would be moved to the shores by action of the tides and wind. There are shorebirds present here at all times, with many migrating together in the spring and scattered migrations in the fall. A spill at any time could have an impact on the survival of shorebirds for many years, as we have seen with previous spills. If their food is wiped out by a spill at any time of the year, it would impact many members of the chain of life in our harbor, and it could be devastating to some, including shorebirds which might not be able to continue on their journeys without the necessary food they are accustomed to finding here. If you propose halting operations during 2 weeks in order to protect shorebirds, then think again, and do not allow any transport of oil here. That would protect shorebirds. Ceasing operations for only 2 weeks would only prevent all the visitors to our Shorebird Festival from witnessing an environmental disaster.

Response GP206-1

Although ceasing vessel-loading operations for 2 weeks during the Grays Harbor Shorebird Festival would reduce risks related to oil spills that could affect migratory birds during this migratory season as well as other species in the area, the Final EIS clarifies that the applicant's primary intent in committing to this voluntary measure is to recognize the importance of the annual Grays Harbor Shorebird Festival to the community and those attending the festival and to eliminate the chance of a spill from vessel-loading operations during this time. The measure has been moved to Final EIS Chapter 3, Section 3.10, *Recreation*, to reflect this clarification. Potential impacts on resources in the event of a spill, fire, or explosion are addressed in Chapter 4, Section 4.7 *Impacts on Resources*. Final EIS Section 4.7 has been revised to indicate that the mechanisms for potential adverse impacts also include secondary impacts on shorebirds from loss of food sources. Chapter 4, *Environmental Health and Safety*, acknowledges (in multiple sections) that oils spills are not completely preventable even with the regulatory requirements and mitigation measures that would reduce the risk of an oil spill; Chapter 4 further states that that the potential impacts from an oil spill could be significant.

GP207, **Dye, Jessie**

Comment GP207-1

This morning a small earthquake hit Clark County, WA, reminding us once again that we in WA live in a very active subduction zone and are at risk for earthquakes a variety of magnitudes. Near the

site of the Imperium and Westway proposed terminals many tsunami warning signs are posted. The sites themselves are located on unstable fill which would collapse during a seismic event. There is no evidence in the DEIS for either project that the nature of the soil where tanks are proposed during is taken into account, including its stability during a tsunami or earthquake. It is essential that measures be included in the DEIS that plan for securing the oil tanks in the event of either an earthquake and tsunami and that local evacuation plans be outlined and funding for emergency planning be established.

Response GP207-1

Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events. Section 3.1.7.1, *Applicant Mitigation*, includes a measure proposing that the applicant ensure that a tsunami evacuation and emergency management plan for the facility is prepared prior to beginning operations.

Comment GP207-2

Most importantly, there is no plan for the mitigation of damage in the event of these major crises and no cost analysis nor evaluation of insurance needs in the event of such a catastrophe. There was an earthquake today, and there will be others. The tsunami signs are by the port of Grays Harbor are there for a reason.

Response GP207-2

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP207-3

If a compelling plan for management of the site during a natural disaster, evacuation and safety plans for the local community, and mitigation of resultant damages cannot be developed, the permits should be unequivocally denied.

Response GP207-3

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP208, **Dye, Jessie**

Comment GP208-1

Thank you. Jessie Dye. I'm here with an organization called Earth Ministry, but really I'm speaking as a citizen today.

I moved to Washington state in 1976 and loved Grays Harbor County, loved the coast, loved this beautiful, beautiful country so much so that from 1978 to 1980 I was a volunteer lawyer for the groups -- the many groups that have hosted and (inaudible) standing. And it gives me an odd feeling approaching this place. So grateful that it never produced electricity.

We said at that time that it was a dirty and dangerous and terribly, terribly risky disaster for public health, and ridiculously expensive for what we would get from it.

Then in 2011, when Fukushima happened, the nuclear disaster that resulted from an earthquake and a tsunami and fought for the grace of God to go with us. This could have happened here.

And now I read a proposal that puts oil terminals on fill in a clear earthquake subduction zone. As I walk through the area, there are tsunami warning signs everywhere. And I ask you, what could go wrong?

This is a project that cannot be mitigated. The risks are too high. There is nothing in the environmental and the Draft Environmental Impact Statements that list evacuation plans, that lists plans to secure the site in the event of either of these extremely predictable catastrophes.

As I've seen the rail tracks in Grays Harbor it's unbelievable to me that they could actually carry the weight of these oil terminals. So I ask you first of all for far better mitigation plans, far better than you have, and to the deny the permits.

Response GP208-1

Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events.

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

GP209, **Eachus, Ann**

Comment GP209-1

Continuing to burn fossil fuels is causing the changes to weather patterns that we are beginning to see. Droughts are causing food shortages, heat is causing premature deaths. Storms are causing huge losses to property and life. We should not invest more resources in programs that help people cope with the problems already visible, not enable more fuel get to market.

Response GP209-1

Comment acknowledged.

GP210, **Eddington, Marianne**

Comment GP210-1

I implore that you choose to reject the proposed oil terminals for Grays Harbor. The rail cars have a proven history of derailment spills. The benzene in crude oil will have lasting effects on the sensitive environment surrounding this area. The oil train fires experienced in Canada and the U.S. Have caused horrific deaths and property damage.it will take many years before tanker cars can be built strong enough to be more effective against potential explosions. Many trains pass through small towns where they block traffic and commerce. In addition, these small communities have not had training in emergency preparedness for a spill and/or explosion that would cause toxic damage to people and property on a scope that is hard to even imagine.

Temporary excitement about the jobs the terminals will bring to the community will be short lived after the structures are completed. Then few new jobs will not be sustainable. Why do these companies always try to build in economically depressed areas, where people often are struggling to find a voice about issues that affect their quality of life? They are also Washingtonians, so I consider them my neighbors and want to write on their behalf.

The Paris climate change talks begin today. Let's be an example to the world that we will not succumb to the capitalistic powers of the oil companies, and that we know the greenhouse emissions caused by this plan will affect our whole world. We are all responsible for each other's welfare and well being.

Response GP210-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP211, **Edwards, David**

Comment GP211-1

My name is David Edwards. I'm a retired physician from Olympia. My concerns include the massive emergency treatment problem that a derailment from explosion would cause. Those are imminent and they've been discussed.

But more immediate, the problem of blockage of access of the emergency vehicles to medical facilities by slow moving oil trains of extreme length and duration are unacceptable hazard and threat to the public health and threat to the public health of the community. The permit really must be denied.

Thank you.

Response GP211-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP212, **Edwards, Karen**

Comment GP212-1

Please do not expand the oil terminals in Grays Harbor as the increased rail traffic through the Columbia Gorge will expose that beautiful area to grave potential environmental damage. The likelihood of an oil spill or explosive accident will increase and is too much risk. Please do not recommend this expansion.

Response GP212-1

Comment acknowledged.

GP213, **Edwards, Rose**

Comment GP213-1

There is no way to effectively boon a tidally influenced area in the case of an oil spill. It makes absolutely no sense to bring these operations in that would amount to a small handful of jobs when there are hundreds of existing jobs, direct and indirect that rely on the health of the estuary and surrounding waterways. From tourism to fishing and crabbing. Plus it is federally punishable to endanger the Quinault's treaty lands. The area is so ecologically and culturally rich, I couldn't imagine a worst place to propose these terminals. It's all risk with only small, immediate, non-sustainable benefit.

Response GP213-1

Comment acknowledged.

GP214, **Ellingboe, Linda**

Comment GP214-1

My name is Linda Ellingboe. I'm a native of Seattle. I'm a member of the Oregon Episcopal Church and we held an earth care retreat at the ocean over Earth Day. We helped with the ocean beach cleanup. The members of our group that were there.

And we also had some speakers, one of which was Jesse Guy of Earth Ministry, that told us about this, that there would be potentially an oil transfer station in Hoquiam.

We were pretty stunned because there had been all kinds of issues going up the I-5 corridor, and we hadn't heard about this one here. And one of the people in our group grew up around Willapa Bay and she hadn't heard anything. She was really quite unhappy about that that was going on. As a person of faith, I think the care for both the environment and people is critical to going forward. And it is our expectation that will be taken into account.

In Seattle last year there was -- there were overturned oil cars right below a main bridge right next to the cruise ship terminal in the middle of summer. When I went back to look at the exact date, which was July 25, I saw that there had been this past January 14 leaking cars on an oil train.

Some were pulled off in Spokane, some were pulled off in Vancouver, some were pulled off in Auburn. That could easily happen here. And because the trains are so close to the major access to the Hoquiam area, it's even more critical that this project be denied.

Thank you.

Response GP214-1

Comment acknowledged.

GP215, **Ellis, E.**

Comment GP215-1

Draft Environmental Impact Statement (DEIS) for Westway and Imperium proposed oil-by-rail terminals Public Comment

Elizabeth Ellis, resident

Aberdeen, WA.

The draft EIS documents for the Westway and Imperium projects at the Port of Grays Harbor are inadequate, containing incomplete data and findings.

I ask that these EIS's be redone and expanded to include more upstream communities and utilize current data and science.

My comments below focus on the Tsunami Risk elements in Appendix C of the DEIS for both projects.

The documents minimize the real hazards of a catastrophic earthquake especially in Grays Harbor. It is apparent that these draft EIS documents as a whole do not utilize best science and they should not be used to provide further guidance on the merit of these projects nor the mitigation measures necessary to justify the purported benefits over the risks to terrestrial, marine, and human communities.

Page 2. 2.1 Tsunami Modeling Methodology

- FERC's revised seismic design criterion (2007) requires that the seismic source used to generate a design tsunami event be consistent with a Safe Shutdown (SSE with a return period of 2,475 years.

Comment: Significant earthquakes of the magnitude of 9 or greater off the coast of Grays Harbor are known to happen in regular 300 – 600 year intervals. The area is due for a significant event any time now.

Every 300 to 600 years

Great earthquakes (magnitude 8 to 9) and tsunamis have repeatedly rocked the Pacific Northwest. Catastrophic earthquakes and tsunamis have occurred along Washington's coast at least six times in the past 7,000 years -- about every 300 to 600 years. There is a good chance that another earthquake will occur offshore within the next 100 years.
http://www.ecy.wa.gov/programs/sea/coast/waves/tsunami.html

Response GP215-1

Refer to the Master Response for Earthquake Probabilities for an explanation of how the probabilities of strong earthquakes reported in the Draft EIS relate to those identified in recent studies.

Comment GP215-2

Page 15 Tsunami Force Calculations

Calculation of tsunami forces herein is conducted according to FEMA P646 (2012)2 . Results of force calculation for each tsunami force component are listed in Tables 3 and 4 for Westway Terminals LLC and Imperium Terminal Services Facilities, respectively. **Calculation of floating debris impact force has been conducted assuming lumber or a wood log –oriented longitudinally as debris.**

Comment: Debris from a tsunami would consist of ships of all sizes and lumber or wood log oriented either longitudinally as well as hitting the tanks and above ground tank components head on.

Response GP215-2

Draft EIS Appendix C, *Tsunami Impact Modeling and Analysis,* calculates debris forces based on guidance from the Federal Emergency Management Agency's[1] (2008) *Guidelines for Design of Structures for Vertical Evacuation from Tsunamis*, which was developed for structures that would provide vertical refuge for evacuees above the level of tsunami inundation. Factors used in this document were derived from laboratory simulations of impenetrable vertical walls. Tsunami-borne debris may not accumulate around a circular tank the same way it would against a vertical structure. Stiffness between debris and vertical structures would differ from stiffness between debris and circular tanks, and impact and damming forces would likely differ for the proposed facilities and evacuation facilities. Uncertainties also exist regarding the size and type of debris that would float over the berm surrounding the site. However, these uncertainties are accounted for in the tsunami analysis by applying a factor of safety of 1.3, as described in Appendix C.

Comment GP215-3

[Proposed Mitigation 3.1 Tsunami

[1] Federal Emergency Management Agency. 2008. Guidelines for Design of Structures for Vertical Evacuation from Tsunamis. FEMA-P646. Washington, D.C.

- To minimize the potential for damage to the storage tanks related to geologic risks and unstable soils, the applicant will install pile-supported foundations that extend up to 150 feet deep for storage tanks to avoid excessive settlement from potentially liquefiable materials.

- To minimize the potential for damage to the storage tanks related to geologic risks and unstable soils, the applicant will develop final design specifications for proposed structures based on the following updated standards/information, including additional site-specific evaluation for the easternmost portion of the project site.

Comment: This mitigation is not sufficient. ADD THE ADDITIONAL REQUIREMENTS for tank design to include:

- To minimize the potential for damage to the storage tanks related to geological and Tsunami risks, all bulk oil storage tank design shall account for the following **five** categories of damage at a minimum 9.0 earthquake. The damages reported due to seismic actions in the past in unanchored above ground storage tanks have been observed principally at the base in the fond and the walls. Then, these damages could be producing the structural loss of the tanks. It can be classified in **five** general categories [Footnote 1: SEISMIC RESPONSE OF CYLINDRICAL TANKS FOR OIL. Cortés Salas Carlos and Sánchez Sánchez Héctor. World Conference on Earthquake Engineering. October 12-17, 2008, Beijing, China. http://www.academia.edu/658535/SEISMIC_RESPONSE_OF_CYLINDRICAL_TANKS_FOR_OIL 5th category added by E. Ellis]

1 . Buckling at the bottom plates of the wall tanks, where it is attending the maximal axial compression stresses due to overturning moment. In this zone the buckling of the plates appear with long deformations as elephant foot.

2 . Damage of the roof near to the end wall hoop and the internal columns is due to sloshing effect of the liquid.

3 . Damage in pipes and others accessories linking to the wall tanks during the seismic movement of the soil.

4 . Damage due to fails of the foundation or intense seismic loads

5 . Damage to tank structure from battering of representative sizes of ships that will be docked or in transit in the harbor (see table 3.18) Current use of boards and log damage does not address a real threat to these structures in a tsunami event and should be recalculated for varying representative debris and ships of different sizes striking the tanks head on as well as sideways.

Response GP215-3

Draft EIS Section 3.1.7.1, *Applicant Mitigation*, identifies measures that would reduce the potential for significant impacts related to the design and performance of the storage tanks during and following seismic and tsunami events. The Final EIS reflects the addition of a measure to incorporate automatic shut-off valves into tank design.

Comment GP215-4

2. Calculation of design runup elevation herein is conducted according to methodology described in Sections 2.1 and 3.3. This methodology has been previously approved by FERC and DOGAMI

Comment: **Final EIS must cite specific references within FERC and DOGAMI that specify which methodology applies to the calculation of tsunami forces. This information is not listed in the citations section and could be misleading or not applicable to Grays Harbor.**

Response GP215-4

Draft EIS Appendix C, *Tsunami Impact Modeling and Analysis,* presents references in the final section of the report (the last page).

Comment GP215-5

Table 3. Tsunami force calculations according to FEMA P646 (2012) for two scenarios: with and without Sea Level Rise for Westway Terminals LLC Facility

Comment: In the event of a magnitude 9 earthquake and resulting tsunami, the amount of oil that would be spilled is outrageously large and impossible to prevent or to mitigate.

Response GP215-5

Final EIS Chapter 3, Section 3.1.8, *Would the proposed action have unavoidable and significant adverse impacts on earth resources and conditions?* clarifies expected post-seismic and post-tsunami performance of the proposed storage tanks. Refer to the Master Response for Seismic Risk and Design Requirements.

Comment GP215-6

Total combined storage Westway and Imperium is 127,000 **72M** barrels of oil. Each train (average two per day) 16 per week**. 2526 Rail Tanker cars**

One panamax tanker holds 17M Gallons.

Comment: Attributing sizes to spills does not equal damage potential. There must be a zero tolerance threshold for oil spills of any size.

References from the draft EIS Imperium and Westway Terminals in Hoquiam

Small S-20

Project site 2,100 gallons (50 barrels) spilled when transferring oil from rail cars or to vessels at the project site

Rail transport 1,000 gallons (24 barrels) spilled during a derailment along the PS&P rail line

Medium

Project site 10,000 gallons (238 barrels) spilled when transferring oil to a vessel at the project site

50,400 gallons (1,200 barrels) spilled from pipeline or storage tank at the project site

Rail transport 30,000 gallons (714 barrels or the contents of one full tank car) spilled during a derailment along the PS&P rail line

Large

Project site 8.4 million gallons (200,000 barrels, the entire contents of 1 full storage tank) spilled on project site

Rail transport 90,000 gallons (2,140 barrels or the contents of three full tank cars) spilled during a derailment along the PS&P rail line

150,000 gallons (3,570 barrels or the contents of five full tank cars) spilled during a derailment along the PS&P rail line

900,000 gallons (21,400 barrels or the contents of 30 full tank cars) spilled during a derailment along the PS&P rail line

Vessel transport 105,000 gallons (2,500 barrels) spilled into Grays Harbor from a vessel collision

Up to 1.2 million gallons (29,000 barrels) from a vessel grounding in Grays Harbor million gallons (360,000 barrels or the entire contents of one full tanker, including fuel) spilled into Grays Harbor from a vessel collision at harbor entrance

http://www.ecy.wa.gov/geographic/graysharbor/imperiumterminal.html
Appendix C

Size, quantity of ships expected in the harbor.
3.17 Vessel Traffic

Although there can be as many as 400 or more commercial, tribal and recreational vessels in the harbor during peak fishing times (Scharpf pers. comm.), fishing activities are highly seasonal and occur primarily in the fall with the highest point in September. (3.17-22)

Tanker. (Bulk Liquid Transfer) Deadweight tonnage: 53,100 metric Tons
Length 612 ft Width 106 ft

Tank Barge (Bulk Liquid Transfer) Deadweight tonnage: 20,000 metric tons
L x W 604’ x 75’

Cargo Ship. (Dry Bulk Cargo) Deadweight tonnage: 43,000 metric tons
L x W 656’ x 105’

Cargo Barge (Dry Bulk Cargo) Deadweight tonnage: 11,000 metric tons
L x W 512’ x 85’

RoRo Vessel (Automobile hauling cargo ship) Deadweight tonnage: 11,760 metric tons
L x W 600’ x 103’

Commercial Fishing Vessel Deadweight tonnage: 100-2000 metric tons.
L x W 82-262, 20-40’

Cargo barges traveling to destinations at the mouth of the Chehalis River or further inland are forecast to account for approximately 21% of total large commercial vessel trips through Grays Harbor in 2017 (Table 3.17-8). These vessels would likely have drafts between 0 and 17 feet, consistent with vessel data reported between 2008 and 2012 (Table 3.17-5).

Up to half of the cargo ships and tank vessel trips would be made by vessels in ballast, assuming that they are in ballast on either the inbound or the outbound trip. Vessels transiting in ballast would have a shallower draft than vessels laden with cargo. Using vessel data (U.S. Army Corps of

Engineers 2014a), ballasted vessels are expected to operate at a draft of less than 27 feet. Based on these assumptions, it is estimated that a substantial proportion (approximately 61%) of the vessel trips under the no-action alternative would be made by vessels that draft less than 27 feet. As described for existing conditions, these vessels are minimally constrained by tidal elevations at any of the three channel depths considered in this analysis.

The remaining vessel trips (approximately 39%) are projected to be laden cargo ships and tank vessels (with drafts between 27 and 39 feet). Pilots schedule most transits of these vessels when tidal elevations are at 5 feet or above MLLW (U.S. Army Corps of Engineers 2014a:21).

Response GP215-6

The comment presents text from the Draft EIS.

GP216, **Ellis, Liz**

Comment GP216-1

Good evening. My name is Liz Ellis. Imperium and Westway's proposed oil terminal DEIS has failed on a number of levels. It's incomplete and contradictory, and if I was rating it, I would give it D for deny.

Most reviews and the scope for the EIS focused on the immediate area of the project and the nearby vicinity within the city of Hoquiam. Although the two projects have applied for permitting within the City of Hoquiam, oil by rail impacts every city and community along the rail line within Grays Harbor County and every other county along the rail line in Washington state.

The scope of this EIS should be broadened to include all communities within the state.

Response GP216-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP216-2

Mitigation related to construction and routine operation does not address the constant noise and ground shaking from driving piles 150 feet into the ground.

The EIS must look at the health impacts of this noise stress on students trying to study, the elderly and the infirm.

Response GP216-2

Draft EIS Chapter 3, Chapter 3.7, *Noise and Vibration*, presents a detailed analysis of potential noise and vibration impacts from construction of the proposed action. Although Washington State and local noise regulations provide an exemption for construction noise during daytime hours, the Draft EIS analyzes impacts based on guidance provided in the Federal Railroad Administration/Federal Transit Administration Manual (*Transit Noise and Vibration Impact Assessment*) as cited in Section 3.7. Based on this guidance, noise and vibration impacts on the nearest sensitive receptors

(residential neighborhoods) from construction activities, including pile driving, are anticipated to be low.

Comment GP216-3

Section three describes risk of damage of facilities during an earthquake as having an increased potential impact with the potential for the tanks to rupture and result in a leak of crude oil into the environment.

This is a gross understatement, for the potential here is really measured in millions of gallons, not just a few barrels of oil.

Response GP216-3

This statement in the Final EIS has been revised to use the word "release" instead of "leak."

Comment GP216-4

The proposed construction of tank facilities would be the current building codes and standards.

Thank you.

Response GP216-4

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

GP217, **Engel, Kim**

Comment GP217-1

I absolutely oppose the increase of the oil rail traffic to these terminals. There is no way that Spokane and the other communities that these rail cars will pass through should have been left out of this decision process. It effects all of us!

Response GP217-1

Comment acknowledged.

GP218, **Engvall, Brady**

Comment GP218-1

Thank you for giving me the opportunity to comment on this issue. My name is Brady Engvall, and I'm a long-time shellfish grower, now retired. And I'm speaking for the shellfish growers in Grays Harbor.

So, the issue here is, the mitigation for an oil spill in Grays Harbor is nonexistent. The Global Response Plan the DOE proposed and is on record of applying to Grays Harbor has never been tested. We don't know what will happen. Oil spills happen. They're happening every day today.

The shellfish growers, the fisherman, and all the fishing families in Grays Harbor County have experienced these issues with oil spills. San Francisco, Coos Bay, the New Carissa in Coos Bay, the Nestucca in Grays Harbor, these all impact the fishing families.

It's got to be remembered, in Grays Harbor County nearly 30 percent of the income to the county is marine related and fishing industry jobs. One oil spill will eliminate all those jobs, thousands of jobs will be eliminated.

So I'm asking you today to think really hard about what this issue is going to bring to Grays Harbor. And thank you for the time to comment on this important issue.

Response GP218-1

Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for additional information about the analysis of emergency planning and response capabilities.

GP219, **Engvall, Brady**

Comment GP219-1

Brady Engvall

From: Brady Engvall [brady@bradysoysters.com]
Sent: Thursday, October 08, 2015 11:15 AM
To: Brady Engvall
Cc: Arthur (R.D.) Grunbaum
Subject: Westway and Imperium crude oil-by-rail terminal Elss

My name is Brady Engvall. I live at 3714 Oyster Pl. E., Aberdeen. I'm a retired shellfish farmer.

One very serious issue is the type of crude oil and the volume that will be delivered to Grays Harbor. The oil we have grave reservations about is Canadian Tar Sands crude or bitumen. You know the stuff, they make highways out of it. This type of crude is heavier than water and sinks. The Rail Road has said that it must haul this type of oil. This type of oil is looking for foreign markets. Because the United States can't restrict local export of this product it will be handled.

As an example: In 2010 a pipeline broke and spilled bitumen into a tributary of the Kalamazoo River in Michigan. Today the cleanup costs are at 1.2 billion dollars. That's with a "B" and total cleanup has not been achieved.

The draft EIS calls for the updated oil spill "Geographic Response Plan" to protect the Grays Harbor estuary from an oil spill. When the current Response Plan was developed I ask the question. How would oil that sinks be handled in a spill situation? The written DOE response to my question was that- oil that sinks is outside of the Grays Harbor Response Plan. So.... we don't have any type of mitigation in response to oil that sinks. In essence, the projects are relying on the shellfish growers and public to absorb the time, money and energy to subsidize these two projects after an oil spill.

The cruel irony of this is the Geographic Response Plan calls on the shellfish growers and fishermen to marshal their resources for cleanup while at the same time destroying our ability make a living. No mitigation no projects!

Response GP219-1

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources and destinations of crude oil related to the proposed action, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Modeling*, refer to the Master Response for Oil Spill Modeling Methods.

To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for additional information about the analysis of emergency planning and response capabilities.

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

GP220, **Engvall, Brady**

Comment GP220-1

Brady Engvall

From: Brady Engvall [brady@bradysoysters.com]
Sent: Wednesday, November 25, 2015 8:20 AM
To: Brady Engvall
Subject: Comment to DEIS Westway-Imperium Improvement Projects

RECEIVED NOV 30 2015

Please incorporate by reference comment by: Quinault Indian Nation, Willapa-GH Oyster Growers Association, Washington Dungeness Crab Fishermen's Association, Audubon Washington and Friends Of Grays Harbor (FOGH).

Note: Because my concerns were not addressed from scoping comments to these projects I'm resubmitting my original scoping comments to be addressed in the FEIS. Thank you!

Dear Sirs, It is of interest that my direct concerns were submitted to the scoping process but the final product for the DEIS was presented in overly broad terms without specific identifiable mitigation .Crude oil by its very nature and the sheer magnitude of the proposals requires detailed accurate information for the agencies to make informed decisions that all citizens rely on.

From WAC 197-11-660 (in essence) and SEPA Handbook p- 62, I find this:

"One of the most important aspects of the SEPA process is the consideration of environmental impacts and the possible mitigation measures during agency decision making. SEPA substantive authority gives all levels of government the ability to condition or deny a proposal based on environmental impacts".

For SEPA to actually work my comments must be addressed in a manner that is in detail so government can carry out its public responsibility.

Thank you in advance,

Brady Engvall (360) 268 5518

Response GP220-1

Comment acknowledged. See response to specific comments below.

Comment GP220-2

Brady Engvall

RECEIVED NOV 30 2015

From: Brady Engvall [brady@bradysoysters.com]
Sent: Saturday, May 10, 2014 2:19 PM
To: Brady Engvall
Subject: Comments CBR- Originally typing into DOE's comment site. Error message appeared when sent so I did a c/p and will mail to ICF International, Seattle
RE: Comments to CBR Imperium-Westway

Dear Sirs,

In the last two weeks the local railroad (RR) has run off the tracks in the city of Aberdeen twice. This does not breed confidence that the local RR can haul crude oil to the port without a serious accident. Crude oil that has been proposed to be hauled has been described as dangerous by the federal government recently. Besides that industrial alcohol is also hauled on the same tracks and stored in close proximity to the crude oil storage tanks. Within the blast radius (currently described by the federal government as 2,000' for tracked crude) are important facilities such as grain silos feeding export markets worldwide. With these facts in mind I ask the following questions. Will the entire RR line from Centralia to Hoquiam be rebuilt to handle the large volume of crude oil proposed?

Response GP220-2

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under

existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP220-3

Does the city of Hoquiam have fire fighting equipment and man power to fight a crude/alcohol fire? Does mutual aid agreements allow other fire departments to respond? Does Hoquiam have and other responders have crude/alcohol fire training? Does Hoquiam and other responders have class "B" foam capability to fight oil fires?

What about Elma and Montesano- do they have oil fire capability and man power staffing to fight an oil fire and can their mutual aid help in an oil fire event? Does Aberdeen and Hoquiam presently fence RR stored transported hazardous materials such as at the siding in Aberdeen (presently this siding has no fencing)? Will the RR identify and tell local fire department what is in the RR cars so they can be prepared in case of a special fire event? Who trains first responders and will the RR help with the cost? Have fumes and secondary impacts been investigated to protect first and mutual aid responders. Does the Hoquiam and mutual aid responders have enough Aid-Car capability to cover a major event? finally- how will the RR and port protect the public from that one unknowable- the person bent on creating a catastrophic event by their actions? Will surveillance of the area be constant and verifiable?

Response GP220-3

Draft EIS Chapter 4, Section 4.2.1, *What framework prevents incidents from happening?* describes the formalized planning framework in place to address risks related to oil spills, fires, or explosions from the terminal operations, rail transport, or vessel transport. This section describes the requirements for planning and preventive equipment and design. Section 4.2.2, *What framework prepares for an incident?* describes federal and state regulations to prepare for an incident, the integration of plans, and drill and exercise requirements.

Final EIS Section 4.2.2 has been revised to indicate that railroad operators would be required to develop spill contingency plans consistent with state requirements and a mitigation measure is proposed for a contingency plan to be submitted to Ecology until state requirements are in place. Final EIS Section 4.2.3, *What framework provides responses to an incident?* has also been updated to better reflect existing response capabilities and resources in the study area, including information identifying existing gaps from the Marine and Rail Oil Transport Study (Ecology 2015). Final EIS Section 4.7, *Impacts on Resources,* has been updated to better reflect how the proposed action could affect emergency service responses.

Final EIS Chapter 4 reflects additional mitigation measures proposed to address gaps in emergency preparedness planning and response capabilities. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions.

Chapter 4, *Environmental Health and Safety*, identifies other proposed measures to ensure that broader prevention, preparedness, and response planning involves the appropriate stakeholders and that updates to any plans applicable to reducing risks related to the proposed action contain appropriate applicant information and participation. To the extent possible, as outlined in the Master Response for Mitigation Framework, measures that address the need for more coordinated and focused planning clarify the role of the applicant as appropriate.

Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7 describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

For more information about the analysis of potential impacts on the BNSF main line, refer to the Master Response for the Geographic Scope of the EIS.

Comment GP220-4

Brady Engvall

From: Brady Engvall [brady@bradysoysters.com]
Sent: Thursday, May 15, 2014 2:43 PM
To: Brady Engvall
Subject: Comments to CBR (Crude By Rail)

RECEIVED NOV 30 2015

RECEIVED MAY 19 2014

RE: Scoping comments to CBR lmperium-Westway

Dear Sirs, Westway and lmperium presently are asking for permits to ship crude oil through the Port of Grays Harbor. Tank farms for crude oil are going to be placed on land owned by the Port. This land has been described as dredge spoils and close to the Grays Harbor estuary. Many other Port renters are located in the same area. As a retired shell fish farmer, in Grays Harbor, I have real concerns about these projects. Because of the nature of crude oil as a product and its current history of not being friendly to the natural environment I have these questions to be answered in the draft EIS.

Earth quakes and resultant tsunami type waves in the location of storage tanks will be a problem. We are in a earth quake zone of great magnitude just off the Washington coast. It has been reported that an earth quake of just 6.00 on the Richter Scale would cause liquefaction in dredge spoils plus possible tank failure. What analysis (peer reviewed) has been undertaken that would allow the proposed tanks to be built on dredge spoils? If liquefaction did happen what would be the outcome for the estuary? Would containment proposed hold all the oil and would the containment structures maintain their integrity? What safety features will be in place to stop oil transfer during a quake event? Will cleanup proposals work during an event and will cleanup crews be available for a massive spill? Where would cleanup start on land or in the water? What fire control measures would be in place since in Japan during the last quake fire was a major hazard? These are just simple questions and could be expanded to be very inclusive but you can see the proposals are not appropriate for location and scale of the projects present real risks for the public.

Tsunamis are a part of earth quakes off coastal Washington. The location of the proposed projects are within the tsunami flood zone for Aberdeen and Hoquiam. Couple an earth quake and a tsunami and you have total devastation. Because of the nature of crude oil and scale of the proposed projects Grays Harbor would never recover from an event. What study will be conducted to examine the effects of an earth quake and tsunami event on Grays Harbor and coastal Washington? Is a cost benefit analysis being prepared to compare long term benefits as opposed to total damage cost from a catastrophic event when it occurs? How long would it take the estuary to return to its original condition given the element of crude oil in the event of a massive spill. What are the benefits of Grays Harbor to fishing, shell fish farming and clam digging if lost to a spill? What is the occurrence here of smaller earth quakes at or above 6.00 for Grays Harbor. ls it within the projected life of the project?

Response GP220-4

Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events.

Refer to the Master Response for Seismic Risk and Design Requirements for a description of the earthquake source model and hydrodynamic modeling method used in the site-specific tsunami analysis conducted for the project site and presented in Draft EIS Appendix C, *Tsunami Impact Modeling and Analysis*.

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP220-5

Sea level rise is now an accepted fact. How much and when are in dispute but it is happening and will continue to happen. What is the projected impacts from sea level rise on the projects? Will storm events added to sea level rise threaten the projects in their projected life span? The Chehalis River floods yearly does adding flood conditions, sea level rise and storm events threaten the location of the projects? What are the projections for sea level rise at the projects location and what effect does this have on RR lines serving the projects? Does soft RR bed lead to toppled rail tank cars?

Thank you for the opportunity to comment.

Brady Engvall (360) 268 5518

Response GP220-5

Final EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts, Climate Change*, clarifies predictions of sea level change in the project area and potential for flooding at the project site. With predicted sea level rise in the project area for 2050 of 1.57 feet, the project site will remain approximately 5 feet higher than the projected high tide. As such, it would not be subject to flooding even during extreme storm events.

Refer to the Master Response for Risk Assessment Methods for information about the approach, assumptions, and data sources used in the assessment of risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, and Appendix M, *Risk Assessment Technical Report*.

Comment GP220-6

RECEIVED NOV 30 2015

RECEIVED MAY 16 2014

Brady Engvall

From: Brady Engvall [brady@bradysoysters.com]
Sent: Monday, May 12, 2014 1:36 PM
To: Brady Engvall
Subject: Comments CBR (Crude By Rail)

RE: Comments to CBR lmperium-Westway

Dear Sirs,

Fifty jobs are being proposed for the CBR projects. As a recent scoping meeting it was stated by a person, with oil operations experience, that these types of operations rely on automation as humans make mistakes. So maybe the original 50 jobs as proposed is not the real figure in reality? A recent quote from an editorial in the Aberdeen World puts the issue of jobs in perspective: "A National Ocean and Atmospheric Administration report released this week said the commercial seafood industry in Washington was responsible for just shy of 61,000 jobs in 2012. A heckuva lot of those are on the Twin Harbors. Crude oil and seafood don't mix." Just the oyster production from Grays Harbor is $3,230,500 without economic multipliers. Willapa and Grays Harbor shellfish together account for $19,549,000 with multipliers in both harbors. As you can see the benefits to local economies are great not even adding in Dungeness crabs, razor clams and other associated seafoods.

Oil spills happen, a steady drip or something catastrophic, that is a given and clean up is never complete with 10 to 15% of cleanup considered a success. You have to imagine and include Willapa in the discussion as oil spills never stay put and impacts range far and wide. A little bit goes a long way. Given this I submit the following comments and questions.

Are there reliable baseline studies in Grays Harbor that define food chains and population dynamics in the estuary that would spell out what would be lost in the event of an oil spill? Who would do these studies and who would do the peer review? A few years ago a ship, the New Carissa, went aground near Coos Bay. The spill out in the open ocean of bunker fuel went into the estuary and killed many of Clauson's oysters. It was only 70,000 gallons of bunker fuel but it took many years for

the settlement to wind iits way through the courts after the shipping company appealed the original settlement. What will be the order of settlement if oil is spilled in GH? Will the railroad, the Port and shipping companies be responsible for losses to the oyster growers and not go bankrupt or challenge settlements after a spill? Will the companies who handle the oil be bonded for future spills and who administers and guarantees the bonds? Will affected citizens be able to collect unemployment insurance during and after a spill episode and if so for how long? After a spill has been partially cleaned up (success could be labeled as little as 10-15%) who pays for market disruption? After a spill it will never be the same as customers either don't come any longer or question the health of your product. This has been the experience of the Gulf seafood industry after the Deepwater Horizon oil spill.

Thank you for the opportunity to comment on CBR.

Response GP220-6

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP220-7

RECEIVED NOV 30 2015

From: Brady Engvall [brady@bradyaoysters.com]
Sent: Sunday, May 18, 2014 3:20 PM
To: Brady Engvall
Subject: Scoping comments lmperium - Westway

RECEIVED MAY 22 2014

Dear Sirs,

lmperium and Westway want to being crude oil to Grays Harbor for transshipment through the Grays Harbor estuary and along coastal Washington. These huge projects by scale will expose both Willapa and Grays Harbor estuaries to potential oil spill risks. Both of these estuaries have a natural resource based economy which provides to their respective communities over 30% of their economic base. By its very nature of and history crude oil and natural resource based economies do not exist comfortably together. Example- Exxon Valdez and Deepwater Horizon. The word "cleanup" is used extensively to describe how a spill would be treated but the word for clams ,crabs, salmon and oysters has no meaning in reality as 15-20% clean up is considered a success. This leaves 80 to 85% to be cleaned up by mother nature over time. Our natural resource economies will not survive this impact. Railroads(RR} are an important part of these proposed projects as this is how the oil gets to the Port and transshipment tank farms. Getting to Grays Harbor the trains cross 100 water courses and wetlands from Centralia each important to the sustainability of our natural resource economy.

The RR that provides this service to the projects is the Puget Sound to Pacific by name and is now having great difficulty staying on the tracks. Just in the last two weeks they have had three grain car derailments in Grays Harbor county and each spilling grain. With the recent history for crude oil

trains with environmental damage and explosions one only has to imagine what may have happened if these grain derailments had been crude oil in DOT-111cars. It must also be mentioned that on the same tracks and rail yards there are ethanol tanker cars that are in proximity to population centers in Grays Harbor county. With these concerns I ask these questions to be answered in the Draft EIS.

Response GP220-7

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

Comment GP220-8

Who provides insurance coverage for the RR and is the amount compatible with the risk? In the event of a spill can the RR just declare bankruptcy without involving their parent companies?

Response GP220-8

Refer to Response to Comment GP220-6.

Comment GP220-9

Will the RR upgrade their infrastructure before any crude is sent to Grays Harbor and will the upgrades be peer reviewed?

Response GP220-9

Refer to Response to Comment GP220-2.

Comment GP220-10

Who provides spill cleanup services to the RR and where are and what are the amounts of spill cleanup equipment available in a spill event? How much man power is available for cleanup and what are the response times that are guaranteed? If response times are not met is their automatic fines and who pays the fines? What is the training required for response providers and is it updated yearly? What is the plan for dilbit (dilute bitumen) from Canada's tar sands- is their now a dependable, verifiable and certified clean up method available for this type of crude?

Response GP220-10

Refer to Response to Comment GP220-3.

Comment GP220-11

What will projected sea level rise be and will the rise effect the RR track bed? If rain fall increases (note- rain fall this spring is blamed for the grain cars falling over) due to climate change will this impact the integrity of the RR track bed?

Response GP220-11

Final EIS Chapter 6, Section 6.5.1.2, *Climate Change*, clarifies predictions of sea level change in the project area and potential for flooding at the project site. With a predicted sea level rise of 1.57 feet in the project area by 2050, the project site will remain approximately 5 feet higher than the projected high tide. As such, it would not be subject to flooding during extreme storm events. Refer to Response to Comment GP220-2 regarding regulatory requirements for track maintenance and inspection addressed in the EIS.

Comment GP220-12

Port facilities in Hoquiam, next to the Grays Harbor estuary, is the destination of the oil trains. What safety precautions will be provided to insure that crude rail cars are safe from potential damage and fires resultant from other local explosion prone business' such as biofuel manufacturing? What precautions will be in place to protect numerous grain silo's from tank car fires and explosions in the event of a catastrophic event?

Response GP220-12

Refer to Response to Comment GP220-3.

Comment GP220-13

Will earth quakes as little as 6.00 on the Richter Scale affect the trains on the tracks at the off loading facilities?

Response GP220-13

Refer to Response to Comment GP220-4.

Comment GP220-14

What is the plan to identify train car contents for local responders given crude and ethanol in proximity to the off loading location?

Response GP220-14

Final EIS Section 4.2, *Applicable Regulations*, describes the requirements identifying and communicating contents of rail cars and identifies mitigation measures to further address coordination with local emergency responders.

Comment GP220-15

What other types of flammable material is stored close by the crude oil cars and do they pose a threat?

Response GP220-15

Refer to Draft EIS Chapter 3, Section 3.14, *Hazardous Materials*, for a description of the types of hazardous materials that are currently stored and used at the project site as well as those that would be used as stored under the proposed action.

Comment GP220-16

Will DOT 111tanker cars be used to haul crude to the Port and tank farms?

These are the questions that quickly come to mind and r reserve the right to expand my concerns as new information comes to light.

Brady Engvall (360) 268 5518

Response GP220-16

Draft EIS Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* acknowledges the voluntary applicant measure for all new rail cars to meet or exceed the U.S. Department of Transportation Specification 117 design or performance criteria and the retrofitting of all existing tank cars in accordance with the U.S. Department of Transportation-prescribed retrofit design or performance standard (80 *Federal Register* 26643).

Comment GP220-17

RECEIVED NOV 30 2015

RECEIVED MAY 27 2014

From: Brady Engvall (brady@bradysoysters.com]
Sent: : Monday, May 19, 2014 8:39 AM
To: Brady Engvall
Subject: Comments to CBR lmperium-Westway.

RE: Comments to CBR lmperium-Westway

Dear Sirs,

Crude by Rail (CBR) is coming to Grays Harbor. There are many concerns regarding this product and the methods by which it may be handled. The scope and scale of the proposed tank farms are far beyond anything the estuary has ever experienced. It has been averred that the scale may grow as markets grow and market potential is certainly there. Canadian tar sands dilute bitumen is proposed to be delivered by rail to the tank farms. To date, no known method is available to cleanup tar sand crude efficiently. Crude oil has a legacy of impacting water bodies and shorelines in a negative way. It is difficult to cleanup spills and the fact that it travels with the tides and before the winds it's impacts are great over long distances. These proposed tank farms and resulting ship transits have the potential to impact Grays Harbor, Willapa and ocean beach environments. These bays and beaches provide over 30% of the economic base for both Pacific and Grays Harbor counties.

Spills are inevitable- whether it is a drip, drip over time or a catastrophic event it will happen. Always has and always will. Given that outcome and the potential to destroy a .large part of the economic base of two harbors I have these concerns. Grays Harbor is a sunken valley that needs

extensive dredging by the Corp of Engineers (COE) to keep the channel deep enough to support shipping. One million to 1.7 million cubic yards need to be dredged each year. Dredge spoils are deposited in three locations two within Grays Harbor and one outside the harbor on the Westport ocean beach. Crude oil spilled into salt water spreads and a portion sinks after losing some of its lighter distillates and contacting sediment on the shore lines, beaches and mud flats. Our estuaries are continually being buffeted by ocean swells, wind waves and tides. Heavy sediment always moves to the lowest point in the estuary which are the channels that the COE must dredge. The COE is required to place contaminated dredge spoils in upland locations out of the marine environment.

The questions I have are below:

Does the COE have a dedicated upland spoil site to take yearly contaminated dredge spoils as required? Does the COE have a protocol in place to identify crude oil contaminated dredge spoils as it is dredged? Will open ocean dumping be allowed for crude contaminated dredge spoils? If open ocean dumping is allowed will the additional cost be computed in dredging cost/ benefit analysis? Tanker ships will be used to haul crude away from Grays Harbor to remote markets they load at docks. Presently siltation around the Port's piers are cleaned by clamshell dredges and a water jet array. Where ships tie there will be crude oil accumulations. How will these dredged materials be checked for contamination so that contamination does not get recycled back into the shellfish growing environment? Is there a protocol in place. How will the water jet arrays be monitored for crude contamination and is thee presently a protocol in place? Will each loading ship be preboomed to contain an oil spill. If so, on days and nights that weather conditions prevent prebooming what other precautionary methods will be used to protect against a crude spill? Will there be onsite responders to protect against a spill when a ship is being loaded? What is the alternative plan for rapid spill cleanup when the weather is stormy?

Response GP220-17

No dredging is proposed as part of this proposed action.

Refer to Chapter 2, *Proposed Action and Alternatives*, for a description of the proposed action. The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. For information about the most likely sources and destinations of crude oil related to the proposed action, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

For information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Modeling*, refer to the Master Response for Oil Spill Modeling Methods.

Section 4.4.3, *What mitigation measures would reduce impacts related to terminal operations at the project site?* includes applicant measures to improve response effectiveness in the case of a spill. More specifically, applicant mitigation includes purchasing an equipment and software package to supplement information on environmental conditions to support oil spill modeling, identify specialized spill response or prevention equipment, and assist with determination of safe and effective conditions for prebooming. Additionally, a licensed engineer would perform an independent engineering analysis and feasibility study to determine the number of days per year it is safe and effective to preboom oil transfers and identify site-specific improvements. If the study identifies no feasible alternative or until the changes are in place, and if prebooming is not feasible, alternative measures would be implemented during oil transfers in addition to those otherwise

required by regulation. However, as noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP220-18

Ballast water is used in tankers when traveling without a load. How will ballast water be handled for tankers coming to Grays Harbor? Will Hoquiam have a pump station for contaminated ballast water? How close to the harbor can tankers discharge ballast water before going over the bar? How is ballast water treated to keep unwanted critters from entering our coastal environment?

Thank you for the opportunity to comment on these proposals.

Response GP220-18

Draft EIS Chapter 3, Section 3.3, *Water*, Section 3.4, *Plants*, and Section 3.5, *Animals*, describe potential ballast water impacts and the regulatory requirements to reduce these impacts. Section 3.4.7.1, *Applicant Mitigation*, and Section 3.5.7.1, *Applicant Mitigation*, identify mitigation measures to further reduce potential impacts.

Comment GP220-19

RECEIVED NOV 30 2015

RECEIVED MAY 27 2014

Brady Engvall

From: Brady Engvall [brady@bradysoysters.com]
Sent: Monday, May 26, 2014 10:04 AM
To: Brady Engvall
Subject: Comments to: lmperium-Westway scoping for EIS

Please include by reference comments by: Quinault Indian Nation, Willapa Grays Harbor Oyster Growers Association and Washington Dungeness Crab Fishermen1s Association.

RE: Scoping for Westway-lmperium EIS.

Three Crude By Rail (CBR) projects are being planned for Grays Harbor. Potential impacts to the natural environment are huge. Grays Harbor relies on an economic foundation based on natural resources. Dungeness crab fishing ($35-$60,000,000 state wide of which GH contributes heavily), tourism ($30,000,000 as reported by the Grays Harbor Chamber of Commerce), razor clam digging ($22,000,000 as reported by the Washington State Department of Fisheries) and oysters ($3,230,500 for Grays Harbor oyster production as reported by Department of Fisheries records). As you can see these Industries are all clean water related. One crude oils pill would threaten these basic industries of which our coastal communities rely. Oil spills happen- it is inevitable and impacts always last long after the spill cleanup crew has declared victory and left the scene.

Response GP220-19

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including impacts on fisheries and shellfish.

Comment GP220-20

The following questions need to be addressed in the scoping EIS process-

Statutory requirements of Coastal Marine Spatial Planning requires that existing sustainable uses be protected. How will these historic uses be protected given that just 10-15% of an oil spill cleaned up is considered successful? Which government agency will guarantee historic uses are protected? Is liability insurance high enough to cover all cleanup costs to guarantee sustainable uses as per statutory requirements? Will the public be indemnified for their natural resource losses from an oil spill? What agency can the public petition if long term losses are incurred? Secondary losses by local tourist businesses- are they covered by cleanup damage awards? How far up the natural resource benefit ladder will losses be covered by insurance awards?

In order to identify natural resource losses there must be baseline studies done to identify that which will be lost. Who will do these studies and will the studies be done before any crude oil is delivered to Grays Harbor? It is not only the estuary that studies must be conducted but from Centralia to the far end of ocean beaches north and south as this is the natural habitat that is all interrelated. Who will be responsible for sediment studies as these are very important for crude oil spills as tidal conditions and time will not allow much cleanup on the mud flats after a spill? How will crude oil combine with mud and sand to make tar balls and will tar balls remain stationary or will they be moved around by wind and currents to different locations over time? Because the Corp of Engineers must dredge the Grays Harbor navigation channel yearly will tar balls and errant crude be dredged up over time? If so, where will these contaminated dredge spoils be discharged and who is responsible to make sure these spoils don't get redeposited in the estuary?

Response GP220-20

Refer to Response to Comment GP220-6.

Comment GP220-21

Through the whole process of the coming EIS it has been stated (over and over again} that only American crude can be shipped out of Grays Harbor because of federal law requirements. But in truth something else is reality. The railroads have said that they have to haul legal products,

American and Canadian. The Canadian product is tar sands crude- the worst possible product to spill into a marine and fresh water environments. It sinks and it defies cleanup by its very nature of being very heavy and the need for solvents to make it pumpable. Because local folks cannot control what comes to our shores there is a real possibility that Grays Harbor would become the tar sands crude oil North American export point. Given that does Department of Ecology (DOE) have a tested, peer reviewed, effective way to clean up tar sands crude oil? Can and will DOE demonstrate their methods for crude oil clean up? Will the US Coast Guard demonstrate effective clean up methods and response times. If cleanup is impossible what are the long term (peer reviewed) impacts our water bodies will experience? Is there sufficient insurance funds for full restitution to fisheries, tourism and to public citizen benefits of a healthy environment we all depend on?

Thank you very much for the opportunity to comment on scoping for the coming EIS. And- in the end when all has failed and the developers have packed up their "carpet bags" and fled to more comfortable environs and have left the public to wallow in their misery we can say, "we tried but no one listened". Please listen!

Brady Engvall (360} 268 5518

Response GP220-21

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

GP221, **Engvall, Korry**

Comment GP221-1

RECEIVED OCT 07 2015

Comments to the Draft EIS lmperium and Westway Expansion Projects. Dear Sirs, I'm part of a large family making their living from the ocean and estuary. The DEIS does not address potential habitat issues that these two projects bring to our family and other fisher families. In the event of a crude oil spill, which is inevitable as history teaches, valuable ocean and estuary habitat will be lost. Habitat that our local citizens rely on for survival.

Response GP221-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including aquatic habitat.

Comment GP221-2

There is no baseline studies in the estuary that lists what habitat will be lost if a spill occurs. The DEIS has the responsibility to list potential habitat degradation and the consequences to the environment so restoration can be achieved. An example would be dilbit or dilute bitumen which is produced from Canadian tar sands. This type of crude oil sinks as it is heavier than water. Current crude oil recovery technology does not address oil that sinks. There has not been any studies that explains bitumen behavior in estuaries such as Grays Harbor. From a recent spill of dilbit in the Kalamazoo River we learn that it is very expensive and nearly impossible to clean up the mess. Also-historically when a spill happens the responders gather just 14% leaving the rest to degrade in the environment. This is unacceptable. The DEIS must include a section on dilbit as well as Bakken crude and how it impacts the marine environment when it is spilled and what it would mean for Grays Harbor and the ocean.

Better yet the two projects should be rejected by Hoquiam and DOE as the risks are too high and the rewards are too small for Grays Harbor.

Aberdeen, WA. 98520

Response GP221-2

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Mod*eling, refer to the Master Response for Oil Spill Modeling Methods. To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill.

Final EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* reflects additional information on the economic and social costs of oil spills. This includes information on derailments and other accidents involving trains carrying crude oil and information on a crude oil spill during marine transport.

GP222, **Engvall, Luella**

Comment GP222-1

Dear Sirs, I attended the morning session of the public hearing for these two projects at Elma. It was evident that the pubic does not support these projects. If the public was in support where were the supporters and where were their oral comments in support? Lets hear them! The purpose of these hearings on the draft EISs is to identify issues that were not covered in the drafts.Here are my comments to the weakness' and incomplete nature of the drafts.

Our family is a fishing family. We have over 14 family members on the ocean and bay that make their living from fishing and oystering in the ocean and estuary. The draft does not cover just how our family members will be supported financially if a spill occurs. Under adverse conditions a spill will be all over the bay and into the ocean within an hour of a spill. The DOC Global Spill Response Plan ironically calls for local fishermen to help with the cleanup. Yet again-cleaning up someone else' mess. The fishermen know how spills are treated by business' as from California to Alaska business fight any attempt to make fishing families whole after a spill event.

The Exxon spill in Alaska is still being litigated and the New Clarisa spill in Coos Bay was litigated by oyster farmers to the bitter end. The oyster growers were never made whole and in Alaska the effects of the spill are still impacting fishing resources. That's what history tells us about oil and fisheries. The draft EIS should out line any and all insurance resources that are compliance bonded to help make fishermen whole in case of a spill .As an example of spill cleanup costs- A few years ago a crude spill happened in Michigan on the Kalamazoo river. One billion dollars have been spent and the spill is still not cleaned up.

Response GP222-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS. The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP222-2

The draft EIS also does not realistically address potential spills along the RR line from Chehalis to Hoquiam. Really- a spill in these locations, over 100 stream crossings, would leach into the harbor and river system for years and impact the publics resources.

As shellfish growers only a sheen is enough to stop all shellfish farming and negative impacts to salmon smolts would happen as well. Tide pools that harbor crab larvie and Year of the Young crabs would also not survive the spill impacts.

Response GP222-2

As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion. For information about the assumptions, data sources, and methods used in the analysis of risks, refer to the Master Response for Risk Assessment Methods.

Comment GP222-3

The rail lines into GH are old and faulty. Rail cars just plop over on occasion and derail more often. The draft EIS should address these issues with a guarantee all rail lines in the area be brought up to mainline specifications before any crude oil visits Grays Harbor county.

Response GP222-3

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP222-4

Fully 30% of the income of GH county is marine related. In the case of a spill that would be lost. That is an impact that can't be mitigated and should be covered in the draft identifying sources, impacts and potential long term effects of an oil spill. Thanks for the opportunity to comment on the DRAFT EIS. Luella Engvall 3714 Oyster Pl. Aberdeen, WA. 98520

Response GP222-4

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on*

Resources, describes the types of impacts that could result from an oil spill, fire, or explosion, including impacts on aquatic resources.

GP223, **Estalilla, Francis**

Comment GP223-1

I am submitting these comments in OPPOSITION to the proposed Westway and Imperium expansions. 1) The railroad parallels the lower Chehalis River for much of its length. Because of the dilapidated condition of the railway into Grays Harbor, derailments are a chronic and recurrent problem. An oil spill from these tracks would discharge directly into the tidal Chehalis River where strong currents would rapidly disperse the toxic goo upstream and downstream before it could ever be contained. This threatens the sensitive riparian and estuarine habitat that supports salmon, steelhead, and sturgeon; many species of wading/diving birds; beaver, river otter, and other marine mammals; and a whole host of important microfauna not even visible or apparent to the casual observer.

A major oil spill from either of the storage facilities or an outbound oil tanker ship would discharge directly into Grays Harbor where strong tidal exchanges over an expansive low-gradient estuary could rapidly contaminate vast swaths of the bay, as well as the ocean beaches to the north and south. Containment would be nearly futile if not impossible, especially during our storm-prone winters. Such a catastrophe would not just threaten a way of life for locals but also soil one of the state's most valuable coastal playgrounds. Hundreds of thousands of visitors come to boat, hike, camp, hunt, fish, kayak, surf, swim or simply WATCH in awe the myriad species of riverine and marine wildlife… and appreciate the clean unsoiled land- and sea-scapes they call home. Oil contamination also poses a major risk to commercially- and recreationally-harvested oysters, clams, crab, salmon, bait-fish and bottom-fish…. all of which are vitally dependent on a clean healthy marine ecosystem. These CLEAN RENEWABLE and SUSTAINABLE industries, valued in the 100's of millions of dollars, are incompatible with an estuary turned toxic oil zone. In that context, crude oil expansion is neither clean, renewable, nor sustainable for our community.

Explosions have proven to be a recurrent risk to the industry. This threatens not only the host storage city of Hoquiam but also EVERY town situated along the railway into Grays Harbor. It's not a matter of "if" but "when". Let's be clear here. People WILL die and many others WILL become ill due to toxic fumes and contamination from an explosion. This is a predictable risk to human life and public health that CANNOT be mitigated

Response GP223-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or within Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts,* presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be

significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP223-2

Seismic and potential tsunami events are an unavoidable reality in the Pacific Northwest, and Grays Harbor is as vulnerable as they come. With the knowledge of the certain devastation a spill or explosion poses to our citizens, willfully and irresponsibly locating, or worse yet, expanding an oil storage zone here is simply courting disaster for the community.

Response GP223-2

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP223-3

The proposed initial volumes of oil train traffic will cause tremendous chaos to the existing traffic and commerce in Aberdeen and Hoquiam. And that's just the tip of the iceberg. Once the way is paved, ever greater volumes of oil train traffic are sure to follow. The additional oil trains WILL block traffic in and out of an already congested Gateway Mall – Walmart complex which includes major retailers, restaurants, financial services, and even a medical office (eye clinic). Thousands of patrons and employees are literally trapped every time a train transits through the area. On one hand this could be dismissed as a trivial personal inconvenience, but on the other hand, it could just as easily and unnecessarily delay access to critical care in a life-threatening emergency. The additional oil train traffic can only exacerbate this problem. How ironic would it be if the medical crisis were an oil-related incident and the oil train was blocking the ONLY access for emergent medical care in or out of the site? Respectfully yours Francis V. Estalilla, MD

Response GP223-3

Comment acknowledged.

GP224, **Estalilla, Francis**

Comment GP224-1

Good afternoon, folks. My name is Dr. Francis Estalilla. I'm an eye surgeon here in Aberdeen. I'm here for now my 22nd year, and I'm here to speak out in opposition of oil by rail, oil by boat, whatever. It's a bad fit for this space. Simply said, it's a bad fit for this space.
I'm a part of this community. I live here, I've got friends, I've got family, I've got patients here. They're all threatened by this. Okay?

I love taking my friends out fishing. I was out on the bay today. It was a great day looking at that pristine water out on the bay catching King Salmon, Coho Salmon, wild fish produced in the Chehalis Basin, estuaries and the rivers of Grays Harbor.

This is why I'm here. This is the only reason I'm here. I make a living here. But by golly, if it weren't for these fish, I wouldn't be either. Ask anyone in this audience. Ask anybody who knows how to fish.

Simply said it's time to stay no. It's a bad fit. The question you must ask yourselves is it worth the risk? Is it worth the risk? The answer is simply no, no, no. Not just no, but hell no.

Response GP224-1

Comment acknowledged.

GP225, **Evans, Susan**

Comment GP225-1

Greys Harbor is a sanctuary for migrating shore birds. One of the largest populations of shorebirds in North America can be seen there in the spring. It is our obligation to protect this area from the catastrophic consequences should there be an oil spill. My fathers ashes were scattered at Greys Harbor because it is the most important birding site he ever saw. And that is after 80 years of birding all over the country. In addition it is time to embrace an economy based on renewable energies, not fossil fuels. The 20 plus oil, coal and gas terminals proved along the west coast only fuel the climate crisis. Please say No to destroying Greys Harbor.

Response GP225-1

Comment acknowledged.

GP226, **Fargo, Rich**

Comment GP226-1

I am viciously opposed to this plan. The ecosystem that makes up Grays Harbor is one of the most diverse in the world. Even the greatest track record has an "OOPS" in it. And when it comes to oil, one "OOPS" means decades of dead habitat and creatures. Keep your oil out of our homes!! WE DON'T WANT IT! NOBODY DOES!! Every single person I have talked to hates the idea of endless trains, explosive material, and the possibility of a spill.

We have lived here our entire lives, and will be damned to let oil companies do what they want with our homes. In today's society we need to GET OFF of fossil fuels. Not pump a ton of tar sands out of the ground, and get what scraps we can there. Makes ZERO sense and only lines the pockets of the oil company elite and a SMALL HANDFUL of jobs.

[Photo of man fishing not reproduced.]

Response GP226-1

Comment acknowledged.

GP227, **Farra, Jackie**

Comment GP227-1

Good afternoon, Panel. My name is Jackie Farra, and I'm a citizen of Grays Harbor County, and a homeowner in Ocean Shores for the last 27 years.

I have hardly any words to say to you except do not do this. Common sense should bring it to a point that this will destroy our fishing industries. I have family and I have daughters that have come with their grandparents to Westport for many, many years in a row fishing for salmon and enjoying our Pacific Northwest.

We don't need this company here. They need us to want them here and pay for them, and we cannot pay for our lives. It's about money for them, it's about livelihood for the rest of us.

I urge you, please, please do not permit any oil transport to Grays Harbor County. I've gone by the rails many, many times, and right now, yes, they have done a lot of improvements, so it appears, in the downtown district. However, there will be absolutely no way to escape that downtown that we're trying to recover from economically.

Economically Grays Harbor does not need this business. I agree with what's been said before me, we need to get our heads together and get green businesses in here and make us well again. We're on that road, we don't need a setback. Thank you.

Response GP227-1

Comment acknowledged.

GP228, **Farrell, Jenny**

Comment GP228-1

Name: Jenny Farrell
Organization Name (if applicable): St. Patrick Church
City/State/Zip: Seattle, WA 98178

My comments relate to both the Westway and Imperium Draft EISs.

There is no way to mitigate the dangers of these crude oil terminals, Grays Harbor is an unsafe place for oil terminals. Also, it is a major earthquake & tsunami zone. Please keep our natural habitat safe and avoid any crude oil in our waterways.

Response GP228-1

Refer to the Master Response for Mitigation Framework and the Master Response for Seismic Risk and Design Requirements.

GP229, **Feltham, Wendy**

Comment GP229-1

I am writing to express my opposition to both the Westway Expansion Project and the Imperium Expansion Project. Thank you for providing the fact sheets and the opportunity for public comment. I am gravely concerned about the increase in transport of highly flammable crude into an area famous for its coastline and estuary visited by migrating birds. The potential for accidents and destruction is just too great. We have seen that accidents happen too frequently, they are too destructive, and they are impossible to clean up. The devastation caused in the recent Lac-Mégantic railway disaster is an example. I believe the coast of Washington should be preserved for recreation

for future generations, and protected for marine mammals, birds, marine invertebrates and native plants.

Response GP229-1

Comment acknowledged.

GP230, **Ferguson, Ken**

Comment GP230-1

Hi, my name is Ken Ferguson. And I'll claim Multnomah County, Portland as my residence.

Of course we know that we've currently had a number of issues with oil trains moving through the Columbia Gorge National Scenic area. And so these trains would likely trend that same corridor.

I would like to underline the necessity of ensuring that the Quinault Indian Nation people exercise their treaty rights under the treaty of 1855. This will definitely impact all the unusual and custom sites in terms of, you know, water quality, air quality.

I want to underline everything everybody said about, you know, danger, environmental contamination, threats to water, threats to fisheries.

These are also things that these nations consider sacred, and so this is impacting also their religious rights. So these are things I think need to really be considered outside the scope of an Environmental Impact Statement.

And also the fact that these terminals don't even exist in a bubble. There's a regional infrastructure that communities all over the region are fighting to prevent, as well as coal and LNG.

This is part of a global war for energy supremacy. So like right now we have, you know, Russia turning to Syria, which of course you know that whole entire region is a lynchpin for global warming.

So Grays Harbor is a pawn, but sometimes the pawn can help put the king in checkmate. So, you know, we have all these things occurring around the world. And a hurricane maybe as large as, you know, Sandy to the Eastern Coast of the United States down to the Caribbean.

So these things are all happening right now in our world and you can't just consider these terminals as, you know, existing in this bubble. And so I think it's interesting, first of all, that we come here to the site of another failed scheme to consider entering into possibly one just as dangerous. Thank you.

Response GP230-1

Comment acknowledged.

GP231, **Ferguson, Ken**

Comment GP231-1

My name is Ken Ferguson. I live in Portland, Oregon, part-time resident of White Salmon, Washington, which is -- the BNSF tracks run right through there. So there's a lot of concerns from the Columbia River Gorge, Columbia River Water Shed, Chehalis Water Shed, all the communities located everywhere along the transportation -- this explosive oil track.

The fact that there's even -- this is even being considered from an ecological standpoint is ridiculous. I would ask Paula Ehlers to do everything you can to ensure that those permits are denied. You need to stand up to oil. We have a lot of people -- hundreds of people came here to stand up to oil. But what we need is a representative in government to stand up to oil. Please deny these permits.

I also have concerns about all Nations under the treaty of 1855 and ensuring that the uniform custom sites for the Quinault Nation and members of the treaty and Chehalis. You must ensure that their ability to exercise that -- those treaty rights are not threatened.

This project threatens not only the Quinault, the Chehalis, the Cowlitz, the Yakama, Warm Springs, you've had people travel from other reservations to speak out from their nations. These are sovereign nations. That is a nation-to-nation arrangement that we need -- you need to make sure that you have prior informed consent from all of those nations throughout the entire transportation route to ensure -- please deny the permits.

All of those nations do not want to see this project and this structure go through. Stand up to oil. We need one of you to. Deny these permits.

Response GP231-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP232, **Ferra, Jackie**

Comment GP232-1

Good evening. My name is Jackie Ferra. I'm speaking on behalf of myself this evening and my community of Ocean Shores. I don't have a lot to say because I'm so ashamed of what's been going on here. I wish I was not here tonight to have to tell you that you should all go away right after you say no. And, Brian, I'm especially upset with you, I guess, because of your position where you were able to deny this a long time ago along with port commissioners.

I'm appalled that these money sucking people would come here and try to destroy our area and only feel worse when I think that it's going to be allowed, in some of your minds. It's not going to be allowed in mine. It's not going to be allowed in the minds of the nation -- Quinault Nation or any of these people that are here tonight or today during the rally.

Please reconsider this and think with your hearts a little bit. It's embarrassing to be in the human race and have you want to be in favor of destroying any part of the mother earth.

Response GP232-1

Comment acknowledged.

GP233, Ferraro, Natalie (Friends of the Columbia Gorge)

Comment GP233-1

Thank you. My name is Natalie Ferraro. I'm with Friends of the Columbia Gorge. I live in Vancouver. I wake up in the morning to the sound of trains, but we're here to talk about environmental impact. And this draft is focused on local impact of this project.

The environmental impact of these terminals not only affects Grays Harbor, but this county, across our state, our nation, and our world. You heard today from citizens how these terminals would threaten their safety, their health and well-being. And I urge you to consider the no action DEIS.

Increases in train traffic would severely affect the safety of every town that these trains go through from Vancouver, Spokane, and over to our state. Increases in train traffic will endanger the habitat in the Columbia Gorge, which is already fighting environmental impact from existing train track. And we're here today to talk about their impact and we need to make sure we talk about all of them.

Thank you.

Response GP233-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Final EIS Chapters 5 and 6, *Cumulative Impacts*, have been revised to clarify the existing risks and the risks under the no-action alternative and the proposed action in the extended study area, individually and cumulatively.

GP234, Ferraro, Natalie (Friends of the Columbia Gorge)

Comment GP234-1

My name is Natalie Ferraro, and I'm from Vancouver, with Friends of the Columbia Gorge.

History and research have shown that transporting oil by train is a dirty and dangerous process. The construction of either of these projects would increase train traffic in the Columbia Gorge National Scenic area as well as in several other places that are designated parks, wildlife refuges and sensitive habitats. These areas are already experiencing negative impacts from train traffic at its current levels.

Throughout the region, communities in which projects like these have been proposed have all stood in opposition. We are proud of our beautiful home and share a commitment to keeping it healthy. I stand with these communities in saying no oil by rail now or ever. Thank you.

Response GP234-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 further describes the potential risks associated with rail transport in this area. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP235, **Figlar-Barnes, Jarred**

Comment GP235-1

Comments and Questions to the Department of Ecology and the City of Hoquiam for the Draft Environmental Impact Statements for the Westway and Imperium Proposal's;

1. Is Crude Oil a renewable energy? If not, I would suggest Renewable Energy Corp is misleading the public, through false advertising, of their true intent. If they wish to pursue their Crude Oil Project further, I ask that they change their name to reflect their actual business practices, so that they are no longer misleading the public about their company's true purpose. Simply adding the word *'Non'* before Renewable in their company's name would be a quick and acceptable fix. A better alternative, if they want to keep their current name, would be that ask they drop their project and pursue the production of Biofuel at their Grays Harbor Facility (Imperium Renewables), which was the original purpose of the facility. Then they would no longer be misleading the public.

Response GP235-1

Comment acknowledged.

Comment GP235-2

2. In the DEIS, rail traffic noise impacts were addressed in detail for the City of Elma. However, increased **rail traffic impacts on car and emergency vehicle blockage** to the north side of the PSAP in Elma were not provided in detail. Rather, an average wait time was derived along the segment of railroad from Centralia to Aberdeen. Elma was omitted from this part of the study. Elma has 11 rail crossings, and with 900 plus people living on the north side of the tracks, I would ask that the EIS include a detailed study of the impacts the increased train traffic would have on the City of Elma including wait times, be it vehicle impacts or emergency access being cut off.

Response GP235-2

Draft EIS Appendix L, *Vehicle Traffic Analysis*, illustrates the estimated daily average and peak hour delay at all at-grade crossings on the PS&P rail line, including the crossings in Elma, for the analysis years (2017 and 2037). The estimated vehicle delay at grade crossings would be for all vehicles, including emergency response vehicles.

Comment GP235-3

3. Oil Train Explosion and Fire Mitigation. There are only two major mitigation measures shown for the potential derailment and explosion of crude oil trains along the PSAP. First, an annual training

day with local emergency responders, and second, a foam truck to be given to the City of Elma Volunteer Fire Department. I ask that the foam truck and yearly training day both be removed from the list of mitigation measures for the following factual reasons;

- Of the 14 large CBR derailments and fires/explosions that have occurred across the US and Canada, almost all were too dangerous for fire crews to fight let alone approach. Due to the risk of further explosions, and toxic smoke issuing forth from the burning cars, emergency responders and the public have often been evacuated to a distance of several miles, and emergency responders have been told to simply let the oil tank cars burn themselves out. Even in Lac-Mégantic, when the train exploded in the center of town, killing 47 people, emergency responders were forced to let the blaze burn out, as it was simply too dangerous to fight.

- A foam truck provides no use parked miles from a train accident if it is too dangerous for first responders to fight the fire. As has been the case in most of the 14 derailments, and as would be the most likely case if a derailment and explosion were to occur in Grays Harbor.

- Foam trucks are only effective as long as they have foam. Presuming that the truck can actually reach and fight an oil train fire, the amount of foam available can run out incredible fast, especially if the fire is burning hot and intense. Thus, as soon as the truck runs out of foam, it becomes obsolete, unless further foam is provided. Will further foam be provided to the Elma Fire Department? If so, how much?

- Yearly training to fight CBR fires is great, but provides little use when a derailment and resulting fire and explosion are too dangerous to approach, even in a city where people's lives are at stake, the heat alone from one of the explosions can prevent first responders from looking for survivors close to the derailment. How will this be addressed?

- Simply not permitting these projects would be the most effective way to mitigate the potential of a spill, explosion or fire along the PSAP Railroad. Why is a no-build scenario not included as a viable alternative in the DEIS?

For the reasons stated, I again ask that the two mitigation measures listed for fire and explosions from derailments in the DEIS be removed. Instead, I would ask that the EIS simply state that there are no effective feasible mitigation measures in the real world that can completely mitigate the potentially dire and tragic possibility of a CBR derailment, fire and explosion. I would ask that the same reasons above also be applied to the possibility of a terminal fire, ship crash or grounding and storage tank rupture and explosion.

Response GP235-3

Refer to the Master Response for Mitigation Framework for an explanation for how mitigation was proposed. Additionally, Final EIS Chapter 4, *Environmental Health and Safety*, proposes additional mitigation measures to address in part local first responder capabilities. As noted in the comment and in the Draft EIS, no measures can completely eliminate all risks.

Comment GP235-4

4. The potential exists for the export of Heavy Tar Sands crude from Canada through these proposed terminals. Heavy crude oil, when spilled, sinks instead of floats when spilled. Thus the spill mitigation measure of booming would become almost completely obsolete. I would ask that the EIS reflect this reality, and state explicitly that booming, in ideal conditions, is only effective for lighter

crudes, if effective at all in the varied and unpredictable weather conditions of the Washington coast. How well will current spill response measures work with heavier Tar Sands Crude Oil? Will this scenario be included in the EIS? If not, why?

Response GP235-4

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action.

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Mod*eling, refer to the Master Response for Oil Spill Modeling Methods.

To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP235-5

5. Will the increased train traffic on the PSAP associated with these terminals (over 1,500 additional trains a year loaded and empty), cause more train related fatalities each year? With no fencing to keep people from trespassing on railroad property, and with hundreds of people regularly trespassing on the tracks in all of the communities on the PSAP (including kids heading home from School in Elma, and many people during the summer at the Wynoochee Railroad Bridge [which you can actually see in Google Earth Satellite Imagery using historic imagery]), with all this in mind, what is the expected loss of life associated with the increase in rail traffic?

Response GP235-5

The Draft EIS does not evaluate potential increased fatalities from increased rail traffic on the PS&P rail line. Refer to the Master Response for the Purpose and Focus of the EIS. Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, includes information about the requirements for PS&P to provide information at grade crossings (toll-free phone number, crossing identification number, and warning devices) and PS&P's participation in Operation Lifesaver, a nationwide public education program to help prevent collisions, injuries, and fatalities at highway and rail grade crossings. These programs address the dangers of at-grade crossing.

Comment GP235-6

If proposed quiet zones are set up in cities like Elma… meaning trains will no longer blow their horns at crossings, will this increase the risk of fatalities and injuries if those kids and teenagers on

the tracks can't hear the trains coming as easily? How many people are expected to be hurt or injured by trains each year? How often are fatalities expected to occur? Where are these fatalities most likely to occur (in the cities, suburbs, rural, county)? What mitigations measures will be required to reduce illegal trespassing? Will mitigation be required at all? If not, why? As these proposals directly contributes to the increased rail traffic and thus any resulting fatalities and injuries, what will the EIS do to address this issue?

Response GP235-6

Quiet zones are described in Draft EIS Chapter 3, Section 3.7, *Noise and Vibration*. To qualify for implementation, grade-crossing quiet zones must undergo a feasibility study and safety risk assessment, and be approved by the Federal Railroad Administration in cooperation with all applicable jurisdictions. Regarding mitigation for the proposed action, refer to the Master Response for Mitigation Framework.

Comment GP235-7

6. The proposed facilities for both Westway and Imperium (Renewable Energy Corp.) will be highly automated, with plenty of computer systems. In this day and age, computer systems have been found to be highly vulnerable to hacking and cyber-attacks, regardless of what safeguards they have in place. What measures will the facilities have in place to prevent or limit the threat of a cyber-attack? Will the facilities have adequate fail-safes in case of a cyber-attack? And what are the worst case scenarios if a full-scale cyber-attack happened to each facility?

Response GP235-7

Refer to the Master Response for the Purpose and Focus of the EIS.

Comment GP235-8

7. The United States Navy and US Military list the PSAP as part of the Strategic Rail Corridor Network (STRACNET), meaning the PSAP is of great importance during times of war for the movement of troops and supplies… as was the case during the early 2000's when tanks were transported by the PSAP to the Port of Grays Harbor for shipment to the Middle East… the PSAP also provides the only rail connection to the Bangor-Trident Base on the Kitsap Peninsula, and thus provides the only safe land route for nuclear missiles to be transferred on. How will the substantial increase in train traffic on the PSAP effect the local and regional military readiness during disaster and/or war? What is the Navy's opinion of this and have they considered potential impacts to their operations during times of disaster and/or war?

Response GP235-8

Draft EIS Chapter 3, Section 3.15.4.7, *Current PS&P Rail Line Capacity and Operations*, presents the results of the rail modeling analysis of the PS&P rail line capacity. Based on this analysis, the addition of 1.25 trains per day on average to baseline trips would result in approximately 4.25 train trips per day along the rail line, which is approximately one-third of the capacity of the line.

The Department of Navy did not comment on the Draft EIS.

Comment GP235-9

8. A major concern many have with the shipment of Crude Oil by Rail, specifically Bakken Crude Oil by Rail, is the fact it's highly explosive. This makes these trains, unfortunately, an easy target for terrorism, be they abroad or homegrown threats. How will the PSAP Railroad and the Department of Homeland Security insure the security of these trains as they are shipped through our communities? Will the 70 miles of the PSAP that these trains have to cross be secured to prevent illegal trespassing, tampering and or willful destruction of railroad property for the intent of causing harm? What effects would potential terrorist targeting oil trains have on the PSAP's STRACNET readiness?

Response GP235-9

Refer to the Master Response for the Purpose and Focus of the EIS.

The Pipeline and Hazardous Materials Safety Administration (PHMSA) regulates the movement of hazardous materials. PHMSA's Hazardous Materials Regulations require any person shipping a number of regulated hazardous materials (including crude oil) to develop and adhere to a safety and security plan that must address personnel security, unauthorized access, and *en route* security. The Federal Railroad Administration is responsible for enforcing the Hazardous Materials Regulations related to the movement of hazardous materials by rail.

Comment GP235-10

9. Spill Response: there are over 100 creek and river crossings on the PSAP mainline, and numerous wetlands, including the extremely unique, fragile and important Chehalis River Surge Plain. Where along the rail line will booming and spill response equipment be placed to provide adequate spill response time to any of these numerous creeks, rivers and wetlands? Will the railroad be required to place spill response equipment along its tracks as a proactive measure for any potential spills? If not, why? What are the costs to fish and wildlife if one tank car spills into a small creek (like Dry Bed Creek in Elma) or a large creek (Like Sylvia Creek in Montesano) or a large creek/river (like the Cloquallum in Elma)? What about 2 tank cars in the above scenarios? Or several? What kind of spill response equipment and spill response time would be needed to adequately stop a spill of any of these sizes? What is the most realistic spill response time likely to be along the PSAP?

Response GP235-10

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. Final EIS Section 4.2.2, *What framework prepares for an incident?* has been revised to indicate that railroad operators would be required to develop spill contingency plans consistent with state requirements and a mitigation measure is proposed for a contingency plan to be submitted to Ecology until state requirements are in place. Nonetheless,

mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

Comment GP235-11

10. Railroad Maintenance: What are the exact, explicit, and detailed list of upgrades the PSAP will be required to make in order to handle the substantial increase in train traffic associated with these proposals? Will they be required to upgrade their tracks at all? If not, why? If so, will they pay for the upgrades with their own money? Or will they seek taxpayer money for these upgrades? If taxpayer funds would be required, and since these upgrades would be for the proposed oil terminals, would these extra costs to the taxpayer be included in the EIS under financial impacts?

Response GP235-11

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspection* describes PS&P ongoing maintenance and inspections, including future maintenance projects from the PS&P capital improvement program such as ongoing and periodic maintenance projects designed to maintain current capacity, safety, and operations. These projects address the normal wear and tear of a rail line and will be needed as more trains (or more cars) transport commodities along the PS&P rail line. The actual scope of these projects may vary depending on future rail traffic volume and the needs of PS&P's rail customers and would be determined based on applicable regulatory requirements. Any future improvements to the rail line would be would likely be privately funded.

Draft EIS Chapter 3, Section 3.15.4.5 also describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP235-12

11. If a crude oil train derailment and explosion occurs along the railroad, and results in substantial loss or property or life, who will pay for it? Does the PSAP Railroad have adequate insurance to cover the worst case scenario? If the proposed oil terminals and storage tanks were to have a large explosion, resulting in substantial loss of property and life, who will pay for it? Do the Westway or Imperium (Renewable Energy Corp) companies have adequate insurance to cover the worst case scenario at their future facilities? Their current facilities? If no to the above questions, they why ae these companies not required to carry insurance that will cover the maximum cost of a worst case scenario? And if not the companies, who will pick up the tab for a worst case scenario? Local Government? Cities? The State or federal Government? The Taxpayer? Can the companies listed above (PSAP, Westway, & Imperium (Renewable Energy Corp)) file for bankruptcy to void any

responsibility or liability for a worst case scenario? If so, then what funding sources will cover the worst case scenario? Will these funding sources be able to cover all the cost of a worst case scenario?

Response GP235-12

Draft EIS Chapter 4, *Environmental Health and Safety*, Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP235-13

12. What effect will increase rail traffic associated with these proposals have on smaller business that rely on the railroad for shipping their products? It's been shown across the country that smaller businesses who rely on the railroad for shipping their products are often given lower priority for shipping than larger companies with bulk products being shipped. This lower priority often results in smaller business being forced to switch to more expensive means of transportation (truck or plane) or in worse cases, actual force smaller businesses out of business entirely. How will the bulk shipment of crude oil on the PSAP railroad effect smaller businesses priority when it comes to shipping their own products? Regardless of the rail lines capacity, there will be an impact to shipping times for smaller business, so what will this impact be?

Response GP235-13

Draft EIS Chapter 3, Section 3.15.4.7, *Current PS&P Rail Line Capacity and Operations*, presents the results of the rail modeling analysis of the PS&P rail line capacity. Based on this analysis, the addition of 1.25 trains per day on average to baseline trips would result in approximately 4.25 train trips per day along the rail line, which is approximately one-third of the capacity of the line. Therefore, no additional analysis was deemed necessary.

Comment GP235-14

13. What are the proposed terminals lifetimes? How much crude oil is expected to be shipped out of these terminals over their entire lifetimes? (a range is fine)…. How much Carbon Dioxide, methane and other greenhouse and toxic gases will be emitted by these facilities over their lifetimes? How much Carbon Dioxide, methane and other toxic gases will be released into the atmosphere by the eventual refining and burning of the crude oil that will be shipped through these terminals over their lifetimes? What effect will these greenhouse gasses have to the planets climate? How much will these emissions contribute to global warming and climate change? Or to sea level rise and ocean acidification?

Response GP235-14

Table 6-7 in Draft EIS Chapter 6, Section 6.5.1, *Air*, presents proposed daily throughput of crude oil for each of the cumulative projects compared to national average throughput of crude oil. The EIS evaluates the potential impacts over the anticipated lifetime of the proposed action, which is represented by conditions anticipated in 2017, the first year of operation, and 2037. Refer to Master Response for Baseline and No-Action Alternative.

Section 6.5.1 presents estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the cumulative projects in the context of emission inventories and reduction goals. The Final EIS section has been updated to include estimated emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination.

Section 6.5.1 also describes the projected impacts of climate change in the Pacific Northwest.

Comment GP235-15

14. The tank cars the crude oil will be shipped in have vents to relieve pressure inside the tanks by venting excess gases. Some of these gasses are remnant from the fracking process in North Dakota used to extract the oil. Many of the chemicals used in fracking are proprietary due to copy right laws. But, as these gasses and chemicals will be venting from these tank cars all the way to Grays Harbor, passing through countless communities, schools, clinics, parks, hospitals, it becomes a substantial matter of public safety and health to know what is being vented, regardless of copyright laws (one would hope human rights and constitutional freedoms of US Citizens trump corporate copyright laws). So in the interest of public safety and health, what gases are expected to vent from these tanks? Over what temperature extremes will certain gases vent? Are toxic fumes expected more during summer than winter (these tanks are black, ergo they will heat up substantially more in the summertime and increased sunlight)? How will these fumes effect individuals with health problems, such as asthma or emphysema? Can these gasses and chemicals get into the human bloodstream? What effects to the human body can these chemicals cause? Are they bio-accumulative? Will fish and wildlife along the tracks exposed to these fumes and chemicals increase the concentrations of the chemicals incrementally up the food chain? Can these chemicals react inside the tank cars as they're traveling to create new compounds and chemicals that may be worse than the originals?

Response GP235-15

PS&P is required to adhere to all applicable regulatory requirements intended to ensure the safe passage of rail freight. Final EIS Chapter 4, Sections 4.4.3, 4.5.3, and 4.6.3 identify additional mitigation measures to reduce risk of an incident that could result in the release of crude oil. Section 4.7, *Impacts on Resources*, describes potential human health impacts related to a release of crude oil.

Comment GP235-16

15. Vibrations: In Elma, I live about a half mile away from the PSAP Railroad, however I can always tell when a train goes by at night as parts of my house will vibrate slightly (windows mainly). With an increase of 1,500 trains a year (loaded and empty), how will the increased vibrations from these trains effect nearby buildings and structures? We have many old bridges and historic structures in Grays Harbor (especially the Aberdeen/Hoquiam area), how will the increased vibrations effect these structures? How will soft soils (fill and clays) and easily liquefiable soils that are found abundantly in the Chehalis River Valley and Estuary (Aberdeen/Hoquiam) effect the vibrations as they travel? Will the vibrations be amplified by these types of soils? Could this cause increased damage to already damaged buildings like those found in downtown Aberdeen or Hoquiam? What impact would increase vibrations from these trains have to highly saturated hillsides along the tracks? Would this increase the likelihood of landslides across the tracks?

Response GP235-16

Groundborne vibration from trains is associated with perceptible vibration in buildings, including noise that is audible inside buildings (e.g., rattling windows). Although this vibration may annoy humans, it rarely causes any kind of building damage. Groundborne vibration from trains does not cause seismic-like activity such as landslides. Draft EIS Chapter 3, Section 3.7*, Noise and Vibration*, provides an analysis of noise and vibration impacts related to the proposed action that would occur in the study area.

Comment GP235-17

16. What impacts will the increased train traffic have on the PSAP railroads existing infrastructure? Its bridges and culverts? As many of these bridges and culverts are very old (80 years plus), how will the increased train traffic impact their life expectancy? How long will the increased trains be able to run before some of these bridges and culverts will need to be replaced? Will the PSAP railroad be required to actively maintain these bridges and culverts? Or will the practice of deferred maintenance be allowed to continue as has been the case since the rail line was sold by BNSF? Wil the PSAP be required to pressure wash and paint their metal rail bridges, as is the normal practice by most department of transportations and railroads in the country (almost all the PSAP's metal bridges are in dire need of painting)? Or will the bridges be allowed to continue to weather and rust?

Response GP235-17

Refer to the Response to Comment GP235-11.

Comment GP235-18

17. If a crude oil train derails in the Chehalis Valley during a **major flood event** and oil spills, spreading quickly across the Chehalis Valley covering farmlands, riparian forests and wetlands, how will that oil be recovered? Are there plans for such a scenario? Are their mitigation measures that will be required to prevent this? Would farmers be compensated for the loss of productivity of their farmland due to high concentrations of Bakken Crude Oil in their fields? What economic loss would result from such a spill?

Response GP235-18

For information about the scenarios addressed in the risk assessment, refer to the Master Response for Environmental Health and Safety Analysis. Mitigation measures aimed at reducing risks during rail transport are proposed in Final EIS Chapter 4, Section 4.5. Refer to the Master Response for Mitigation Framework for more information about the approach to developing mitigation. Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS.

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of

associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP236, **Figlar-Barnes, Jarred**

Comment GP236-1

My name is Jarred Figlan-Barnes, and I live here in Elma. So I'd just like to quickly address something about the DEIS meeting location here before I go on.

It's miles from Elma, it's inconvenient, it's out of way. It's hard for people who are unfamiliar with the area to get to. People with disabilities, people who do not own a car because of low income who rely on mass transit may find this meeting almost impossible to attend.

Had a location in Elma, such as the high school or the fairgrounds been chosen, it would have been a lot more convenient.

Furthermore, as the Port of Grays Harbor directly benefits from these projects and owns Satsop Business Park, and as these meetings are supposed to be free of situational bias or geographical bias related to these projects, having the Port of Grays Harbor host this meeting is therefore a direct conflict of interest due to their own interest in having these projects go through since they'll be beneficiaries.

Response GP236-1

Comment acknowledged.

Comment GP236-2

Furthermore, in the DEIS, rail traffic noise impacts were addressed in detail for the city of Elma. However, increased rail traffic impacts on car and emergency vehicle (inaudible) to the north side of (inaudible) were not provided in detail. Rather an average wait time was derived along the segment of railroad from -- basically from Centralia all the way to Aberdeen. Elma was omitted from this part of the study. Elma has 11 rail crossings and with 900-plus people living on the north side of the tracks. I would ask that the EIS include a detailed study of the impacts the increased train traffic would have to the city of Elma specifically before it goes through.

Response GP236-2

Draft EIS Appendix L, *Vehicle Traffic Analysis*, illustrates the daily average and peak hour delay at all at-grade crossings on the PS&P rail line, including the crossings in Elma, for the analysis years (2017 and 2037).

Comment GP236-3

Furthermore, oil train explosions and fire mitigation, there are only two major mitigation measures shown for the potential derailment and explosion of a cruel oil train along the PSAP. First is an annual training day and second is a foam truck given to the City of Elma.

I would ask that the foam truck and both of those be removed as they do not mitigate an explosion if emergency responders cannot actually access the explosion or derailment because it's too dangerous.

Response GP236-3

Refer to the Master Response for Mitigation Framework.

GP237, **Figlar-Barnes, Kim**

Comment GP237-1

Co-lead Agencies: City of Hoquiam Washington State Department of Ecology November 21, 2015 The draft EIS is a horribly composed document and full of inaccuracies and lacks factual information. In particular, the last chapter of the document, Chapter 7 which includes the "Cost-Benefit Analysis" is extremely disconcerting. It is obvious the document has been composed to thoroughly benefit Westway Terminal Company LLC and Imperium Terminal Services proposed expansion to existing bulk liquid storage terminals. The City of Hoquiam and the Washington State Department of Ecology should be ashamed to be the co-lead agencies for the EIS. With that said, please review the attached comments for the DEIS for Westway Terminal Company LLC and Imperium Terminal Services proposed expansion to existing bulk liquid storage terminals located at the Port of Grays Harbor Terminal 1. Sincerely, Kim Figlar-Barnes

Response GP237-1

The commenter does not provide sufficient details to allow for a response.

Comment GP237-2

Chapter 3.1 Earth

Table 3.1.2 Probability of Stronger Earthquakes in Study Area

This information needs to be updated with figures from the *March 10, 2010 FEMA HAZUS-MH: Earthquake Event Report Canyon River Fault Grays Harbor County.*

Operations

Under this section of the report it states:

"Therefore, the development and implementation of the emergency evacuation plan described in Section 3.1.7.2, *Applicant Mitigation*, would help to reduce this impact."

So exactly where is section "**3.1.7.2**, Applicant Mitigation" located in the report for public review?

Response GP237-2

Refer to the Master Response for Earthquake Probabilities for an explanation of how the probabilities of strong earthquakes reported in the Draft EIS relate to those identified in recent studies. The reference to Section 3.1.7.2 has been corrected to Section 3.1.7.1, *Applicant Mitigation*.

Comment GP237-3

Rail - Landslide and Slope Instability

Under this section of the report it states:

"For approximately 12 of the 19 miles (about 63%) that the rail line is adjacent to steep or unstable slopes, it is separated from the adjacent hillslope by US 12, a two-lane highway that is between 40 to 70 feet wide and often divided by a concrete barrier, as well as a vegetated median of varying width. Based on data obtained from WSDOT's Unstable Slopes Management Program, debris flows from the majority of the known unstable slopes upslope of the highway are not expected to impede more than half of the roadway width (Fish pers. comm.). Consequently, it is unlikely that landslide debris from these locations could reach the PS&P rail line."

This statement is false as the January 2015 storm event caused a severe landslide to cross Hwy 12 and the PS&P rail line east of Morrison Park closing both Hwy 12 and the rail line. Large amounts of landslide debris covered both areas. Why does the report not reflect that ***it is likely that landslide debris will reach the PS&P rail line as it occurred in the January 2015 storm?***

Response GP237-3

Based on the recent landslide occurrences that exceeded the predicted landslide flow distance, Final EIS Chapter 3, Section 3.1, *Earth*, acknowledges the distance that debris flow has traveled in the past. Despite the recent landslide events that exceeded the predicted landslide flow distances, the rail and road segments for 12 of the 19 miles described are estimated to have the same level of risk for interruption by landslides as previously described in the Draft EIS.

Comment GP237-4

3.1.7.1 Applicant Mitigation

Under this section of the report it states:

"The applicant will ensure that a tsunami evacuation and emergency management plan is prepared prior to beginning project operations. This plan will consider evacuation planning, identification of safe havens, and identification of evacuation routes to natural high ground and will be developed in coordination with emergency management officials (City of Hoquiam, Grays Harbor County, Washington State, U.S. Coast Guard, ship captains, and pilots)."

Where is the tsunami evacuation and emergency management plan? Why is this plan not included in the EIS for public review?

Under this section of the report it states:

"To reduce the potential for environmental damage related to a tsunami event, the applicant will

conduct a study to assess the technical feasibility and cost of implementing measures to construct

the proposed facilities to withstand a CSZ L1 tsunami wave based on the Scenario 2 inputs listed in Table 3 of the Tsunami Impact Modeling and Analysis (Appendix C). Agreed upon measures will be implemented prior to project design and construction in coordination with the co-lead agencies."

Where is the study to assess the technical feasibity and cost of implementing measures to construct the proposed facilities to withstand a CSZ L1 tsunami wave based on the Scenario 2 inputs listed in Table 3 of the Tsunami Impact Modeling and Analysis (Appendix C)? The study needs to be conducted and included in the EIS for public comment and review before the project is designed and constructed.

Response GP237-4

Development of the specified measures would be required if the proposed action is approved. Refer to the Master Response for Seismic Risk and Design Requirements for more information about the iterative, ongoing risk assessment and design processes commensurate with the project's stage in development.

Comment GP237-5

3.1.8 Would the proposed action have unavoidable and significant adverse impacts on earth resources and conditions?

Under this section of the report it states:

"Although the likelihood of a large-scale tsunami event is low, such an event would likely cause

unavoidable and significant adverse environmental effects at or near the site if it occurred and the facility was not constructed to withstand it. The potential impacts in the event of a large scale

tsunami would include oil spills, fires, or explosions which are discussed in Chapter 4, *Environmental Health and Safety*."

According to the report *The Oregon Resilience Plan Reducing Risk and Improving Recovery for the Next Cascadia Earthquake and Tsunami, Report to the 77th Legislative Assembly from Oregon Seismic Safety policy Advisory Commission (OSSPAC) Salem, Oregon February 2013,* the likelihood of a large scale tsunami event is **high**, due to this fact alone the Westway and Imperium permits should be denied.

Response GP237-5

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP237-6

Chapter 3.2 Air

According to a report published by John Kemp through Reuters on August 3, 2015 the following was observed at tanks containing Bakken Crude oil for rail transport:

"The pipeline operator made the application just three days after the vapours in one crude tank at Berthold terminal in North Dakota were sampled and found to contain H2S at an extremely high concentration of 1200 parts per million, more than enough to be fatal."

"Exposure to hydrogen sulphide causes severe irritation and respiratory problems. It is immediately dangerous to life and health at concentrations above 100 parts per million (ppm), according to the federal government's Occupational Safety and Health Administration (OSHA)."

"Concentrations of as little as 50-200 ppm can cause shock, convulsions and coma. Inhaling H2S in excess of 1,000 ppm will cause immediate respiratory paralysis followed by death according to the Environmental Protection Agency (EPA) ("Report to Congress on Hydrogen Sulfide Air Emissions Associated with the Extraction of Oil and Gas" 1993)."

"Under OSHA regulations, workers must not be exposed to an average concentration more than 20 ppm over the course of an eight hour shift. Exposures of 20-50 ppm are permitted for no more than 10 minutes at a time. Workers must never be exposed to concentrations over 50 ppm."

So, how will the storage tanks at the terminals and the railway tank cars mitigate for storing and transporting Bakken Crude oil containing high concentrations of H2S at 1200 parts per million?

What mitigation measures will be taken at the terminal storage tanks to ensure the health and safety of individuals working around these tanks containing high concentrations of H2S at 1200 parts per million?

How will stationary railway tanks cars mitigate for venting the high concentrations of H2S at 1200 parts per million in communities throughout the transportation routes from North Dakota to the terminals in Grays Harbor?

Response GP237-6

The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, would reduce emissions of criteria and toxic air pollutants from onsite stationary sources.

As described in Draft EIS Chapter 3, Section 3.2, *Air*, based on air quality modeling for conducted by the applicant, emissions of toxic air pollutants related to routine operations of onsite stationary sources, including hydrogen sulfide, would be below the state thresholds identified in WAC 173-460-150. The Final EIS section reflects updated estimates based on a review of recently published Bakken crude oil data. These emissions are subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping for onsite stationary sources. Refer to the Draft EIS for a list of permit conditions and applicant mitigation that would reduce potential impacts on air quality.

PS&P is required to adhere to all applicable regulatory requirements intended to ensure the safe passage of rail freight. Final EIS Chapter 4, Sections 4.4.3, 4.5.3, and 4.6.3 identify additional mitigation measures to reduce risk of an incident that could result in the release of crude oil.

Comment GP237-7

3.4 Plants

3.4.5.2 Proposed Action - Rail

Under this section of the report it states:

"An increase in leaks and spills of petrochemicals used in routine rail operations could occur due to the increased frequency of rail traffic and associated maintenance; the increase would be slightly higher compared to the no-action alternative. Diesel fuel, oils, grease, and other petrochemicals required for rail operation and maintenance could reach vegetation along the rail line through a small-scale spill or dripping from the train. These materials could either leak directly into vegetated areas along the rail bed or be carried short distances by precipitation or surface waters to more sensitive areas such as streams and wetlands through the openings on bridges and trestles. Impacts from a minor spill would be expected to be localized to the area of the spill adjacent to the rail line and would not be expected to spread across a wide area."

Why is it not reflected that such spills would spread across a wide area during any high water or flood event thus contaminating all vegetation that would come in contact with spilled oil?

Response GP237-7

Draft EIS Chapter 3, *Affected Environment, Impacts, and Mitigation*, addresses the impacts associated with routine operations, including the potential for spills and leaks. As noted in Section 3.3, *Water*, the potential for impacts associated with such spills would most likely be minimized by containment features and best management practices. The potential for widespread environmental damage related to the risk of oil spills, fires, and explosions is addressed in Chapter 4, *Environmental Health and Safety*.

Comment GP237-8

3.5 Animals

3.5.3.2 Impact Analysis

Under this section of the report it states:

"The impact analysis for animals considered animals and habitats in the study area, specifically in and within 1 mile of the project site, within 0.5 mile on either side of the PS&P rail line, in and along the shoreline (0.5 mile inland) of Grays Harbor, and in the Pacific Ocean within 3 nautical miles of the entrance to Grays Harbor."

The Pacific Ocean currents will take spills farther than 3 nautical miles from entrance of Grays Harbor, the 1989 Nestuca Oil spill impacted Vancouver Island, BC. Since this is true; Why is the report not including all animal species likely to occur in the Pacific Ocean that is greater than 3 nautical miles of the entrance to Grays Harbor?

Response GP237-8

Refer to the Master Response for Geographic Scope of the EIS for an explanation of why Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport in the extended study area qualitatively.

Comment GP237-9

3.5.4.3 Grays Harbor - Aquatic Habitats – Chinook
Under this section of the report it states:

"Spring-run adults are likely to pass through Grays Harbor in April on their return trip

to spawn in upper tributaries."

Spring-run adult Chinook pass through Grays Harbor in ***March***, see WDFW data 2015. Why is this information not included correctly in the report?

Response GP237-9

Final EIS Chapter 3, Section 3.5.4.3 *Grays Harbor*, *Aquatic Habitats*, *Fish*, reflects additional information to address the distinction between the presence of Chinook salmon and steelhead in Grays Harbor and the timing of river entry.

Comment GP237-10

3.5.4.3 Grays Harbor - Aquatic Habitats – Marine Mammals

Under this section of the report it states:

"Several ESA-listed whale species may occur off the Washington coast near Grays Harbor. These include blue, fin, and sei whales (*Balaenoptera musculus, B. physalus, and B. borealis*, respectively), sperm whale (*Physeter macrocephalus*), killer whale (*Orcinus orca*), and humpback whale (*Megaptera novaengliae*), all of which are federally listed and state-listed as endangered. Other whale species that may occur in the waters off Grays Harbor are the pygmy sperm (*Kogia breviceps*), common minke (*Balaenoptera acutorostrata*), and the state-listed sensitive gray whale (*Eschrichtius robustus*)."

Both the humpback whale (*Megaptera novaengliae*) and gray whale (*Eschrichtius robustus*) are frequently observed and known to **forage <u>with</u> in Grays Harbor**. Why is this information not included in the report?

Response GP237-10

Final EIS Chapter 3, Section 3.5, *Animals*, clarifies whale use of Grays Harbor, including frequent use by the gray whale, and provides additional information on gray whales, humpback whales, and killer whales.

Comment GP237-11

3.5.5.2 Proposed Action - Underwater Vessel Noise -

According to "Figure 3.5-1. Frequency Relationship between Marine Animals Sounds and Sounds from Shipping" Primary Shipping Noise ranges from 10 Hz to 1kHz which directly over laps with the hearing frequency range of baleen whales. How will underwater vessel noise be mitigated to protect baleen whales, specifically humpback whales (*Megaptera novaengliae*) and gray whales (*Eschrichtius robustus*) when they are foraging in Grays Harbor?

Response GP237-11

Draft EIS Chapter 3, Section 3.5, *Animals*, Figure 3.5-1, shows that primary shipping noise ranges between 10 Hertz and 1 kilohertz, a range that includes all vessel types. However, the Draft EIS also states that tankers exhibit noise frequencies at the lower end of this spectrum (40 Hertz), and tank barges would produce even less near-surface sound. Given that the context for the increase in vessel traffic related to the proposed action is an existing navigation channel currently used by large commercial vessels and that the proposed action would add fewer than one vessel trip per day on average, vessel traffic related to the proposed action is not expected to have a significant impact on humpback and gray whales.

Comment GP237-12

3.10 Recreation

3.10.4.3 Grays Harbor - Recreational Activities – Shellfishing

Under this section of the report it states:

"Razor clams are found primarily on the intertidal coastal beaches (those that are exposed at low tide) from a +3 foot tide level to a -2 foot tide level. The Washington Department of Fish and Wildlife manages two razor clam harvest areas near Grays Harbor.

- **Copalis Beach**. Harvests are managed from the north jetty at the mouth of Grays Harbor to the Copalis River.

- **Twin Harbors**. Harvests are managed from the Willapa Bay north to the south jetty at the mouth of Grays Harbor.

Razor clam seasons are variable and occur only after clam samples have been tested by Washington Department of Health and are found to be safe for human consumption (Washington Department of Fish and Wildlife 2015b)."

According to the Washington Department of Fish and Wildlife webpage the following is true regarding razor clam management:

"Razor clams are found primarily on the intertidal coastal beaches (those that are exposed at low tide) from a +3 foot level to a -2 foot tide level. The Washington Department of Fish and Wildlife (WDFW) divides the harvest areas into five major management zones (see map):

- **Long Beach** from the Columbia River north to the mouth of the Willapa Bay

- **Twin Harbors** from Willapa Bay north to the south jetty at the mouth of Grays Harbor

- **Copalis Beach** from the north jetty at the mouth of Grays Harbor to the Copalis River

- **Mocrocks** from the Copalis River to the south boundary of the Quinault Indian Reservation and

- **Kalaloch**] from the South Beach campground north to ONP Beach Trail 3. *(This beach is closed to harvest until further notice)*"

The Mocrocks and Kalaloch razor clam management areas need to be included in the EIS since they are located near Grays Harbor and many individuals who live in and near Grays Harbor are known to harvest razor clams in these areas.

The EIS also needs to include the fact that razor clam seasons **occur throughout the fall, winter and spring months** once the Washington Department of Health finds that clam samples are safe for human consumption.

Response GP237-12

Both the Mocrocks and Kalaloch razor clam management areas are outside of the study area for recreation analyzed in EIS Chapter 3, Section 3.10, *Recreation*. Final EIS Section 3.10.4.3, *Grays Harbor,* reflects revisions to indicate that razor clam seasons occur in the spring, fall, and winter.

Comment GP237-13

3.14 Hazardous Materials

3.14.5.2 Proposed Action-Operations-Diluted Bitumen

Why is "Diluted Bitumen" not listed as acutely toxic to all types of organisms?

Under this section of the report it states:

"Additionally, the applicant would be required to develop the required spill prevention, contingency, and response plans to reduce the potential for releases of crude oil and to clarify emergency notification and response protocols during site operations and vessel transfers. "

Where are the required spill prevention, contingency, and response plans so the public can review these documents?

Response GP237-13

It is the constituent chemicals of diluted bitumen that can be acutely toxic. Final EIS 4.7, *Impacts on Resources*, has been revised to more fully describe the potential impacts on human health. As noted in Draft EIS Chapter 4, Section 4.2, *Applicable Regulations*, such plans are not required prior to operations and have not been developed. However, once the plans have been submitted to Ecology, such as the contingency plan required by WAC 173-186, they will be available for public review and comment for a period of 30 days. Refer to the Master Response for the Purpose and Focus of the EIS.

Comment GP237-14

3.15 Rail Traffic

3.15.4.2 PS&P Rail Line Track Conditions and Physical Characteristics- Federal Railroad Administration Class of Track and Speeds

Under this section of the report it states:

"The PS&P tracks are registered with the Federal Railroad Administration (FRA) as Class 2 tracks11 with an overall maximum speed of 25 mph for freight trains."

In light of the numerous crude by rail derailments that have occurred across the United States, the "Class 2 tracks11" are insufficient to tolerate such heavy freight loads due to transporting crude by rail. What mitigation measures will PS&P take to ensure their tracks will be able to tolerate the heavy freight loads associated with transporting crude by rail?

"Over Devonshire Bridge (Wynoochee River), the speed limit is 10 mph. Current maintenance

plans include repairing this bridge and increasing the speed limit to 25 mph."

What exactly are the maintenance plans for repairing this bridge that is nearly 100 years old and full of structural deficiencies, specifically gaping holes in the steel structural supports? Why is it not mandatory that this bridge should be replaced in order to transport crude by rail?

"Over the moveable bridges spanning the Wishkah and Hoquiam Rivers, the speed limit is 5 mph, in part because of the maintenance condition, but also because these are moveable bridges

(drawbridges). The rails must separate to open the bridge and align again when the bridge is

closed, which contributes to the speed limit of 5 mph."

Again, another bridge that is structurally deficient and nearly 100 years old which had a freight derailment on May 9th. Why is it not mandatory that this bridge should be replaced in order to transport crude by rail?

Response GP237-14

Refer to Response to Comment GP235-11.

Comment GP237-15

3.15.4.5 Ongoing Maintenance and Inspections- Future Maintenance Projects

Under this section of the report it states:

"Install 9,500 new hardwood ties at various locations on the west end of the Elma Subdivision."

It is a fact that concrete ties can handle heavier loads, are better support and last longer than wooden ties; why are concrete ties not being used to replace hardwood ties?

"Upgrade three steel bridges."

What and where are the three steel bridges that are to be upgraded?

Response GP237-15

As described in Draft EIS Section 3.15.4.5, *Ongoing Maintenance and Inspections*, PS&P has a capital improvement program, which includes a number of ongoing and periodic maintenance projects designed to maintain current capacity, safety, and operations. These planned projects address the normal wear and tear of a rail line, and will be needed as more trains (or more cars) transport commodities along the PS&P rail line. The actual scope of these projects may vary depending on future rail traffic volume and the needs of PS&P's rail customers and would be determined based on

applicable regulatory requirements. The projects listed are planned projects only and the scope of the projects may change.

Draft EIS Chapter 3, Section 3.15.4.5 also describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP237-16

3.15-10. Maximum Occupancy Time at Selected Grade Crossings—No-Action Alternative and Proposed Action

The proposed action times at Fleet Street 45 minutes and East Heron Street 52 minutes, is too long. The train would prevent any emergency vehicle from entering or exiting these areas. What is the plan to prevent this from happening?

Response GP237-16

Final EIS Chapter 3, Section 3.16.8, *Would the proposed action have unavoidable and significant adverse impacts on vehicle traffic and safety*? clarifies that while implementation of proposed mitigation could reduce impacts on vehicle traffic, average and peak hour vehicle delays at the following grade crossings in Aberdeen would remain significant.

- Average hour: East Heron Street and Newell Street (Olympic Gateway Plaza area).
- Peak hour: Washington Street (Port of Grays Harbor area).

Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

Comment GP237-17

3.16 Vehicle Traffic and Safety

3.16.5 What are the potential impacts on vehicle traffic and safety? No-Action Alternative-Emergency Vehicle Access

Under this section of the report it states:

"Additionally, as noted above, there are times (an average of four times per week) when all access into the Olympic Gateway Plaza is blocked for approximately 35 minutes."

An average of four times per week, where the Olympic Gateway Plaza is blocked for 35 minutes, that is too long. How will this be mitigated in order to save an individual's life during an emergency situation?

Response GP237-17

The text referenced in the comment describes impacts under the no-action alternative.

Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

Comment GP237-18

3.17 Vessel Traffic

3.17.4.2 Large Commercial Vessels-Large Commercial Vessel Operations-Escort Tug Services

Under this section of the report it states:

"The existing emergency response towing vessel at Neah Bay, located at the far northwest corner of Washington State, is available to assist vessels off the coast of Washington and in Puget Sound. It could assist with vessels in a difficult situation in or near Grays Harbor; however, under normal weather conditions, it could take an average of 12 hours to reach the harbor. Under adverse weather conditions, transit time to Grays Harbor could be as much as 18 hours."

Westway and Imperium are proposing to store and ship millions of gallons of crude oil out of Grays Harbor and the emergency response towing vessel is at Neah Bay! This is totally irresponsible and unacceptable, 12 to 18 hours for assistance or even longer depending upon adverse weather conditions which are a given every fall, winter and spring. How can this be justified when so much is at stake? This alone is gross negligence calling for the permits to be revoked. How and who will be responsible for staging an emergency response towing vessel in Grays Harbor? Who will be paying for this additional cost as it should be mandatory if crude oil is to be shipped from Grays Harbor?

Response GP237-18

Final EIS Chapter 3, Section 3.17.4.2, *Large Commercial Vessels*, clarifies the emergency response capabilities of the tugs stationed at Grays Harbor.

Refer to Draft EIS Chapter 3, Section 3.17.4.4, *Vessel Traffic Management*, for information about the closure of the Grays Bar Channel. The Captain of the Port has the authority to close the bar at Grays Harbor if the weather conditions are deemed too severe for vessels to transit. If the entrance to the port is closed due to weather conditions, the Port, the U.S. Coast Guard, and state-licensed pilots coordinate ship logistics until the Captain of the Port reopens the entrance.

Comment GP237-19

3.17.8 Would the proposed action have unavoidable significant adverse impacts on vessel traffic?

Under this section of the report it states:

"Under existing fishing conditions, increased vessel traffic would cause a disruption when

commercial fishers are in the navigation channel. This conflict is most likely to occur related to

harvest of salmon, steelhead, and sturgeon during the fall fishery. Although vessel operations related to the proposed action are reasonably certain, it is not possible to determine how the proposed action could affect a commercial fisher's daily catch because of other unpredictable factors (number of fishers, fish distribution, timing, and duration of fishing window on any given day of any given week). However, it is anticipated that because there are alternate fishing areas and because there would be additional days/windows to fish uninterrupted, impacts would not be significant."

"…it is not possible to determine how the proposed action could affect a commercial fisher's daily catch…"

This statement is a bogus and totally inaccurate. It is totally possible to determine how the proposed action could affect a commercial fisher's daily catch. Have the commercial fisher's been interviewed and asked: "How the proposed action could affect a commercial fisher's daily catch?" Has the commercial gillnetters association be contacted and asked this exact question? Have the commercial fish buyers been contacted and asked this exact question? All these groups would have an exact answer as it is their livelihood that is at stake and to make the assumption that "impacts would not be significant" shows a total lack of respect and how little research was done to acquire the correct answer.

Response GP237-19

Draft EIS Chapter 3, Section 3.17.4.3, *Fishing and Recreational Vessels*, describes commercial fishing in the study area. Section 3.17.5.2, *Proposed Action, Conflicts with Commercial Fishing*, describes potential conflicts with project vessels and commercial fishers. The statement quoted by the commenter does not reflect absence of information on fishing practices and catch; it reflects the uncertainty of specific circumstances. As stated, "Depending on the specific circumstances of each interaction (e.g., chance of a vessel calling during an open fishing window, distribution of the fish within the channel, number of fishers on any given day), it is difficult to predict whether increased occupancy at Terminal 1 would significantly affect any single fisher's daily catch."

Comment GP237-20

4.3 Risk Considerations

4.3.1.2 Crude Oil - Bakken Crude Oil & Diluted Bitumen

Under section "3.14 Hazardous Materials" the report states that Bakken Crude Oil is acutely toxic to all types of organisms and in this section of the report it states "In general, Bakken crude oil is moderately toxic." So which is it – acutely toxic or moderately toxic?

Under this section of the report it states:

"The responders for the Enbridge spill found that after the oil remained in the environment for a few hours or days, it sank because its composition changed (weathered).2 Oil that sinks below the surface of the water is harder to see and harder to recover."

According to the U.S. Coast Guard there is no effective or known method for cleaning up Diluted Bitumen oil that sinks. Why is this fact not represented in this report?

Response GP237-20

Final EIS Chapter 3, Section 3.14, *Hazardous Materials*, and Chapter 4, Section 4.3, *Risk Considerations*, have been revised for consistency. Final EIS Chapter 4, Section 4.7, *Impacts on Resources*, has been revised to more fully describe the human health impacts. These revisions include clarification that the potentially toxic effects are more specifically related to the constituent components of crude oil rather than the crude oil itself.

Comment GP237-21

4.4 Environmental Health Risks—Terminal (Onsite)

4.4.1 What are the existing risks?

Under this section of the report it states:

"The **medium pipeline or storage tank spill scenario** could occur once in 2,500 years. This volume of spill could occur in the event of a pipeline rupture or a smaller storage tank failure. Depending on the event, it is possible that the existing containment areas would contain the majority of a spill of this size; however, if extensive infrastructure damage were to occur,

widespread environmental damage could occur."

If the above is true, then how can the "Potential Environmental Impact" under figure 4.4-1 be listed as ***LOW*** for the medium spill scenario? Why is it not ***SEVERE***? Please explain in detail.

Response GP237-21

For the reasons discussed in the Master Response for Risk Assessment Methods, the figures depicting risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, have been removed from the Final EIS.

Comment GP237-22

4.5 Environmental Health Risks—Rail Transport

4.5.1 What are the existing risks? - Figure 4.5-1. Environmental Health Risks from Potential Spills during Rail Transport—No-Action Alternative

Under this section of the report it states:

For medium to large spills the figure under "likelihood of reaching water" should read likely not unlikely. The report states that the rail line crosses 107 waterways from Centralia to Hoquiam. The report neglects to point out that from Oakville to Hoquiam the rail line parallels the Chehalis River and the Chehalis River surge plain for 16 miles (See Table 4.5-1. Sensitive Habitats along the PS&P Rail Line). This is significant and therefore it would be ***likely*** that a medium or large spill will reach the water. In this same figure for medium to large spills "potential for environmental impact" would be low. Considering the facts listed above, the potential for environmental impact should be severe for medium to large spills. Figure 4.5.1 needs to reflect these facts!

Response GP237-22

Refer to the Master Response for Risk Assessment Methods for a discussion of the assumptions, data sources, and methods used in the analysis of risks. For the reasons discussed in this Master Response, the figures depicting risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, have been removed in the Final EIS.

Comment GP237-23

4.5.2 What are the potential risks of the proposed action?

Under this section of the report it states:

"However, recent incidents in Lac-Mégantic, Québec; Casselton, North Dakota; Aliceville, Alabama; and Lynchburg, Virginia have been more significant."

Why does the report not list the reason for these recent incidents to be "more significant"? Each recent incident needs to be listed in detail as follows: the cause of derailment, amount of oil spilled, number of rail cars that exploded, loss of human life, damages to the surrounding environment and economic costs of the clean-up and who was responsible for those costs?

Response GP237-23

Final EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns*, reflects additional information on the economic and social costs of oil spills. This includes information on derailments and other accidents involving trains carrying crude oil and information on a crude oil spill during marine transport.

Comment GP237-24

4.5.2.1 Oil Spills

Oil Spill Risk

Under this section of the report it states:

"There were four recent derailments on the PS&P rail line, all in April and May 2014. These

derailments did not involve oil spills.

- On April 29, two cars derailed at 5 mph at South Washington Street in Aberdeen due to wide gauge (track separation).

- On May 9, seven cars derailed at 6 mph at Heron Street in Aberdeen due to wide gauge.

- On May 15, 10 cars derailed at 10 mph near Montesano due to thermal track misalignment.

- On May 21, 11 cars derailed at 5 mph at Blakeslee Junction due to a combination of train makeup and track geometry design."

All of these listed derailments point to the PS&P rail line having rail tracks that are in disrepair and unable to handle the current cargo being transported. How will the PS&P rail line upgrade and repair current rail tracks in order to transport crude by rail without the risk of an oil spill or explosion?

Response GP237-24

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP237-25

Also in this section the report states:

"The likelihood of very large releases would remain low."

This is totally false, especially with the state of the PS&P rail line tracks. Until the PS&P rail line upgrades the rail tracks and decaying bridges to support the transportation of crude oil this statement should read: "The likelihood of very large releases would remain ***high***."

Response GP237-25

Refer to the Master Response for Risk Assessment Methods for information about the data, methods, and approach used in the risk analysis.

Comment GP237-26

Oil Spill Prevention

Under this section of the report it states:

"As discussed in Section 4.2, *Applicable Regulations*, railroad operators that transport oil and hazardous materials are required to meet federal and state standards for

locomotives and rail cars. They must also develop contingency and response plans to prevent spills from reaching the environment."

Where are contingency and response plans to prevent spills from reaching the environment? These plans need to be included in the EIS for public review.

Response GP237-26

Contingency plans would not be required until the proposed action has been approved. Once they are available, the will be circulated for public review and comment.

Comment GP237-27

Oil Spill Prevention

Under this section of the report it states:

"As described in Section 4.2.1.2, *Rail*, PHMSA has issued a final rule that defines and regulates highhazard flammable trains (49 Code of Federal Regulations [CFR] 171?180). The proposed requirements would improve the safety of crude oil and ethanol shipments by rail (80 FR 26643)."

Since this rule has been in effect crude oil trains are still derailing and exploding. How will the rail lines transporting crude oil go above and beyond this rule to ensure that crude oil trains will no longer explode when derailed?

Response GP237-27

Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport,* discloses voluntary measures and design features, applicant mitigation, and other measures that would further reduce environmental health and safety impacts from rail transport related to the proposed action, in addition to regulatory compliance and best practices. To the extent possible, within the framework outlined in the Master Response for Mitigation Framework, measures addressing the need for more coordinated and focused planning include the role of the applicant as appropriate. However, as noted, no risks can be completely eliminated. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant.

Comment GP237-28

Under this section of the report it states:

"Reduce operating speeds to no more than 40 mph. The PS&P rail line is already limited to 25 mph as Class II track and there are slower speed limits in areas."

The Aliceville, Alabama train was traveling 20 mph when it derailed, exploded and spilled 750, 000 gallons of crude oil into surrounding wetlands. How will the PS&P rail line mitigate to prevent such an event from occurring?

"Require new and existing tank cars to meet specific design requirements or performance

criteria (e.g., thermal, top fittings, and bottom outlet protection; tank head and shell puncture resistance)."

New and existing tanks cars required to meet specific design requirements for performance criteria have already been involved in train derailments and have failed to prevent oil spills and oil explosions. The tank cars cannot be made crashworthy. Non-yard oil train **derailment spills** are guaranteed to happen in the extended area several times per decade. An oil spill would have significant and adverse impacts that cannot be prevented or mitigated. At best only 14% of the oil is recovered in a spill. Crude oil contains benzene which cannot be recovered from the water. How will the PS&P rail line mitigate to prevent these events from occurring?

Response GP237-28

Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport,* discloses voluntary measures and design features, applicant mitigation, and other measures that would further reduce environmental health and safety impacts from rail transport related to the proposed action, in addition to regulatory compliance and best practices. To the extent possible, within the framework

outlined in the Master Response for Mitigation Framework, measures addressing the need for more coordinated and focused planning include the role of the applicant as appropriate. However, as noted, no risks can be completely eliminated and, depending on the circumstances, significant impacts could occur.

Comment GP237-29

Oil Spill Response – Railroad

Under this section of the report it states:

"Implement emergency response plan required under federal law. This includes notifications and

initial actions for incidents."

Where is the emergency response plan so it can be reviewed for public comment in the EIS?

Response GP237-29

Evaluation of the emergency response plan is outside the scope of the EIS. Refer to Purpose and Focus of the EIS.

Comment GP237-30

Geographic Response

Under this section of the report it states:

"For example, the Grays Harbor GRP contains 16 response strategies relevant to an oil spill that affects the Chehalis River (this number does not include response strategies related to tributaries or wetlands that connect to the river)."

According to this report, the rail line crosses 107 waterways from Centralia to Hoquiam. So what exactly will be the response strategies related to tributaries or wetlands that connect to the river? This information needs to be available for public comment in the EIS.

Response GP237-30

As discussed in Draft EIS Chapter 4, Section 4.2, *Applicable Regulations*, the response framework would consider the specific conditions at the time of an incident to inform the best procedure for containing and responding to an oil spill.

Comment GP237-31

Under this section of the report it states:

"In addition to the site-specific information in the GRPs, there is relevant information in other

sections of the larger Northwest Area Contingency Plan that supplements the site-specific strategies. For example, Chapter 3000 – Operations, contains a section titled Operational Safety Issues Associated with Bakken Crude Oil and another section titled Fast Water Oil Spill Response, which would inform local responders in the event of a rail incident. Section 9302 of the Northwest Area

Contingency Plan is entirely dedicated to responder decision tools for oil spill response in fast water currents."

Why are these plans not included in the Appendices of this report for public review and reference?

Where are the exact methods for "oil spill response in fast water currents"? This information needs to be included in the EIS for public review.

Response GP237-31

Although the Northwest Area Contingency Plan (NWACP) contains information that would inform emergency preparedness and response planning in the event of an incident associated with the proposed action, review of and comment on the NWACP is not within the scope of the EIS. As noted in Draft EIS Chapter 3, Section 3.0, *Introduction*, the Draft EIS considers the effectiveness of existing regulations, plans, and available resources, including the NWACP, in the analysis of impacts. As discussed in Section 4.2, *Applicable Regulations*, the response framework would consider the specific conditions at the time of an incident to inform the best procedure for containing and responding to an oil spill.

Comment GP237-32

4.5.2.2 Fires or Explosions

Fire or Explosion Risk

Under this section of the report it states:

"While there have been multiple recent derailments of trains on main lines that resulted in fires or explosions, the chance of an extreme derailment is very limited in the study area because of the slow speeds on the PS&P rail line, which are slower than typical mainline speeds."

The Aliceville, Alabama spill was 20 mph and the spill was extreme. The Mount Carbon WV spill was very extreme! Extreme spills happen at slower speeds!

According to the April 16, 2015 article; *Rail defect, tank car valves implicated in West Virginia oil train fire (http://www.mcclatchydc.com/news/nation-world/national/economy/article24783187.html#storylink=cpy)* the following facts are true:

1. Outlet valves underneath four tank cars in a February oil train derailment in West Virginia were sheared off and the 50,000 gallons of crude oil they released ignited in a fire (According to Wikipedia *All of the cars were DOT-111 tank cars meeting the Casualty Prevention Circular (CPC)-1232 industry standard*).

2. 362,000 gallons of crude oil were released. The fires and explosions from the derailment kept 300 residents away from their homes.

3. Federal regulations require tank cars to survive 100 minutes of fire exposure. However, eight tank cars failed within 90 minutes after the derailment, their contents exploding in giant fireballs, according to the NTSB.

How will PS&P rail lines mitigate to prevent the scenarios listed above? Will the PS&P rail lines guarantee that all the tank cars will have thermal jackets and high capacity pressure relief valves to prevent tank cars sitting in a pool fire from exploding? Please be specific with the response.

Response GP237-32

Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport,* discloses voluntary measures and design features, applicant mitigation, and other measures that would further reduce environmental health and safety impacts from rail transport related to the proposed action, in addition to regulatory compliance and best practices. To the extent possible, within the framework outlined in the Master Response for Mitigation Framework, measures addressing the need for more coordinated and focused planning include the role of the applicant as appropriate. However, as noted, no risks can be completely eliminated and, depending on the circumstances, significant impacts could occur.

Comment GP237-33

Explosion Prevention- Explosion Response

Under this section of the report it states:

"PHMSA provides guidance for a fire or explosion from a train carrying crude oil (Pipeline and Hazardous Materials Safety Administration 2014), which states that, "in the event of an incident that may involve the release of thousands of gallons of product and ignition of tank cars of crude oil in a unit train, most emergency response organizations will not have the available resources, capabilities, or trained personnel to safely and effectively extinguish a fire or contain a spill of this magnitude (e.g., sufficient firefighting foam concentrate, appliances, equipment, water supplies). Response to unit train derailments of crude oil will require specialized outside resources that may not arrive at the scene for hours; therefore it is critical that responders coordinate their activities with the involved railroad and initiate requests for specialized resources as soon as possible.""

This is absurd beyond absurdity! There are no effective means to extinguish a fire or contain a spill of this magnitude. To date no crude by rail derailment consisting of explosions has been successfully fought or put out with "foam concentrate, appliances, equipment, water supplies". It is totally absurd to even include such comments in this report. The only effective means to fight a crude by rail train derailment explosion is to **LET IT BURN OUT**! The oil vapor pressure cannot be lowered enough to prevent ignition. When tank cars are punctured during a derailment, gases rush out and find a spark. Non-yard derailment spills usually lead to fire. Oil train fires are likely to cause **burns, deaths**, and property damage. Burns, deaths, and property damage are significant adverse impacts that cannot be prevented or mitigated. This fact needs to be included in the EIS for public review and comment.

Response GP237-33

Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport*, presents the analysis of risk of oil spills, fires, and explosions during rail transport related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident along the PS&P rail line. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including those raised in the comment. The Final EIS section acknowledges that injury and death are potential impacts of a fire or explosion.

Comment GP237-34

4.**5.3 What mitigation measures would reduce impacts related to rail transport?**

4.5.3.1 Voluntary Measures and Design Features

Why are the measures listed in this section of the report voluntary? These measures should be mandatory!

Response GP237-34

Voluntary measures and design features are measures not otherwise required by law, which the applicant has committed to and which are considered to be elements of the proposed action. Refer to the Master Response for Mitigation Framework.

Comment GP237-35

4.5.3.2 Applicant Mitigation

Under this section of the report it states:

"The applicant will implement the following mitigation.

- To improve preparedness for incidents, including oils spills, explosions, and fires, the applicant will ensure an emergency preparedness workshop is conducted prior to beginning project operations. The applicant will coordinate the workshop with Ecology. The workshop will be no more than 1 day in length and be held prior to beginning operations and annually thereafter. The initial workshop will focus on familiarizing local emergency responders, tribes, and communities with the contents of the Northwest Area Contingency Plan, the Grays Harbor and Chehalis Geographic Response Plans, other local response plans, the facility response plan, and the measures that are in place for a rapid and effective spill response."

The workshop will be no more than 1 day in length! Are you serious? Can this report get any more absurd? Why is this workshop no more than 1 day in length? Does one honestly believe that the contents of "the Northwest Area Contingency Plan, the Grays Harbor and Chehalis Geographic Response Plans, other local response plans, the facility response plan, and the measures that are in place for a rapid and effective spill response" can be covered in no more than 1 day in length? This is totally unrealistic and needs to be appropriately addressed in the EIS.

Response GP237-35

Comment acknowledged.

Comment GP237-36

Under this section of the report it states:

"Due to sensitivity of the local environment, tribal resource concerns, and the potential presence of special-status species, to improve coordination and response capabilities in the event of a rail accident, the applicant will not accept crude oil by rail unless PS&P prepares, submits to Ecology for approval, and implements a contingency plan…"

Where are the contingency plan? These plans need to be completed and made available for public review and comment in the EIS.

Response GP237-36

As noted in Draft EIS Chapter 4, Section 4.2, *Applicable Regulations*, an oil spill contingency plan is not required prior to operations and has not been developed. However, once a plan has been submitted to Ecology as required by WAC 173-186, it will be available for public review and comment for a period of 30 days. Refer to the Master Response for the Purpose and Focus of the EIS.

Comment GP237-37

Under this section of the report it states:
"To improve response capability for trains transporting product to the project site, the applicant will not accept crude oil until a foam truck has been provided to the Elma Fire Department to provide fire-fighting capability along the PS&P rail line. The foam truck must be available and operational prior to beginning operations. The applicant will consult with Ecology and the local fire department to determine the capacity of the foam truck."

Is this seriously being considered? To date a foam truck has not been effective in fighting a crude by rail train derailment and explosion. Why is this even being considered? If it is being considered, who will be purchasing the foam truck? Will taxpayer dollars be used to purchase the foam truck? All of these questions need to be addressed in the EIS for public review and comment.

Response GP237-37

Final EIS Chapter 4, Section 4.5.3.2, *Applicant Mitigation*, clarifies the proposed measure to support the Elma Fire Department's response capabilities. The measure is the responsibility of the applicant.

Comment GP237-38

4.5.5 Who would pay for the response and cleanup of a rail transport spill?

Under this section of the report it states:

"The liability for rail transport spills is the same as described for onsite spills (Section 4.4.5) when there is the potential for waters of the United States to be affected. The polluter pays for costs and damages associated with oil spills. Response and cleanup of spills from rail cars that threaten the navigable waters or adjoining shorelines are the responsibility of the owner or operator (also referred to as the shipper) of the rail cars carrying the crude oil (RCW 88.40, Transport of Petroleum Products—Financial Responsibility). The federal government has established high limits on that liability. Washington State places no limits on liability of polluters to third parties, allowing recovery of cleanup costs and natural resource damages beyond the federal limit. To cover removal costs above the federal limits of liability, the U.S. Congress established a 1-billion-dollar Oil Spill Liability Trust Fund to pay for expeditious oil removal and uncompensated damages."

Who will pay when the "shipper" claims bankruptcy as did the "shipper" for the Lac-Mégantic, Québec crude by rail derailment disaster with costs currently approaching 2 billion dollars?

Response GP237-38

Draft EIS Chapter 4, Section 4.5.5, *Who would pay for the response and cleanup of a rail transport spill?* addresses the liability for rail transport spills. Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS.

Comment GP237-39

Who will pay when the costs exceed the U.S. Congress established a 1-billion-dollar Oil Spill Liability Trust Fund?

Response GP237-39

Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law.

Comment GP237-40

Will it be mandatory for the "shipper" to obtain the best available insurance policies to cover a worst case scenario of a crude oil disaster by rail?

Response GP237-40

The Oil Transportation Safety Act (House Bill 1449, Section 10) added a new section to RCW Chapter 81.04 (81.04.560) that requires railroad companies that transport crude oil in Washington to submit information relating to the railroad company's ability to pay damages in the event of a spill or accident involving the transport of crude oil in Washington. The Washington Utilities and Transportation Commission is administering this requirement and recently approved regulations (TR-151079, effective March 11, 2016) that require rail operators transporting crude oil in Washington to state in a required annual report that they carry sufficient insurance to cover any losses resulting from a reasonable worst-case spill. Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS.

Comment GP237-41

4.6 Environmental Health Risks—Vessel Transport

Oil Spill Prevention

Under this section of the report it states:

"Vessel operators are required to develop and implement safety and contingency plans to ensure that appropriate protocols, equipment, and training are in place to reduce the chances and extent of damage related to spills."

Where are the safety and contingency plans to ensure the appropriate protocols, equipment, and training are in place to reduce the chances and extent of damage related to spills? These plans need to be available for public review and comment in the EIS.

Response GP237-41

Although individual vessel operator contingency plans contain information that would inform emergency preparedness and response planning in the event of an incident associated with the proposed action, review of and comment on these plans is not within the scope of the EIS. As noted in Draft EIS Chapter 3, Section 3.0, *Introduction*, the Draft EIS does consider the effectiveness of existing regulations, plans, and available resources, which includes an understanding of the basic requirements of a vessel contingency plan, in the analysis of impacts. And as discussed in Draft EIS Chapter 4, Section 4.2, *Applicable Regulations*, the response framework would consider the conditions at the time of an incident to inform the best procedure for containing and responding to an oil spill.

Comment GP237-42

Oil Spill Response- Geographic Response

Under this section of the report it states:

"The GRPs describe response strategies such as placing boom to close off access of spilled oil into environmentally sensitive sites (such as Grass Creek in North Bay or Newskah Creek just to the south of Rennie Island)."

Booming is a useless oil spill response strategy in Grays Harbor, especially during the fall, winter and spring months when storms are persistent. These storms are accompanied by high winds and fast flowing/flooding currents. What other oil spill response strategy will be used instead of booming to protect environmentally sensitive sites when winds are creating waves and currents are flooding?

Response GP237-42

Final EIS Chapter 4, Section 4.4, *Environmental Health Risks—Terminal (Onsite*), includes proposed applicant mitigation measures to assess the feasibility of response strategies in the study area, including rail and vessel transport, options for prevention and response strategies other than booming. If the underlying permit application is approved, these measures can be required to inform strategies that would be required in the applicant's contingency plan and related operational approvals. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion.

Comment GP237-43

Under this section of the report it states:

"In some cases, economic considerations may dictate response priorities (for example preventing oil from affecting shellfish harvest areas or a marina)."

Preventing oil from affecting shellfish harvest areas. The exact methods, time of response, and allocation of resources needs to be explained in full detail on how this will occur? Every shellfish

grower/harvester in Grays Harbor and along the WA coastal beaches has a right to know: "How this will be done?!"

Response GP237-43

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. Section The geographic response plans, as referenced in Final EIS Chapter 4, Section 4.2, *Applicable Regulations*, supplement the Northwest Area Contingency Plan and provide additional information on sensitive resources that could be affected by a spill at specific locations in the study area. The plans also identify appropriate response strategies for different spill scenarios. These plans are publicly available as follows:

- The Northwest Area Contingency Plan: http://www.rrt10nwac.com/Files/NWACP/2016/Northwest%20Area%20Contingency%20Plan%202016.pdf
- The Chehalis River Geographic Response Plan: http://www.ecy.wa.gov/programs/spills/preparedness/GRP/ChehalisRiver/ChehalisRiverGRP.pdf
- The Grays Harbor Geographic Response Plan: http://www.ecy.wa.gov/programs/spills/preparedness/GRP/GraysHarbor/GraysHarbor-AllChapters.pdf

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

Comment GP237-44

4.6.2.2 Fires or Explosions

Explosion Prevention

Under this section of the report it states:

"Ecology also conducts vessel inspections. Vessel classification societies also regularly survey vessels to ensure compliance."

How often does Ecology conduct vessel inspections? How often do vessel classification societies survey vessels to ensure compliance? This information needs to be included in the EIS for public review and comment.

Response GP237-44

Draft EIS Chapter 4, Section 4.2, *Applicable Regulations*, describes the applicable regulatory requirements and framework related to vessel transportation. The inspection requirements for all tank vessels are provided in 33 CFR D (Part 30-40). As required by 46 USC 3714, each foreign tank vessel must undergo a Certificate of Compliance Exam conducted by the U.S. Coast Guard at its initial U.S. port of call and at least annually thereafter. U.S. tank vessels are also boarded annually to maintain a current Certificate of Inspection and to ensure other international and domestic

requirements are being met (e.g., pollution prevention, lifesaving, navigation equipment). Additional design, equipment, and operations requirements relating to pollution prevention for vessels that carry oil are provided in 33 CFR O, 151–157). Vessel classification society boardings are carried out independently or in conjunction with the U.S. Coast Guard boarding depending upon the situation. Washington State Department of Ecology inspects vessels and observes oil transfer operations in accordance with 90.56 RCW and 88.46.167 RCW, respectively. The following link provides information on the requirements for tank vessels operating in Washington State waters:

http://www.ecy.wa.gov/programs/spills/prevention/vesseltechassist/tankvessels.html.

Comment GP237-45

Under this section of the report it states:

"A venting system that prevents tanks from being over-pressurized while they are being loaded or if the product expands while being transported. Vapors are released high above the deck at the end of vent risers, away from potential ignition sources."

What measures are in place to protect the safety of people working or living in the vicinity of the toxic vapors being released into the environment?

Response GP237-45

The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, would reduce emissions of criteria and toxic air pollutants from onsite stationary sources.

As described in Draft EIS Chapter 3, Section 3.2, *Air*, based on air quality modeling for conducted by the applicant, onsite emissions of toxic air pollutants related to routine operations of onsite stationary sources would be below the state thresholds identified in WAC 173-460-150. The Final EIS section reflects updated estimates based on a review of recently published Bakken crude oil data. These emissions are subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping for onsite stationary sources. Refer to the Draft EIS for a list of permit conditions and applicant mitigation that would reduce potential impacts on air quality.

Comment GP237-46

4.6.3.1 Applicant Mitigation

Under this section of the report it states:

"To reduce the risk of a fire or explosion from tank barges, the applicant will not receive or supply Bakken crude oil to tank barges unless the tank barges are able to inert their tanks when carrying Bakken crude oil."

What product will be used to "inert their tanks"? How much will this reduce the risk of a fire or explosion?

Response GP237-46

Draft EIS Chapter 4, Section 4.6.2.2, *Fires or Explosions*, discusses the use of an inert gas system to reduce the threat of a fire or explosion on tank vessels and barges. Controlling ignition sources also helps reduce the chance of igniting any vapors. As noted in Master Response for Environmental Health and Safety Analysis, the risk assessment considers the risks of various release scenarios regardless of causal event to provide information to characterize the risk profile and better target the need for potential mitigation.

Comment GP237-47

Under this section of the report it states:

"To improve response times and communication in the event of an incident that could affect commercial or recreational fishing, the applicant will develop a method for provide information on potential incidents to commercial and recreational fishing boats and will describe this measure in the oil spill contingency plan prior to beginning operations."

Where is the oil spill contingency plan? The plan needs to be included in the EIS for public review and comment.

Response GP237-47

As noted in Draft EIS Chapter 4, Section 4.2, *Applicable Regulations*, an oil spill contingency plan is not required prior to operations and has not been developed. However, once a plan has been submitted to Ecology as required by WAC 173-186, it will be available for public review and comment for a period of 30 days.

Comment GP237-48

4.6.3.2 Other Measures to Be Considered

Why is an emergency response tug stationed at Grays Harbor not listed in this section? Why is this not mandatory?

Response GP237-48

Final EIS Chapter 3, Section 3.17.4.2, *Large Commercial Vessels*, clarifies the emergency response capabilities of the tugs stationed at Grays Harbor.

Comment GP237-49

4.6.4 Would the proposed action result in unavoidable and significant adverse environmental impacts related to vessel transport?

Under this section of the report it states:

"However, no mitigation measures would completely eliminate the possibility of a large spill or explosion, nor would they completely eliminate the adverse consequences of a large spill or explosion."

This statement alone sums up the insanity of the proposed Westway and Imperium oil terminals. Please explain what the full costs would be to the local economy and environment if a large spill or explosion were to occur?

Response GP237-49

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP237-50

4.7 Impacts on Resources

Groundwater

Under this section of the report it states:

"In the study area, the highest risk of groundwater contamination from spilled crude oil would be along the PS&P rail line, which runs through several areas underlain by largely unconfined surficial1 aquifers. These aquifers are known to interact with surficial water features (e.g., rivers, streams), generally receiving discharge from these features during the winter when river stages are high and discharging to rivers and stream during the summer when river stages are low (Gendaszek 2011:10)."

Exactly how will these groundwater areas be protected from an oil spill or explosion? Please list the exact details and costs of implementing such protective mitigation measures.

Response GP237-50

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. The potential impacts are described in general terms in Final EIS Section 4.7, *Impacts on Resources*, including the potential impacts on groundwater. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2, has been updated to provide additional information about economic and social costs of oil spills.

Comment GP237-51

Under this section of the report it states:

"The greatest potential for the most extensive environmental exposure would involve a large spill directly to surface waters because the oil could be transported to a much wider geographic area. For these reasons, the subsequent discussion focuses on the potential for impacts on plants for a larger-scale release within Grays Harbor or the Chehalis River.

If a plant comes into direct contact with crude oil, constituent compounds (e.g., polycyclic aromatic hydrocarbons) can cause acute toxicity, resulting in tissue necrosis and loss of photosynthetic ability.

Depending on the amount of a plant's surface that is coated, crude oils and heavy refined oils can destroy plant tissues through direct toxicity and can reduce photosynthesis, oxygen transfer to the roots, and respiration to the point where the aboveground portion of the plant dies. Regrowth from below ground roots and rhizomes is possible within one to two growing seasons, although 3 to 5 years is a typical recovery period for salt marshes such as are present along the shores of Grays Harbor and the lower Chehalis River (International Tanker Owners Pollution Federation Limited 2011a:4; Michel and Rutherford 2013:2-21)."

It is bad enough native plants would be destroyed, but there is no mention of agricultural crops. If an oil spill occurs along the rail line when the Chehalis River is flooding as it is today (11-18-15) as I write these comments farmers would lose crops for market and feed for animals. Who will cover farmers loses for 3-5 years or longer?

Response GP237-51

Final EIS Section 4.7, *Impacts on Resources*, clarifies that while impacts would depend on the circumstances of the incident, the resources described in Chapter 3 could be affected. This section has been revised to more specifically refer to the potential for impacts of a crude oil spill on crop land. Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS.

Comment GP237-52

Under this section of the report it states:

"Dispersed oil in the water column can also affect floating plants (phytoplankton), nonfloating kelp, and primary consumers (zooplankton) typically through direct toxicity. This affects, at least temporarily, the base of the estuarine and marine food web, which, depending on the extent (in size and duration) of the damage, can result in broader ecological damage."

Why does the statement end with "can result in broader ecological damage"? The true statement should read "can result in a complete ecological collapse in areas of oil contamination". The amount of "downplaying" the consequences of an oil spill throughout this report is shameful and totally unprofessional.

Response GP237-52

Draft EIS Chapter 4, Section 4.7, *Impacts on Resources*, describes the general types of impacts that could be expected if an incident were to occur and acknowledges resources that could be adversely affected. The potential impacts from a spill would vary based on the material spilled, weather, tides,

location, and other factors. The reference to broader ecological damage is inclusive of extensive damage.

Comment GP237-53

Under this section of the report it states:

"Once oil enters these small pores, it can be very difficult to access and clean up contaminated areas. Heavier and more viscous oils, such as bitumen, may be more likely to remain trapped in pore spaces and thus be more difficult to remove (International Tanker Owners Pollution Federation Limited 2011a:6). High viscosity oils can also form "asphalt pavements"—the oil oxidizes in small pore spaces into hard pavement that can persist for decades (International Tanker Owners Pollution Federation Limited 2011b:7)."

Since oil can still be found just a few inches below the surface of the shoreline from the Exxon Valdez spill that occurred in 1989; what exactly will the mitigation plans be to prevent and clean-up contaminated areas that fall under the above classification?

Sensitive Areas in the Study Area-Grays Harbor Shoreline, Chehalis River Surge Plain Natural Area and Grays Harbor National Wildlife Refuge (Bowerman Basin)

Response GP237-53

Draft EIS Chapter 4, Section 4.2, *Applicable Regulations*, includes a discussion of the existing regulatory framework in place to respond to and cleanup an oil spill. Refer to the Master Response for Liability and Responsibility for Incidents.

Comment GP237-54

Under this section of the report it states:

"However, no mitigation measures can be implemented that will completely eliminate the possibility of a large spill, nor are there any mitigation measures that will completely eliminate the adverse consequences of a large spill."

Another callous statement that sums up the insanity of the proposed Westway and Imperium oil terminals. So does that mean the *Sensitive Areas in the Study Area-Grays Harbor Shoreline, Chehalis River Surge Plain Natural Area and Grays Harbor National Wildlife Refuge (Bowerman Basin)* are expendable? What would the exact economic and environmental costs be if a large spill would destroy these Sensitive Areas?

Response GP237-54

Refer to Response to Comment GP237-50.

Comment GP237-55

4.7.1.3 Animals- Impacts from Oil at the Water Surface

Under this section of the report it states:

"Federally protected species such as killer whales, humpback whales, and sea turtles such as leatherback and green sea turtles might visit Grays Harbor (although rarely) and can be seasonally present in adjacent Pacific coast waters."

Why does this statement list humpback whales visiting Grays Harbor as rare? This is totally false and needs to be corrected! Humpback whales are regular visitors to Grays Harbor and have been observed feeding in the harbor on multiple occasions this summer and in years past.

Response GP237-55

Final EIS Chapter 3, Section 3.5, *Animals,* and Chapter 4, Section 4.7.1.3, *Animals*, clarify whale use of the study area. Additional information on humpback whales and killer whales has also been added to Section 3.5.

Comment GP237-56

Impacts from Oil in the Water Column

Under this section of the report it states:

"These responses include developmental abnormalities in larval and adult fish, cardiovascular defects in embryonic fish, and delayed hatching and smaller size at hatching of juveniles (Michel and Rutherford 2013:2?18)."

Why does this report not include the latest findings from the report *Very Low Embryonic Crude Oil Exposures Cause Lasting Cardiac Defects in Salmon and Herring*? Since salmon and herring populations are vital to Grays Harbor and the coastal waters the most relevant and significant studies involving crude oil exposures to such populations must be included in this report.

Response GP237-56

There are many studies on the potential impacts of oil (and its components) on many species and specific physiological functions. Draft EIS Chapter 4, Section 4.7, *Impacts on Resources*, covers subacute and acute impacts, and the worst-case scenario of death for aquatic organisms, including fish. These impacts are well documented in literature, and as required under SEPA regulations (WAC 197-11-440 (6)(c)(v)), impacts are summarized in the Draft EIS.

Comment GP237-57

Impacts from Oil along Shoreline and Intertidal Habitats

Under this section of the report it states:

"Common benthic invertebrates in Grays Harbor marshes and intertidal mudflats include variousspecies of clams and snails, as well as intertidal crabs (e.g., red rock crabs and Dungeness crabs), which burrow in the substrates of these habitats. Oil that sinks and binds with sediments in these habitats can become trapped, resulting in smothering or toxic effects in benthic invertebrates."

Why does the report neglect to state the smothering or toxic effects in the microbenthic invertebrates, major food web organisms of the marine environment?

Response GP237-57

Draft EIS Chapter 4, Section 4.7, *Impacts on Resources,* addresses the potential oil impacts on plankton, phytoplankton, and zooplankton, which are major food web organisms that include microscopic plants and animals (including microinvertebrates in the benthic zone).

Comment GP237-58

Terrestrial Animals

Under this section of the report it states:

"Oil spills in the vegetated terrestrial environment could occur during rail transport and could affect terrestrial animals and their habitats."

Why is livestock not included under "terrestrial animals"?

Response GP237-58

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 4, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. Final EIS Section 4.7 acknowledges agricultural uses along the rail line.

Comment GP237-59

Sensitive Areas in the Study Area

Under this section of the report it states:

"The U.S. Fish and Wildlife Service designated critical habitat in several areas along the PS&P rail line for the federally listed bull trout (fish) and marbled murrelet (bird), and has proposed critical habitat for the Oregon spotted frog."

Why is the Pacific Ocean not included as designated critical habitat for the marbled murrelet considering it lives and forages along the Washington coast? This fact needs to be included in the EIS.

Response GP237-59

Critical habitat is a specific habitat designation under federal regulations and the critical habitat designation applies to specific areas identified in the regulations. The U.S. Fish and Wildlife Service has not designated marbled murrelet critical habitat in the Pacific Ocean.

Comment GP237-60

Under this section of the report it states:

"The applicant has committed to cease all vessel-loading operations for a 2-week period each year during the Grays Harbor Shorebird Festival."

This is such an absurd statement it is laughable. Why does the applicant not recognize that any oil spill at any time of the year would jeopardize all living organisms?

Response GP237-60

Although ceasing vessel-loading operations for 2 weeks during the Grays Harbor Shorebird Festival would reduce risks related to oil spills that could affect migratory birds during this migratory season as well as other species in the area, the Final EIS clarifies that the applicant's primary intent in committing to this voluntary measure is to recognize the importance of the annual Grays Harbor Shorebird Festival to the community and those attending the festival and to completely eliminate the chance of a spill from vessel-loading operations during this time. The measure has been moved to Final EIS Chapter 3, Section 3.10, *Recreation*, to reflect this clarification.

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant.

Comment GP237-61

4.7.1.4 Aesthetics

Under this section of the report there is no mention on how private property would be effected by oil spills?

Response GP237-61

The approach to the risk analysis is to consider different potential spill scenarios related to the proposed action. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms, which includes aesthetic impacts on surrounding land uses regardless of specific land ownership.

Comment GP237-62

4.7.1.5 Recreation

Under this section of the report it states:

"However, no mitigation measures can be implemented that will completely eliminate the possibility of a large spill, nor are there any mitigation measures that will completely eliminate the adverse consequences of a large spill."

This statement seems to be a rather common phrase throughout this report. It is so insensitive and has a total disregard for the recreational value of Grays Harbor and the people who live in this community. How can the proposed Westway and Imperium oil terminals even be considered given the above statement?

Response GP237-62

The statement referred to in the comment is intended to acknowledge the potential for unavoidable significant impacts in a consistent manner for all resource areas that could occur as the result of the proposed action. As noted previously, the approach to the risk assessment is to evaluate the risks of select spill scenarios and therefore, does not identify the impacts that could affect specific resource areas. However, Chapter 4, Section 4.7, *Impacts on Resources,* does address the types of impacts that could occur, including the impacts on recreational resources within Grays Harbor, in general terms.

Comment GP237-63

4.7.1.8 Human Health

Under this section of the report it states:

"A potential health risk is posed from the inhalation of high concentrations of hydrogen sulfide released into the air from an oil spill."

Why is there no mention of the inhalation of high concentrations of hydrongen sulfide and other toxic gases that will be released from venting rail cars, tanks and vessels?

Response GP237-63

The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, would reduce emissions of criteria and toxic air pollutants from onsite stationary sources.

As described in Draft EIS Chapter 3, Section 3.2, *Air*, based on air quality modeling for conducted by the applicant, onsite emissions of toxic air pollutants related to routine operations of onsite stationary sources, including hydrogen sulfide, would be below the state thresholds identified in WAC 173-460-150. The Final EIS section reflects updated estimates based on a review of recently published Bakken crude oil data. These emissions are subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping for onsite stationary sources. Refer to the Draft EIS for a list of permit conditions and applicant mitigation that would reduce potential impacts on air quality.

Rail and vessel operators are required to adhere to all applicable regulatory requirements intended to ensure the safe passage of freight.

Comment GP237-64

4.7.2.1 Recent Fires and Explosions Involving Crude Oil Trains

Since the report lists all of the recent fires and explosions involving crude oil trains, then how can the report make the following statements?

"The **large (five-car) rail transport spill scenario** could occur once in 4,800 years with current rail cars; with rail car improvements, this would extend to once in 11,000 years."

"The **large (30-car) rail transport spill scenario** could occur once in 10,000 years with current rail cars; with rail car improvements, this would extend to once in 74,000 years."

What sources were used to come up with the above statements? It seems the recent events listed under section 4.7.2.1 had a frequency of less than 4,800 and 10, 000 years? Is that not true? Where are the facts to support the above statements? Were the recent listed events used in determining the above statements? If they were not then why?

Response GP237-64

Recent events are included in the Federal Railway Administration's database used to derive accident rates. The scale of the nationwide rail system is more than a 1,000 times the length of the PS&P rail line, with a very large number of trains traveling each day. Thus, the likelihood of an incident occurring along any single segment of railroad (such as the PS&P rail line) would be much less than the likelihood of an incident occurring across the nation on the entire mainline railroad system. In addition, the Draft EIS determines the likelihood of an accident on an annual basis. These frequencies can be multiplied by the expected lifetime of the proposed action to determine the overall chance of an accident of a specific size.

Comment GP237-65

Chapter 5 Extended Rail and Vessel Transport

5.4.4.4 Emergency Response Towing Vessel

Under this section of the report it states:

"To help protect Washington's shorelines and waterways, the Washington State maritime industry has permanently stationed an emergency response towing vessel in Neah Bay. The tug is an important safety net to prevent disabled ships and barges from grounding off Washington's outer coast or in the western Strait of Juan de Fuca. Tank vessels transiting to or from a Washington port through the Strait of Juan de Fuca (except for transits extending no further west than Race Rocks Light) must include the emergency response towing vessel stationed at Neah Bay in their oil spill contingency plans (RCW 88.46.130)."

In section 3.17.4.2 the report states:

"The existing emergency response towing vessel at Neah Bay, located at the far northwest corner of Washington State, is available to assist vessels off the coast of Washington and in Puget Sound. It could assist with vessels in a difficult situation in or near Grays Harbor; however, under normal weather conditions, it could take an average of 12 hours to reach the harbor. Under adverse weather conditions, transit time to Grays Harbor could be as much as 18 hours."

How can an emergency response towing vessel stationed in Neah Bay that can take 12 or more hours to reach Grays Harbor be considered an important safety net? Again, according to the Westway and Imperium permits, both companies intend to ship millions of gallons of crude oil from the port of Grays Harbor; therefore why is an emergency response towing vessel not being stationed at the port of Grays Harbor? Why is this not a mandatory recommendation in order for either permit to be considered?

Response GP237-65

Final EIS Chapter 3, Section 3.17.4.2, *Large Commercial Vessels*, clarifies the emergency response capabilities of the tugs stationed at Grays Harbor.

Comment GP237-66

5.6 What mitigation measures would reduce impacts on rail and vessel transport in the extended study area?

Under this section of the report it states:

"The increase in rail and vessel traffic in the extended study area from the proposed action is small relative to the existing and anticipated future traffic that will occur without the projects. A risk of an incident involving a major spill, fire, explosion, or derailment in the extended study area exists but has a low likelihood based on the small increase in overall rail and vessel traffic due to the proposed action. Therefore, no mitigation is proposed in the extended study area."

Where are the facts to support the above statement? Where are the reports and references to support the above statement?

Response GP237-66

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, and Chapter 6, *Cumulative Impacts*, address potential impacts in the extended study area, including the potential for increased risks, individually and cumulatively, respectively. The analysis of impacts in the extended study area is qualitative for the reasons discussed in the Master Response for Geographic Scope of the EIS. Final EIS Chapters 5 and 6 have been revised to clarify the potential impacts in the extended study area.

Comment GP237-67

Chapter 6 - Cumulative Impacts

Toxic Air Pollutants

Why does this section not include the toxic air pollutants, which include high concentrations of H2S at 1200 parts per million, from the venting of crude oil from rail cars, storage tanks and vessels?

Response GP237-67

The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, would reduce emissions of criteria and toxic air pollutants. As described in Draft EIS Chapter 3, Section 3.2, *Air*, based on air quality modeling for conducted by the applicant, onsite emissions of toxic air pollutants related to routine operations of onsite stationary sources, including hydrogen sulfide, would be below the state thresholds identified in WAC 173-460-150. The Final EIS section reflects updated estimates based on a review of recently published Bakken crude oil data.

Rail and vessel operators are required to adhere to all applicable regulatory requirements intended to ensure the safe passage of freight. Refer to the Master Response for Cumulative Analysis for an explanation of the scope of the analysis in Chapter 6, *Cumulative Impacts*.

Comment GP237-68

6.5.1.3 Mitigation Measures

Where are the mitigation measures for rail cars, storage tanks and vessels venting toxic air pollutants which include high concentrations of H2S at 1200 parts per million?

Response GP237-68

The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, would reduce emissions of criteria and toxic air pollutants from onsite stationary sources.

As described in Draft EIS Chapter 3, Section 3.2, *Air*, based on air quality modeling for conducted by the applicant, onsite emissions of toxic air pollutants related to routine operations of onsite stationary sources, including hydrogen sulfide, would be below the state thresholds identified in WAC 173-460-150. The Final EIS section reflects updated estimates based on a review of recently published Bakken crude oil data. These emissions are subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping for onsite stationary sources. Refer to the Draft EIS for a list of permit conditions and applicant mitigation that would reduce potential impacts on air quality.

Rail and vessel operators are required to adhere to all applicable regulatory requirements intended to ensure the safe passage of freight. Refer to the Master Response for Mitigation Framework for information about the development and enforcement of mitigation measures.

Comment GP237-69

6.5.5.3 Mitigation Measures

Under this section of the report it states

"To ensure that local emergency service providers have access to areas south of the PS&P rail line in Aberdeen, the applicant will ensure an automobile with an 8-foot clearance and a combination truck (pumper and ambulance) are available for staging south of the PS&P rail line in the Olympic Gateway Plaza for use by local emergency service providers. The applicant will also ensure an ambulance is available for staging south of PS&P rail line in the Port of Grays Harbor area between the project site and Port Industrial Road for use by emergency service providers. These measures will be in place prior to beginning crude oil operations."

How can this mitigation measure get the emergency vehicle to a hospital any faster if the train is blocking the tracks?

Response GP237-69

Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

Comment GP237-70

6.5.7.3 Mitigation Measures

Under this section of the report it states:

"To improve oil recovery in the case of a spill during vessel loading at the dock, the applicant will retain a licensed engineer to perform an independent engineering analysis and feasibility study to determine the number of days it is safe and effective to preboom oil transfers and to identify site-specific improvements to maximize successful prebooming. The applicant will ensure the study is submitted to Ecology for review. If approved, Ecology will amend the applicant's oil spill contingency to require prebooming and improvements consistent with the study."

Where is the analysis and feasibility study to determine the number of days it is safe and effective to preboom oil transfers and to identify site-specific improvements to maximize successful prebooming? Why is this study not available for public review and comment before the permits are issued?

Response GP237-70

Refer to the Master Response for Mitigation Framework for a discussion of public availability for studies identified in the mitigation measures.

Comment GP237-71

Under this section of the report it states:

"At a minimum, this alternative must include the following elements.

One oil spill response vessel with crew, skimmer, and at least 1,000 feet of boom at the dock."

What are the mitigation measures for recovering Diluted Bitumen, it sinks? Where are the mitigation measures for cleaning up and recovering Diluted Bitumen?

Response GP237-71

It is the constituent chemicals of diluted bitumen that can be acutely toxic. Final EIS 4.7, *Impacts on Resources*, has been revised to more fully describe the potential impacts on human health.

As noted in Draft EIS Chapter 4, Section 4.2, *Applicable Regulations*, such plans are not required prior to operations and have not been developed. However, once the plans have been submitted to Ecology, such as the contingency plan required by WAC 173-186, they will be available for public review and comment for a period of 30 days. Refer to the Master Response for the Purpose and Focus of the EIS.

To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP237-72

Under this section of the report it states:

"To reduce the risks and impacts from an oil spill, prior to beginning the proposed operations the applicant will conduct a study to identify an appropriate level of financial responsibility for the potential costs for response and cleanup of oil spills, natural resource damages, and costs to state and affected counties and cities for their response actions."

Where is the above study and why is not available for public review in the EIS?

Response GP237-72

Refer to the Master Response for Mitigation Framework for a discussion of public availability for studies identified in the mitigation measures.

Comment GP237-73

Under this section of the report it states:

"Due to sensitivity of the local environment, tribal resource concerns, and the potential presence of special-status species, to improve coordination and response capabilities in the event of a rail accident, the applicant will not accept crude oil by rail unless PS&P prepares, submits to Ecology for approval, and implements a contingency plan meeting the requirements identified below. This requirement will remain in place until state contingency plan requirements for railroads are implemented by Ecology pursuant to ESHB 1449, Section 5, and/or amendments to the federal oil spill response plan rule (49 Code of Federal Regulations 130) is adopted."

Where is the contingency plan for public review in the EIS?

Response GP237-73

Applicable plans would be prepared and permits would be issued after the publication of the Final EIS. Refer to the Master Response for the Purpose and Focus of the EIS. State approved contingency plans are made available for public review and comment when complete.

Comment GP237-74

6.5.8.1 Rail Traffic

Under this section of the report it states:

"More specifically, the following impacts could occur as more trains, including the anticipated increases in Class I freight rail traffic, travel along the BNSF main line routes. - Increased emissions resulting from more diesel trains."

Where are the impacts of toxic air pollution being vented from the oil rail cars? Why is this not listed as an impact that would occur?

Response GP237-74

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment,*

Impacts, and Mitigation, which presents a detailed analysis of potential impacts on air in the study area related to the proposed action. As noted in Section 3.2, *Air*, the release of toxic air pollutants during rail transport related to the proposed action is not anticipated to be significant. Chapter 6, *Cumulative Impacts*, similarly addresses these potential impacts from the cumulative projects.

Comment GP237-75

Chapter 7-Economics, Social Policy, and Cost-Benefit Analysis

Under this section of the report it states:

"The proposed action would generate an estimated 73 jobs throughout the County's economy. These jobs would account for $3.6 million in annual direct labor income and benefits and $5.1 million in total labor income and benefits throughout the County's economy (Table 7-7)."

Really, 73 jobs? What exactly would be the economic loses to the thousands of direct sea resources jobs when an oil spill puts those individuals out of work? What would be the economic loses for all the indirect jobs that support the sea resources industry when an oil spill occurs? Why are these figures not included in this report? Is it not supposed to be a **Cost**-Benefit Analysis? So where are the costs?

The Cost-Benefit Analysis of the report is totally bogus plain and simple. If exact figures can be estimated for Benefits then the same can be said for **Costs**. What a bunch of malarkey stating repeatedly throughout this chapter "It is not possible to estimate how much…" loses would be. The lack of costs associated with any oil spill/explosion to a particular entity whether it be the shellfish industry or community etc…. is appalling. It is imperative the **exact costs** related to cleanup activities and related degradation be fully listed in this section of the document. Do the work!

Response GP237-75

Draft EIS Section 7.1.4, *What are the potential impacts on economic conditions?* describes the estimated impacts on employment associated with the construction and operation of the proposed action, including the number of direct, indirect, and induced jobs that would be generated as a result of the project. Final EIS Chapter 7, Section 7.3.4.2, Po*tential Costs Related to Environmental Health and Safety Concerns,* reflects additional information on the economic and social costs of oil spills. This includes information on derailments and other accidents involving trains carrying crude oil and information on a crude oil spill during marine transport. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP238, **Figlar-Barnes, Ron**

Comment GP238-1

Westway and Imperium Expansion Projects Draft Environmental Impact Statements Here are my comments regarding the DEIS. These project should not have gone this far in the process. Several concerns can not be mitigated. The projects endanger so many communities and environments it is amazing that the Department of Ecology did not deny the permits immediately. Attached are my questions regarding the DEIS.

Westway and Imperium DEIS

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ICF International and Ms. Toteff,
Westway and Imperium crude oil-by-rail terminal EIS

Thank you for the opportunity to comment again on these two projects. In previous correspondences and testimony we expressed our disbelief that these type of projects would be proposed in an area which is susceptible to sea level rise, earthquake activity and is in a tsunami zone. Despite the logic for rejection of these proposals due to these major factors we are still going through the process asking for the permits to be denied. According to the Washington Administrative Code [WAC 197-11-560] it is the responsibility of the lead agency to respond to our questions. As stated,

"The lead agency must consider comments received during the draft EIS comment period, and respond to them in the final EIS Lead agency responses—comments should be as specific and informative as possible.

Possible responses are to:

- Explain how the alternatives, including the proposed action, were modified;

- Identify new alternatives that were created;

- Explain how the analysis was supplemented, improved, or modified;

- Make factual corrections; or

- Explain why the comment does not warrant further agency response.

Since all of our questions will be specific and we are requesting specific answers. As stated in the DEIS "in all likelihood, the projects will have an accidents", oil will spill, or an explosion will occur and the community will suffer loss. Since this is the basic conclusion of the DEIS, that accidents are unavoidable, we ask; how can a project be permitted when there is no mitigation for loss? How can a non-mitigatable human activity be allowed?

For our questions, we want to see the specific mitigation actions for each of our concerns. For example, who will pay the businesses and individuals associated with economic loss or loss of life associated with the transport and siting of these oil terminals when an unavoidable accident occurs. How and who will evaluate loss?

The DEIS has determined that the projects' (1), will increase rail and marine vessel traffic (2), would increase the risk of a derailment, collision, spill, fire, or explosion. (3), the projects would cause increased air pollution from more diesel trains and vessels (4), will increased noise (5), would have

harmful impacts on tribal resources (6), will increase vehicle delay at railroad crossings large enough to disrupt emergency vehicle response times. According to the DEIS all of these impacts cannot be fully mitigated. So, revoke the permits. It is not acceptable to permit these facilities and then rely on the proposers to build or plan the components without public input and scrutiny.

Response GP238-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP238-2

Here are our first questions,

(1) What type of containment will protect tanks from a tsunami with waves of 40 to 100 ft. high as projected for a major offshore earthquake? We want to see the plans and designs before the permits are allowed. Oh that's right--- a tsunami of that size cannot be mitigated however, a tsunami of that size is what's projected *(The Oregon Resilience Plan Reducing Risk and Improving Recovery for the Next Cascadia Earthquake and Tsunami, Report to the 77th Legislative Assembly from Oregon Seismic Safety Policy Advisory Commission (OSSPAC) Salem, Oregon February 2013).*

Response GP238-2

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction. This master response also addresses the iterative, ongoing risk assessment and design processes, including the opportunity for public review, commensurate with the project's stage in development.

Comment GP238-3

(2) **Table 3.1-2**, "The Probability of Stronger Earthquakes in the Study Area" needs to be revised to show the latest data by Goldfinger *(U.S. Geological Survey Professional Paper 1661–F 2012).* The 8.0 or greater projections are not 10-12 percent—it's **37 percent** and there is a one and three chance an earthquake of this magnitude will occur in next 50 years. How can you justify allowing these terminal upgrades when data shows the probability of a damaging earthquake in the next 50 years?

Response GP238-3

Refer to the Master Response for Earthquake Probabilities for an explanation of how the probabilities of strong earthquakes reported in the Draft EIS relate to those identified in recent studies.

Comment GP238-4

(3) In the DEIS your assumptions about climate change assume sea-level will stop rising at the end of the century, but NASA studies conclude the loss of sheet ice will continue for centuries. How can you use information that is clearly a minority opinion? *(America's Climate Choices: Panel on Advancing the Science of Climate Change,* Final EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, *Climate Change*, considers the impacts of sea-level rise in 2050. It does not assume that this is the

endpoint of sea-level change, but it is a reasonable period for considering the impacts on the proposed facilities*., Division on Earth and Life Studies, NATIONAL RESEARCH COUNCIL OF THE NATIONAL ACADEMIES (2010). "7 Sea Level Rise and the Coastal Environment". Advancing the Science of Climate Change. Washington, D.C.: The National Academies Press. p. 245. ISBN 978-0-309-14588-6. Retrieved 2011-06-17).*

Response GP238-4

Final EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, *Climate Change*, considers the impacts of sea-level rise in 2050. It does not assume that this is the endpoint of sea-level change, but it is a reasonable period for considering the impacts on the proposed facilities.

Comment GP238-5

(4) In your final EIS please describe how oil trains will affect the health safety and welfare of other communities along the train route.

Response GP238-5

Final EIS Chapter 4, Section 4.7, *Impacts on Resources*, has been revised to clarify the potential impacts on human health that could occur as the results of incidents involving the spill of crude oil or as the result of related fires or explosions related to the proposed action. Consistent with the approach to the risk assessment as discussed in the Master Response for Environmental Health and Safety, the discussion of impacts is presented in general terms.

Comment GP238-6

(5) The DEIS cites the Contingency Plan regarding preparations for oil spills on the Chehalis River. Although we appreciate the effort put into the plan, it is unrealistic. Citing this plan as a solution to rail or marine oil spills is troubling. For example, the scope of the plan is large and the cost for personnel and equipment to cover each of the contingencies is prohibitive. The training of personnel to cover each area needs to be well coordinated and we wonder if that can be accomplished.

A plan is only as good as the actions implemented during an emergency. We believe it will be difficult at best to protect the natural resources of the area if a spill occurs due to a number of factors. These include: (1) Training of local teams: how will Ecology plan to prepare local groups? (2) Supplies needed to accomplish protection: how will Ecology supply these items? (3) Long-term readiness for a major oil spill and how will Ecology maintain this long-term readiness? Has long-term funding been for the effort been identified?

So much of the Contingency Plan depends on calm weather or slack tide. It is doubtful there will be either when a spill occurs. It would be better to plan for extreme weather and hope a spill occurs on a nice day with a corresponding slack tide, or, as the saying goes, plan for the worst but hope for the best!

Several response strategy locations in the lower Chehalis (sector CHER-1A) are in the slough areas and must rely on booms to protect wetlands and critical habitat. Many of these sites can only be accessed if a responder boat can get to them and some locations are inaccessible during low tide. How do you plan to respond in those areas? Have you identified boats to match shallow water areas? Is boat size important for deploying booms? Blue Slough mouth is an example of where

adverse weather conditions may make the required towing of booms quite difficult if not impossible. What are the contingencies for such areas? After deployment how will boom be monitored? The existing boat launches are distant to some selected locations; will responders be able to get to those locations in adverse weather conditions and to the response locations in an appropriate timeframe? How was the "Potential Oil Spill Points"decided? Looking at a map for the route especially in the lower Chehalis River many more locations exist where a crude by rail spill could occur which are not marked. How does having a spill in a different location affect your response plan? Although, we respect the efforts of the Washington Department of Ecology Spill Prevention, Preparedness, and Response (CHER-GRP) team to put together an oil spill plan for the Chehalis River. However, the plan is problematic and citing it in the DEIS as a solution that will reduce the impacts of an oil spill related to crude by rail or the oil terminals is overly optimistic.

Ecology and the City of Hoquiam should use the analysis and findings in the DEISs to reject these terminals. Since the risks of oil spills during rail transport, at the terminal site, and during marine vessel transport through Grays Harbor cannot be fully mitigated and if a spill occurred, the environmental damage would be significant. The permits for terminals in Grays Harbor should be denied.

Response GP238-6

Final EIS Chapter 4, *Environmental Health and Safety*, has been revised to clarify the application of existing geographic response planning to the proposed action and to include additional applicant measures to address increased risks related to the proposed action. Nonetheless, existing regulations and proposed mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources,* describes the types of impacts that could result from an oil spill, fire, or explosion. As noted above, the City of Hoquiam will make a determination on the land use permit application submitted by the applicant to construct and operate the proposed facilities. Evaluation of the proposal will include the information presented in the Final EIS, including the potential for significant and unavoidable adverse impacts.

Comment GP238-7

Below are specific issues associated with specific DEIS by chapters.

Chapter 3.1 Earth

Understanding the types of soils and the underlying geologic conditions is important in determining whether a project would be exposed to increased risks related to these conditions.

From the DEIS: two separate areas. On page 3.1.13 it is stated,

"The Hoquiam-Aberdeen area is underlain by sandy gravel, which is susceptible to liquefaction. The Hoquiam-Aberdeen shoreline, including the project site, is mapped as having a high liquefaction hazard (Slaughter et al. 2013); consequently, these areas are susceptible to liquefaction during a strong (6.0 magnitude or greater) earthquake. This high hazard zone extends up to 0.5 mile inland from the shoreline of the harbor". Then on page 3.1.11 the DEIS states,

The probabilities of earthquakes of magnitude 6.0 to 9.0 and greater affecting the study area.

• *At the project site, a magnitude 6.0 earthquake has a 30 to 40% likelihood of occurring once in 50 years.*

• *An earthquake of magnitude 9.0 or greater has a lower likelihood of occurring, 6 to 8% chance within a 50-year window."*

Using this DEIS information, the permit it is understood the site will experience an earthquake which will cause significant damage in the next 50 years which is troubling enough. **However, the earthquake data in the DEIS is now outdated.** Research from scientist at the Oregon State University suggests the assumptions made by the DEIS are underestimated at best. The major earthquakes that devastated Chile and which triggered the catastrophic Indonesian tsunami of 2004 are more than just a distinct possibility to strike the Pacific Northwest coast of the United States. There is more than a one-in-three chance that it will happen within the next 50 years.

New analyses by Oregon State University marine geologist Chris Goldfinger and his colleagues have provided fresh insights into the Northwest's turbulent seismic history – where magnitude 8.2 (or higher) earthquakes have occurred 41 times during the past 10,000 years. Those earthquakes were thought to generally occur every 500 years, but as scientists delve more deeply into the offshore sediments and other evidence, they have discovered a great deal more complexity to the Cascadia Subduction Zone. According to Goldfinger, "What we've found is that Cascadia isn't one big subduction zone when it comes to major earthquakes," Goldfinger said. "It actually has several segments – at least four – and the earthquake activity is different depending on where a quake originates. The largest earthquakes occur in the north and usually rupture the entire fault. These are quakes of about magnitude-9 and they are just huge – but they don't happen as frequently.

"At the southern end of the fault, the earthquakes tend to be a bit smaller, but more frequent," he added. "These are still magnitude-8 or greater events, which is similar to what took place in Chile, so the potential for damage is quite real."

Based on historical averages, Goldfinger says the southern end of the fault – from about Newport, Ore., to northern California – **has a 37 percent chance of producing a major earthquake in the next 50 years.** The odds that a mega-quake will hit the northern segment, from Seaside, Ore., to Vancouver Island in British Columbia, are more like 10 to 15 percent.

"Perhaps more striking than the probability numbers is that we can now say that we have already gone longer without an earthquake than 75 percent of the known times between earthquakes in the last 10,000 years," Goldfinger said. "And 50 years from now, that number will rise to 85 percent."

Understanding the Cascadia Subduction Zone history is further complicated by the possibility that major earthquakes in the northern segment have occurred in "clusters." A thousand years may go by without a major event, and then an earthquake would occur every 250 years or so.

In fact, the science is robust, and one of the chief scientists behind it is Chris Goldfinger. Thanks to work done by him and his colleagues, **we now know that the odds of the big Cascadia earthquake happening in the next fifty years are roughly one in three. The odds of the very big one are roughly one in ten** *(U.S. Geological Survey Professional Paper 1661–F) -- U.S. Department of the Interior U.S. Geological Survey U.S. Geological Survey, Reston: Virginia 2012*.

We believe this new research warrents a new analysis of risk of an earthquake and tsunami at the project site. Can you explain why allowing a significant increase in risk of toxic oil

contamination should be allowed? Permits should not be issued if the DEIS review shows a one and three (37%) this problematic outcome.

1) What type of mitigation and insurance measures are in place if an earthquake and tsunami impacts the oil facilities? Who pays for the cleanup? The Tohoku Japan tsunami in 2011 caused fuel storage containers in Japan to fail. Failure of these containers resulted in major damage to Japanese cities where fuel leaked out of the containment basins that surrounded the storage areas. Oil damage is difficult to clean up and often precludes rehabilitation of any contaminated structures.

2) What types of storage tanks are being proposed and what is the rating for withstanding a tsunami event? We want to know before a permit is issued.

3) What type of cable system will be used to ensure the storage tanks will remain secure during a tsunami event? We want to know before a permit is issued.

The Westway and Imperium sites are located on soils derived from dredge materials that have a high liquefaction susceptibility factor. Both locations are rated by the National Earthquake Hazards Reduction Program as a seismic class D-E site. However, both proposed bulk facility projects are located on past lagoon fills (figure 1). Since the surrounding areas which weren't lagoon fills are Classified D-E [Footnote 1: D-E sites:

- Structures must be designed to resist seismic forces.

- Only structural systems that are capable of providing superior performance permitted.

- Many types of irregularities are prohibited.

- Nonstructural components that could cause injury must be provided with seismic restraint.

- Nonstructural systems required for life safety protection must be demonstrated to be capable

- Nonstructural systems required for life safety protection must be demonstrated to be capable of post-earthquake functionality.

- Special construction quality assurance measures are required.] does this indicate the site class for the specific project area needs to re-classified to a more susceptible level like F?

4) Why is there a difference of 75 feet regarding piles driven into the ground from the proponents?

5) What are the piles being driven into? What do the well logs show? Has there been a detailed geologic assessments conducted?

6) What is the depth to bed rock?

7) The project is located in a potentially earthquake and liquefaction hazard zone; how are you going to mitigate if an accident occurs? What type of insurance and coverage do the proponents have?

Attached is a map showing various earthquake faults, earthquakes and liquefaction potential near Grays Harbor. As the map shows there are many fault systems associated with the project site. What earthquake impacts are anticipated from (1). Canyon River, (2) Cascadia, (3) Saddle Mountain, (4) Tacoma, and (5) Langley Hill?

8) Has there been an assessment regarding the structural damage that would happen during a smaller 5 to 7 magnitude event to the proposed facility?

9) How can you explain the practicability of increasing the oil capacity of these facilities knowing the dangers associated with their location?

[Figure 1 Liq Sucep - project locations; reviewed but not reproduced.]

Response GP238-7

Refer to the Master Response for Earthquake Probabilities for an explanation of how the probabilities of strong earthquakes reported in the Draft EIS relate to those identified in recent studies.

1. Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events. Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS.

2. Refer to the Master Response for Seismic Risk and Design Requirements for more information about the iterative, ongoing risk assessment and design processes commensurate with the project's stage in development. Designs and the permit application that are public records will be available for review during the design and permitting process.

3. Refer to the Master Response for Seismic Risk and Design Requirements for more information about the iterative, ongoing risk assessment and design processes commensurate with the project's stage in development. Designs and the permit application that are public record will be available for review during the design and permitting process.

4. Final EIS Chapter 3, Section 3.1, *Earth*, clarifies the approximation of pile depth. According to the investigations completed at the project site, the majority of the site consists of gravel to about 40 feet below the surface underlain by loose to dense sandy gravel to a depth of about 130 feet below the surface. Figure 8 of the Hart Crowser report (2013; as cited in Section 3.1, *Earth*) indicates competent soil is generally reached at 150 feet below-ground surface. Estimates in the REG (formerly Imperium Terminal Services) Expansion Project Draft EIS are based on subsurface investigations completed for that project site.

5. Proposed piles would be driven to necessary depths to reach required embedment into competent soils. Refer to the Master Response for Seismic Risk and Design Requirements for information about the iterative, ongoing risk assessment and design processes commensurate with the project's stage in development.

6. Figure 8 of the Hart Crowser report (2013; as cited in Section 3.1, *Earth*) indicates competent soil is generally reached at 150 feet below-ground surface.

7. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential

impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction. Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS. The Draft EIS considers the impacts related to a large earthquake, and smaller events are considered by inclusion in the consideration of the larger and more intense seismic event.

8. The Draft EIS considers the impacts related to a large earthquake, and smaller events are considered by inclusion in the consideration of the larger and more intense seismic event.

9. As noted in the Master Response for Project Objective and Alternatives, the proposed action is a private project and the objectives and proposal are defined by the applicant.

Comment GP238-8

Chapter 3.2 Air

1. Impacts on climate change. In order to have any chance to stave off global warming disaster, we must start weaning ourselves off of fossil fuels. The DEIS discusses the direct emissions from the rail-transportation part of these projects, and finds a 2.6% increase in greenhouse gas emissions from rail in Washington—over 30,000 metric tons of carbon dioxide equivalent each year. **The DEIS improperly limits its cumulative effects on climate change analysis to the Grays Harbor terminals,** even though federal agencies, like the U.S. Fish and Wildlife Service, have called on Ecology and Hoquiam to review the cumulative impacts of all oil and coal shipping terminals proposed for Washington ports. The 2.6% increase in DEIS for Greenhouse gases for Grays Harbor does not get at the real impacts associated with the project. We want to see the total Greenhouse gases for the entire process—what are those totals? From fracking to the transport across the states involved in rail transport. What is the cumulative impact of Greenhouse gases on climate change? What is the impact of increased Greenhouse gasses on the snow of the Cascades and Olympic Peninsula? How does increasing temperature and changes in the climate translate to our agricultural economy? What effect does the increases in Greenhouse gasses effect our seafood industry? Again, we want to see a comprehensive analysis of the total potential impacts. From the fracking of the product to the transportation of the product, to the storing and shipping of the product, and finally to the final burning of the product.

Response GP238-8

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively, in the context of emission inventories and reduction goals. The Final EIS has been updated to include estimated emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

Draft EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, *Climate Change*, describes the projected impacts of climate change in the Pacific Northwest.

Comment GP238-9

2. There needs to be a baseline assessment of the current conditions of Grays Harbor! Then there needs to be a way to monitor the potential air pollution associated with the projects. What type of monitoring will be done? Where will monitoring location be placed?

Response GP238-9

As described in Section 3.2.6, *What required permits and plans apply to air quality?* the proposed action is subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record-keeping requirements for onsite stationary sources.

Comment GP238-10

3. Train impacts: There needs to be side air pollution detectors in the study area. What types of air pollution detector are proposed for the rail potion of the project? Will inspectors use infrared cameras to detect vapor leaks? If not why how will vapor leaks be detected?

Response GP238-10

Rail operators are required to adhere to all applicable regulatory requirements intended to ensure the safe passage of rail freight. Refer to the Master Response for Mitigation Framework for information about the development and enforcement of mitigation measures.

Comment GP238-11

4. How will the crude oil rail cars be vented to protect the air quality people and animals breath as the rail cars travel from North Dakota to Grays Harbor?

We want to know the long term outlook for maintenance of air pollution controls for the plants. What type of system will be used? Will air pollution be monitored 24 hours and if problems occur what will be the procedures to protect the surrounding communities from airborne toxics?

Response GP238-11

Rail operators are required to adhere to all applicable regulatory requirements intended to ensure the safe passage of rail freight.

Comment GP238-12

1) How will the oil tanks at Westway and Imperium be vented to protect the air quality people and animals breath in the Port of Grays Harbor and surrounding communities?

2) How will the transfer of oil from the tanks to vessels be vented to protect the air quality people and animals breath in the Port of Grays Harbor and surrounding communities?

Response GP238-12

As described in Draft EIS Chapter 3, Section 3.2, *Air*, the proposed action is subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping for onsite stationary

sources. Refer to the Draft EIS for a list of permit conditions and proposed applicant mitigation that would reduce potential impacts on air quality.

Comment GP238-13

Chapter 3.4 Water

In your assumptions about climate change you assume sea-level will stop rising at the end of the century, but NASA studies conclude the loss of sheet ice will continue for centuries *(America's Climate Choices: Panel on Advancing the Science of Climate Change, Board on Atmospheric Sciences and Climate, Division on Earth and Life Studies, NATIONAL RESEARCH COUNCIL OF THE NATIONAL ACADEMIES (2010). "7 Sea Level Rise and the Coastal Environment". Advancing the Science of Climate Change. Washington, D.C.: The National Academies Press. p. 245. ISBN 978-0-309-14588-6. Retrieved 2011-06-17).*

In 2015 study by sea level rise experts concluded that based on MIS 5e data, sea level rise could rise faster in the coming decades, with a doubling time of 10, 20 or 40 years. This research was conducted by thirteen of the leading climate change scantiest in the world have now predicted that sea level is rising at an accelerated rate *(J. Hansen, M. Sato, P. Hearty, R. Ruedy, M. Kelley, V. Masson-Delmotte, G. Russell, G. Tselioudis, J. Cao, E. Rignot, I. Velicogna, E. Kandiano, K. von Schuckmann, P. Kharecha, A. N. Legrande , M. Bauer, and K.-W. Lo (2015). "Ice melt, sea level rise and superstorms: evidence from paleoclimate data, climate modeling, and modern observations that 2?C global warming is highly dangerous" (PDF). Atmospheric Chemistry and Physics (ACP). doi:10.5194/acpd-15-20059-2015).*

Additional work has been published by. R. Winkelmann, A. Levermann, A. Ridgwell, K. Caldeira. Combustion of available fossil fuel resources sufficient to eliminate the Antarctic Ice Sheet. Science Advances, 2015; 1 (8): e1500589 DOI: 10.1126/sciadv.1500589, they concluded the Antarctic Ice Sheet stores water equivalent to a 58 meter in global sea-level rise. They show in simulations using the Parallel Ice Sheet Model that burning the currently attainable fossil fuel resources is sufficient to eliminate the ice sheet. With cumulative fossil fuel emissions of 10,000 gigatonnes of carbon (GtC), Antarctica is projected to become almost ice-free with an average contribution to sea-level rise exceeding **3 meters per century** during the first millennium. Consistent with recent observations and simulations, the West Antarctic Ice Sheet becomes destabilized and melt the ice basins in both West and East Antarctica results in a threshold increase in global sea level. Unabated carbon emissions thus threaten the Antarctic Ice Sheet in its entirety with associated sea-level rise that far exceeds that of all other possible sources. Why would we want to put a new oil terminal in a location that will be susceptible to this type of change over the next 50 years?

Recent reasons to be concern about Grays Harbor include (1) Storm waves near the Grays Harbor South Jetty threatened City of Westport facilities and a state park including the South end of Ocean Shores. Increasing sea level will increase the problem and will create problems with erosion and sediment movement in Grays Harbor. What studies have been done to look at the potential impacts of such changes to the shipping channel of Grays Harbor? (2) High erosion rates at North Willapa Bay! At Washaway Beach more than 100 homes have fallen into the ocean in the last 20 years, including the entire town center of North Cove. This type of erosion due to sea-level rise will be more pronounced. Recently higher than predicted tides have occurred in Grays Harbor and the rest of Washington, this type of change is predicted by the extreme sea level rise events of climate change.

There have also been larger than usual rainfall events in the area. How do atmospheric rivers of moisture impact the oil terminals sites? Stormwater and asphalt surfaces can impact water quality. How will the terminal locations deal with large amounts of rainfall and saturated soils?

Response GP238-13

Final EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts, Climate Change*, clarifies predictions of sea level change in the project area and potential for flooding at the project site. With predicted sea level rise in the project area for 2050 of 1.57 feet, the project site will remain approximately 5 feet higher than the projected high tide. As such, it would not be subject to flooding even during extreme storm events. Regarding the other points, refer to the Master Response for the Purpose and Focus of the EIS.

Comment GP238-14

Chapter 3.5 Plants

Native Americans have used Grays Harbor for many years as a repository of plants for basket weaving and medicinal herbs. What impacts will the sites have on traditional access to treaty-protected resources of Tribes to gather these plants? What value will be put on native vegetation that would be destroyed if an oil spill occurs in Grays Harbor and along the coast?

Response GP238-14

Draft EIS Chapter 3, Section 3.12.5.2, *Proposed Action*, describes potential impacts on tribal resources from construction and routine operation of the proposed action. Potential impacts from oil spills, fires, or explosions are addressed in Draft EIS Chapter 4, *Impacts on Resources*, including impacts on plants and tribal resources. The process for determining damages for an oil spill, including impacts on plants, is called a natural resource damage assessment, as defined in WAC 173-183.

Comment GP238-15

According to the DEIS invasive species are present at the project sites—how will the proponents insure invasive will not propagate due to building and production activities?

Response GP238-15

As noted in Draft EIS Chapter 3, Section 3.4, *Plants*, the applicant would prevent the potential establishment and spread of noxious weeds during construction and operation per Washington State noxious weed regulations (RCW 17.10). This weed law establishes and spells out property owners' responsibilities for preventing and controlling the spread of noxious weeds. If a property owner fails to control noxious weeds, the local weed board can impose civil fines for failure to control weeds. Any weeds removed from the project site would be disposed in accordance with these regulations.

Comment GP238-16

Ballast water is carried by empty vessels to provide stability during transit. As vessels are loaded with cargo, ballast water is discharged to balance the weight of the new cargo. What types of

measures will be used to insure both plant and animal invasive species will not be present in the discharged water into Grays Harbor?

Response GP238-16

Draft EIS Chapter 3, Section 3.3, *Water*, Section 3.4, *Plants*, and Section 3.5, *Animals*, describe potential ballast water impacts and the regulatory requirements to reduce these impacts. Section 3.4.7.1, *Applicant Mitigation*, and Section 3.5.7.1, *Applicant Mitigation*, identify mitigation measures to further reduce potential impacts.

Comment GP238-17

This section should include mitigation for all spills, leaks, and explosions throughout the entire corridor, including in remote areas where support vehicle access is very limited.

Response GP238-17

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or within Grays Harbor, respectively.

Comment GP238-18

Chapter 3.6 Animals

It is very important to take into consideration all animals that could be affected by the citing of oil terminals in Grays Harbor. **Specifically we want to know how the following species are going to be protected.**

1) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the Federally Endangered Bucaccio Rockfish?

2) How will an oil spill response plan for the coast of Washington ensure the protection of the Federally Endangered Snake River Sockeye Salmon?

3) How will a rail oil spill response plan for the Columbia River ensure the protection of the Federally Endangered Snake River Sockeye Salmon?

4) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the Federally Threatened Bull Trout?

5) How will a rail oil spill response plan for Grays Harbor drainages ensure the protection of the Federally Threatened Bull Trout?

6) How will an oil spill response plan for the coast of Washington ensure the protection of the Federally Threatened Canary Rockfish?

7) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the Federally Threatened Columbia River Chinook Salmon?

8) How will a rail oil spill response plan for the Columbia River ensure the protection of the Federally Threatened Columbia River Chinook Salmon?

9) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the Federally Threatened Columbia River Chum Salmon?

10) How will a rail oil spill response plan for the Columbia River ensure the protection of the Federally Threatened Columbia River Chum Salmon?

11) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the Federally Threatened Columbia River Coho Salmon?

12) How will a rail oil spill response plan for the Columbia River ensure the protection of the Federally Threatened Columbia River Coho Salmon?

13) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the Federally Threatened Columbia River Steelhead Trout?

14) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the Federally Threatened Green Sturgeon?

15) How will a rail oil spill response plan for the Columbia River ensure the protection of the Federally Threatened Green Sturgeon?

16) How will a rail oil spill response plan for the Columbia River ensure the protection of the Federally Threatened Columbia River Steelhead Trout?

17) How will an oil spill response plan for Grays Harbor and the coast of Washington ensure the protection of the Federally Threatened Eulachon?

18) How will a rail oil spill response plan for the Columbia River ensure the protection of the Federally Threatened Eulachon?

19) How will an oil spill response plan for the coast of Washington ensure the protection of the Federally Threatened Hood Canal Summer Chum Salmon?

20) How will an oil spill response plan for the coast of Washington ensure the protection of the ederally Threatened Ozette Lake Sockeye Salmon?

21) How will an oil spill response plan for the coast of Washington ensure the protection of the Federally Threatened Puget Sound Chinook Salmon?

22) How will an oil spill response plan for the coast of Washington ensure the protection of the Federally Threatened Puget Sound Steelhead Trout?

23) How will an oil spill response plan for Grays Harbor and the coast of Washington ensure the protection of the Federally Threatened Yelloweye Rockfish?

24) How will an oil spill response plan for Grays Harbor and the coast of Washington ensure the protection of the Federal Species of Concern Copper Rockfish?

25) How will an oil spill response plan for Grays Harbor and the coast of Washington ensure the protection of the State Candidate Greenstriped Rockfish?

26) How will a rail oil spill response plan for the Grays Harbor drainages ensure the protection of the State Sensitive Olympic Mudminnow?

27) How will an oil spill response plan for the coast of Washington ensure the protection of the State Candidate and Federal Species of Concern Pacific Hake?

28) How will an oil spill response plan for the coast of Washington ensure the protection of the State Candidate and Federal Species of Concern Quillback Rockfish?

29) How will an oil spill response plan for the coast of Washington ensure the protection of the State Candidate and Federal Species of Concern Pacific Herring?

30) How will an oil spill response plan for Grays Harbor and the coast of Washington ensure the protection of the State Candidate and Federal Species of Concern Quillback Rockfish?

31) How will an oil spill response plan for Grays Harbor and the coast of Washington ensure the protection of the State Candidate Redstripe Rockfish?

32) How will an oil spill response plan for Grays Harbor and the coast of Washington ensure the protection of the State Candidate and Federal Species of Concern River Lamprey?

33) How will a rail oil spill response plan for the Grays Harbor drainages ensure the protection of the State Candidate and Federal Species of Concern River Lamprey?

34) How will an oil spill response plan for the coast of Washington ensure the protection of the State Candidate Tiger Rockfish?

35) How will an oil spill response plan for the coast of Washington ensure the protection of the State Candidate Widow Rockfish?

36) How will an oil spill response plan for Grays Harbor and the coast of Washington ensure the protection of the Federal Species of Concern Pacific Lamprey?

37) How will a rail oil spill response plan for the Western and Eastern Washington ensure the protection of the Federal Species of Concern Pacific Lamprey?

38) How will a rail oil spill response plan for the Columbia River ensure the protection of the State Candidate Leopard Dace?

39) How will a rail oil spill response plan for the Columbia River ensure the protection of the State Candidate Umatilla Dace?

40) How will a rail oil spill response plan for the Columbia River ensure the protection of the State Candidate Mountain Sucker?

41) How will a rail oil spill response plan for the Columbia River ensure the protection of the State Sensitive and Federal Species of Concern Pygmy Whitefish?

Specific Areas of Concern Bird Life:

42) How will an oil spill response plan for Grays Harbor and the coast of Washington ensure the protection of the Federally Threatened Marbled Murrelet which spends most of its life within 5 miles of the Washington coast?

43) How will an oil spill response plan for Grays Harbor and the coast of Washington ensure the forage fish for the Marbled Murrelet which includes the Pacific Herring, Anchovy, Pacific Sand Lance, Capelin and Krill will be protected from a spill?

44) How will a rail oil spill response plan for the Eastern Washington ensure the protection of the State Endangered American White Pelican?

45) How will an oil spill response plan for Grays Harbor and the coast of Washington ensure the protection of the State Endangered and Federal Species of Concern Brown Pelican?

46) How will a rail oil spill response plan for the Eastern Washington ensure the protection of the State Endangered Sandhill Crane?

47) How will an oil spill response plan for Grays Harbor and the coast of Washington ensure the protection of the Federally Threatened Snowy Plover?

48) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the State Sensitive and Federal Species of Concern Bald Eagle?

49) How will a rail oil spill response plan for all of Washington State ensure the protection of the State Sensitive and Federal Species of Concern Bald Eagle?

50) How will a rail oil spill response plan for all of Washington State ensure the protection of the State Candidate and Federal Species of Concern Northern Goshawk?

51) How will a rail oil spill response plan for Western Washington State ensure the protection of the State Candidate Pileated Woodpecker?

52) How will a rail oil spill response plan for South Western Washington State ensure the protection of the State Candidate Purple Martin?

53) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the State Candidate Cassin's Auklet?

54) How will a rail oil spill response plan for all of Washington State ensure the protection of the State Sensitive and Federal Species of Concern Peregrine Falcon?

55) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the State Candidate Brandt's Commorant?

56) How will a rail oil spill response plan for all of Washington State ensure the protection of the State Candidate and Federal Species of Concern Yellow-billed Cuckoo?

57) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the State Candidate Common Murre?

58) How will a rail oil spill response plan for the Eastern Washington ensure the protection of the State Threatened Ferruginous Hawk?

59) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the State Candidate Tufted Puffin?

60) How will a rail oil spill response plan for the Eastern Washington ensure the protection of the State Candidate Flammulated Owl?

61) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the State Candidate Western Grebe?

62) How will a rail oil spill response plan for all of Washington State ensure the protection of the State Candidate Western Grebe?

63) How will a rail oil spill response plan for all of Washington State ensure the protection of the State Candidate Golden Eagle?

64) How will a rail oil spill response plan for the Eastern Washington ensure the protection of the State Threatened Columbian Sharp-tailed Grouse?

65) How will a rail oil spill response plan for all of Washington State ensure the protection of the State Sensitive Common Loon?

66) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the State Sensitive Common Loon?

67) How will a rail oil spill response plan for the Eastern Washington ensure the protection of the State Threatened and Federal Candidate Greater Sage Grouse?

68) How will a rail oil spill response plan for the Eastern Washington ensure the protection of the State Candidate Burrowing Owl?

69) How will a rail oil spill response plan for Southwestern Washington ensure the protection of the Federally Threatened Streaked Horned Lark?

70) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the Federally Threatened Streaked Horned Lark?

Specific Areas of Concern Mammals:

71) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the Federally Endangered Blue Whale?

72) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the State Endangered Northern Sea Otter?

73) How will a rail oil spill response plan for Southwest Washington ensure the protection of the Federally Threatened Tenino Pocket Gopher?

74) How will a rail oil spill response plan for Southwest Washington ensure the protection of the Federally Threatened Yelm Pocket Gopher?

75) How will a rail oil spill response plan for Southwest Washington ensure the protection of the State Threatened Mazama (western) Pocket Gopher?

76) How will a rail oil spill response plan for Southwest Washington ensure the protection of the Federally Endangered Columbian White-tailed Deer?

77) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the Federally Endangered Sperm Whale?

78) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the State Threatened and Federal Species of Concern Stellar Sea Lion?

79) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the Federally Endangered Fin Whale?

80) How will a rail oil spill response plan for the Eastern Washington ensure the protection of the State Species of Concern White-tailed Jack Rabbit?

81) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the State Species of Concern Gray Whale?

82) How will a rail oil spill response plan for the Eastern Washington ensure the protection of the Federally Endangered Gray Wolf?

83) How will a rail oil spill response plan for Southwest Washington ensure the protection of the State Threatened Western Gray Squirrel?

84) How will a rail oil spill response plan for Southwest Washington ensure the protection of the State Candidate Gray-tailed Vole?

85) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the State Candidate Harbor Porpoise?

86) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the Federally Endangered Humpback Whale?

87) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the Federally Endangered Killer Whale?

Specific Areas of Concern Mollusk:

88) How will a rail oil spill response plan for the Columbia River ensure the protection of the State Candidate California Floater?

89) How will a rail oil spill response plan for the Columbia River ensure the protection of the State Candidate Dalle's Sideband?

90) How will a rail oil spill response plan for the Columbia River ensure the protection of the State Candidate Columbia Oregonian Mollusk?

91) How will a rail oil spill response plan for the Columbia River ensure the protection of the State Candidate Columbia Pebblesnail?

92) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the State Candidate Northern Abalone?

93) How will a rail oil spill response plan for the Columbia River ensure the protection of the State Candidate Giant Columbia River Limpet?

94) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the State Candidate Newcomb's Littorine Snail?

Specific Areas of Concern Reptiles and Amphibians:

95) How will a rail oil spill response plan for the Black River drainage in Grays Harbor ensure the protection of the State Endangered and Federal Candidate Oregon Spotted Frog?

96) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the Federally Endangered Loggerhead Sea Turtle?

97) How will a rail oil spill response plan for the Eastern Washington ensure the protection of the State Candidate Sagebrush Lizard?

98) How will a rail oil spill response plan for the Eastern Washington ensure the protection of the State Endangered Northern Leopard Frog?

99) How will a rail oil spill response plan for the Columbia River ensure the protection of the State Candidate Cascade Torrent Salamander?

100) How will a rail oil spill response plan for the Eastern Washington ensure the protection of the State Candidate Columbia Spotted Frog?

101) How will a rail oil spill response plan for all of Washington State ensure the protection of the State Candidate Western Toad?

102) How will a rail oil spill response plan for Southwestern Washington State ensure the protection of the State Candidate Dunn's Salamander?

103) How will a rail oil spill response plan for Southwestern Washington State ensure the protection of the State Candidate Van Dyke's Salamander?

104) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the Federally Threatened Green Sea Turtle?

105) How will an oil spill response plan for the terminal areas, Grays Harbor and the coast of Washington ensure the protection of the Federally Endangered Leatherback Sea Turtle?

Specific Areas of Concern Insects:

106) How will a rail oil spill response plan for the Columbia River ensure the protection of the State Candidate Columbia Clubtail?

107) How will a rail oil spill response plan for the Columbia River ensure the protection of the State Candidate Columbia River Tiger Beetle?

108) How will a rail oil spill response plan for the Columbia River ensure the protection of the Federally Endangered Taylor's Checkerspot?

109) How will a rail oil spill response plan for Thurston County and Eastern Washington State ensure the protection of the State Endangered and Federal Species of Concern Mardon Skipper?

110) How will a rail oil spill response plan for the Columbia River ensure the protection of the State Candidate Juniper Haristreak?

111) How will a rail oil spill response plan for Eastern Washington State ensure the protection of the State Candidate Silver-bordered bog fritillary?

112) How will a rail oil spill response plan for the Columbia River ensure the protection of the State Candidate Chinquapin Hairstreak?

113) How will a rail oil spill response plan for Southwestern Washington State ensure the protection of the State Candidate Valley Silverspot?

114) How will a rail oil spill response plan for Grays Harbor County Washington ensure the protection of the State Candidate Puget Blue?

115) How will a rail oil spill response plan for Grays Harbor County Washington ensure the protection of the State Candidate and Federal Species of Concern Queen Charlotte's Copper?

116) How will a rail oil spill response plan for Grays Harbor County and Southwestern Washington State ensure the protection of the State Candidate Johnson's Hairstreak?

117) How will a rail oil spill response plan for the Columbia River ensure the protection of the State Candidate Pacific Clubtail?

Specific Areas of Concern Other Species:

118) How will a rail oil spill response plan for Eastern Washington State ensure the protection of the State Candidate Giant Palouse Earthworm?

119) How will a rail oil spill response plan for Thurston County Washington ensure the protection of the Leschi's Millipede?

Response GP238-18

As noted in Draft EIS Chapter 4, Section 4.2, *Applicable Regulations*, an oil spill contingency plan is not required prior to operations and has not been developed. However, once a plan has been submitted to Ecology as required by WAC 173-186, it will be available for public review and comment for a period of 30 days. Refer to the Master Response for the Purpose and Focus of the EIS.

Comment GP238-19

Specific Areas of Concern Global:

The projects are expected to increases CO2 by more than 15,000 metric pounds a year. Reports show that pH is decreasing to critical levels in the Pacific Ocean. Increases in CO2 are directly linked to this problem. Question;

120) Oyster spat are dying by the millions in Willapa Bay due to lower pH and oyster growers are increasingly desperate to get oyster to grow. How can there be justification to contribute to this problem by increasing CO2 with the proposed terminals?

Response GP238-19

Refer to the Master Response for Purpose and Focus of the EIS.

Comment GP238-20

<u>Chapter 3.8 Noise and Vibration</u>

The projects will increase noise in the area of the projects. What about the impacts to homes near the project? Noise from facility operations is expected to be similar to the existing levels at the port. What are the existing levels of noises at the port?

Studies found the increased number of trains could increase noise, mainly from train horns at road crossings. These horns are for safety to let cars and people know the trains are approaching. Homes near the rail line between Satsop and Elma and in Central Park, Malone Porter and Centralia could be most affected, and the average noise increases in these areas could be substantial. What is substantial? The studies recommend creating Quiet Zones to reduce noise, but impacts could remain. What are Quiet Zones?

Please explain how the only viable mitigation for the noise and vibration of the 7.65 and 1.25-mile-long trains per day is to trade off the increased risk of vehicle crossing accidents for reduced use of locomotive horn soundings!

Where is the information on noise and vibration impacts to Elma, Centralia, Montesano, and Junction City? We would like to get an in-depth understanding of the effects of noise and vibrations on home values in the communities associated with the increases in train traffic. Where is that information? Where is the analysis?

Response GP238-20

Draft EIS Chapter 3, Section 3.7, *Noise and Vibration*, provides an analysis of noise and vibration impacts related to the proposed action that would occur in the study area, including Elma, Centralia, Montesano, and Junction City. Noise monitoring conducted for the proposed action is summarized in Appendix G, *Noise Data*. Quiet zones are described in Section 3.7. To qualify for implementation, grade-crossing quiet zones must undergo a feasibility study and safety risk assessment, and be approved by the Federal Railroad Administration in cooperation with all applicable jurisdictions.

Comment GP238-21

<u>Chapter 3.14 Hazardous Materials</u>

First responder delays will be statewide. How can first responders effectively respond to an explosive rail train accident? What will the response time be if an accident occurs along a deserted part of the track from Elma to Hoquiam? How many first responders are available? What is the work schedule for local police and fire to respond to an oil spill and /or explosive fire?

Response GP238-21

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment GP238-22

What is the secondary containment common to all tanks at the terminal? Can fire from a leak in one tank weaken other tanks sitting in the same pool, causing the oil to exceed capacity of secondary containment?

October 1, DOT implement stricter safety standards for America's crude-oil transporting railcars—however, the CPC-1232 cars were introduced by the rail industry in 2011 as an upgrade to older models and were built with thicker shells and pressure-relief devices. According to the Association of American Railroads (AAR), roughly 60,000 CPC-1232 tank cars are operating across North America, in addition to 100,000 of the older models.

"These new type of cars were supposed to be safer, but it's obvious these cars are not good enough or safe enough," said Claude Gravelle, a Canadian lawmaker who represents a northern Ontario area where two recent derailments occurred. The Wall Street Journal reports that one of the derailments occurred on Saturday near Gogama, Ontario, and by Monday, emergency workers were still trying to extinguish fires from the ninety-four car Canadian National Railway Co. train. Even with new tank cars explosions and fires still occur. How can there be any justification for allowing trains to carry crude by rail through Grays Harbor County and to the Port of Grays Harbor. How are you going to mitigate this concern? What type of rail cars will be required on the rail line through Grays Harbor?

Response GP238-22

Facility design standards required by state and federal law are described in Draft EIS Chapter 4, Section 4.2, *Applicable Regulations*, and are intended to minimize the risks of the spread of crude oil and the likelihood of fires or explosions. Draft EIS Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* acknowledges the voluntary applicant measure for all new rail cars to meet or exceed the U.S. Department of Transportation Specification 117 design or performance criteria and the retrofitting of all existing tank cars in accordance with the U.S. Department of Transportation-prescribed retrofit design or performance standard (80 *Federal Register* 26643). However, as noted in Section 4.5.4, *Would the proposed action result in unavoidable and significant adverse environmental impacts related to rail transport*? the risks cannot be eliminated.

Comment GP238-23

Chapter 3.15 Rail Traffic

Your Draft Environmental Impact Statement glosses over the impacts, particularly in the extended rail study area. In addition, each of our communities have names how will each of our named communities be affected by oil trains going through or by their city limits. Be specific, what is the chance of property damage, of loss of life or of oil spills and explosions to each individual community. The probability of this happening in any one town on any one day may be "low" as you say, but in 20 years, significant property damage, loss of life, burns and oil in the river is almost guaranteed to happen and will be unavoidable.

We disagree with your use of the word "low" in this statement. What does "low" look like in terms of loss of life, property, or oil in a river. Either replace the word "low" with the word "high" or ask your consultants to do the math for the entire route.

Response GP238-23

Comment acknowledged.

Comment GP238-24

3.15.4.5 Ongoing Maintenance and Inspections

Made various bridge repairs at MPs 2.34, 12.64, 38.8, 46.9, 52.43, 63.93, and 68.64. What are the repairs?

Response GP238-24

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP238-25

Table 3.15-4. Current Rail Traffic by Commodity along the PS&P Rail Line

Commodity: Auto
Status by Direction: Full Empty
Typical Trips
Daily: 0.5
Weekly: 3.8
Annually: 197
Typical Number of Cars: 65

Commodity: Grain
Status by Direction: Full Empty
Typical Trips
Daily: 0.6
Weekly: 4.0
Annually: 206
Typical Number of Cars: 101

Commodity: Mixed carload freight
Status by Direction: Varies Varies
Typical Trips
Daily: 2.1
Weekly: 15.0

Annually: 780
Typical Number of Cars: 50

Commodity: Between Centralia and
Status by Direction: Varies Varies
Typical Trips
Daily: 1.6
Weekly: 11.5
Annually: 598
Typical Number of Cars: 50

Commodity: Between Centralia and Elma
Status by Direction: Varies Varies
Typical Trips
Daily: 0.3
Weekly: 2.4
Annually: 124
Typical Number of Cars: 50

Commodity: Between Elma and Aberdeen
Status by Direction: Varies Varies
Typical Trips
Daily: 0.2
Weekly: 1.1
Annually: 58
Typical Number of Cars: 50

Commodity: Garbaged
Status by Direction: Empty Full
Typical Trips
Daily: 0.1
Weekly: 1.0
Annually: 52
Typical Number of Cars: 98

Total
Typical Trips
Daily: 3.1c
Weekly: 23.8
Annually: 1,235

3.0d

According to the DEIS the PS&P rail line would not need to expand for these proposals. The Westway and Imperium projects together would add about 3.25 train trips (full and empty) a day to the 3 train trips a day that happen now. The studies found the PS&P rail line can accommodate up to 12 trips per day with its existing infrastructure, so no additional construction is needed. What studies? In addition, U.S. Development is also interested in developing a terminal in Grays Harbor what would be the total including their proposed facility?

The Westway and Imperium projects together would add about 3.25 train trips (full and empty) a day to the 3 train trips a day that happen now. The studies found the PS&P rail line can accommodate up to 12 trips per day with its existing infrastructure, so no additional construction is needed. What study? We need to review the research to better understand the conclusions.

Response GP238-25

The detailed analysis of rail capacity is presented in Draft EIS Appendix K, *Rail Traffic Technical Information*.

Comment GP238-26

What do these projects mean for traffic at Olympic Gateway Plaza?

The studies found the increase in train traffic could increase the average daily time that street crossings are blocked. The wait times are expected to be worst during rush hour. The current amount of time that the railroad crossings in the Olympic Gateway Plaza area are blocked on an average day ranges from 49 to 70 minutes in a 24 hour period. This range could increase to 96 to 112 minutes per day for the Westway project, and 108 to 138 minutes for the Imperium project. That's---around 4 hours a day for these projects plus the existing rail traffic. With U.S. Development also in the mix, bossiness will be severely impacted by the increase in rail traffic.

Because project trains are longer than current trains in the area, the proposed projects could increase the amount of time that all crossings into and out of the Olympic Gateway Plaza and Port of Grays Harbor areas are blocked. Trains currently occupy all crossings in the Olympic Gateway Plaza area for about 35 minutes four times per week. With the projects, this could increase to 45 minutes each time and happen four more times a week for Westway and seven more times a week for Imperium. In the Port area, trains currently occupy crossings up to 13 minutes at a time. With the projects, this could increase up to 22 minutes for 22 minutes for Westway and 77 minutes for Imperium. The studies recommend the companies work with agencies responsible for traffic to find ways to reduce the possible impacts. If the impacts cannot be reduced, they will be identified as unavoidable and significant impacts in the final EISs. Will this finding stop the permitting of the terminals?

You computed the probability of harm for the last 59 miles of the route and we want you to compute that probability for the entire route. A million people who live, work, and drive near the tracks are at risk. Having 2 drunk drivers on the road doesn't mean it is OK to have three.

"Although the likelihood of a large spill, fire, or explosion is low, the potential for significant adverse impacts on the environment and human health in the case of such an incident is high." What is high—what is the loss of life look like?

Using the FRA rate of 0.8 non-yard accidents per million miles, we conclude there will be 22 non-yard accidents involving full oil trains and 22 more involving empty oil train in twenty years for the combined Westway and Imperium proposals. Is that acceptable to the Department of Ecology and the City of Hoquiam?

Response GP238-26

Refer to the Master Response for Purpose and Focus of the EIS.

Comment GP238-27

In your EIS please describe how oil trains will affects the health safety and welfare of other communities including members of the Columbia River Inter-Tribal Fish Commission, the Washougal School District and the Federally protected National Scenic Columbia River Gorge and Recreation Area.

Response GP238-27

Refer to the Master Response for Geographic Scope of the EIS.

Comment GP238-28

You assume that **historical risk assessment for crude oil applies to Bakken Crude.** You wrote "Long-term historical data may show that most spills do not result in fires or explosions" . . . but . . . the oil being transported now is much more prone to ignite. There have been 14 spills resulting from derailments since 2013, and all but two of them have ignited. You need to reexamine your analysis. What is the real risk of an explosion or fire associated with Bakken Crude?

You assume that if one tank car spills from a derailment, the subsequent fire does not cause other tank cars to spill. Derailments and explosions over the last 3 years do not support that assumption. What is the likelihood of an explosive event when Bakken Crude rail cars derail? We would like that analysis to only include the last 5 year period.

You assume empty tank car derailments do not cause fire, but the fire chief in Ellensburg says otherwise. Why is there a concern by the fire chief in Ellensburg?

Railroad's calculated Worst Case Scenarios for a potential crude oil train emergency in urban and sensitive environmental locales. What is the potential impact of a crude oil disaster in Washington communities? What is the potential impact of a crude oil disaster in Grays Harbor?

What is the evidence of the levels of catastrophic insurance coverage railroads and Westway and Imperium has purchased relevant for potential serious releases in Washington State and Grays Harbor? For what level of potential disaster is your railroad covered?

There are high hazard flammable train Comprehensive Emergency Response Plans, both generic and for specific locations in Washington, urban and rural. Is there any credible emergency response to crude oil train disasters except evacuation? Please provide such plans covering all counties with crude train routes.

Route analysis documentation and route selection results for Washington State., pursuant to 2007 Public Law 110-53 on urban hazmat safety and security routing, with the currently covered cargoes, especially chlorine and ammonia, as well as for the newly-recognized "key trains" of crude oil and ethanol. How have you weighted the 27 federal routing factors and whatever interchange agreements your railroad has struck with others to avoid high-risk areas?

You assume sparks are **almost absent** at 25 mph. What does almost absent mean? You assume the impacts to property values of an oil train, is the same as the impacts to property value of a general freight train. Where does that information come from? Cite the source!

You assume spills can be cleaned up, but according to the Marine and Rail Transportation Study, at best only 14% of the oil is recovered in a spill. How are you going to improve on that percentage?

You assume tank car caps are on tight and there are no vapor releases during transport, but Oregon State Rail Inspector reports hearing hissing and observer's have witness vapors escaping tank cars. Can you prove that there are no vapors linking from rail cars?

You say "Heavier oils . . . do not generate many flammable vapors", but the oil train fires in Timmens and Gogama Ontario in winter involved Tar Sands Crude. Where is the proof that heaver oils do not explode?

In the event of an accident, you assume the responsible parties will be able to pay for damages and do so in a timely manner. Why do you assume this?

You assume the vapor combustion units are reliable, but they have been known to fail. You assume that better control technology does not exist. If you assume combustion, units are the most reliable and they can fail —what is the rationale for your statement?

1. What are the speeds above which tank cars can rupture?

2. Why have there been rail inspection failures?

3. Why have there been equipment inspection failures?

4. Why are there concerns about crew size on trains?

5. Are there concerns about the human element, fatigue, long hours?

6. What are the lessons learned from the recent whistleblower victory in court.

7. What is the cost of providing adequate staff, and equipment for emergency preparedness for Grays Harbor?

8. America's largest landslide area, in the Columbia River Gorge.

9. The speed of the train that spilled into the James river was 24 mph

10. There have been four ruptures of the newer safer CPC 1232s in the last yaer—why is this a concern for Grays Harbor?

11. Why is there a need for 25 mph speed limit on the PS&P line from Centralia to Aberdeen?

Response GP238-28

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, has been revised to include a discussion of the unique considerations specific to Bakken crude oil with respect to emergency response and cleanup activities, including factors related to its relatively higher potential for flammability.

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Final EIS Chapter 5, *Extended Rail and Vessel Transport*, further describes the potential risks associated with rail transport in this area.

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS.

Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values and includes a discussion of the range of impacts that could be anticipated based on studies cited in that section.

Rail operators are required to adhere to all applicable regulatory requirements intended to ensure the safe passage of freight.

Draft EIS Chapter 3, Section 3.2, *Air*, addresses potential impacts from routine operations. Emissions of onsite stationary sources, including the marine vapor combustion, are subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping for onsite stationary sources. Refer to the Draft EIS for a list of permit conditions and applicant mitigation that would reduce potential impacts on air quality.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP238-29

Chapter 3.16 Vehicle Traffic and Safety

Where are the statewide traffic impacts?

Where is there reference to school bus delays statewide?

Response GP238-29

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP238-30

Chapter 3.17 Vessel Traffic

If both projects are approved, Terminal 1 would be occupied up to 363 days per year. This would exceed the maximum capacity of the dock, considering needed time off for maintenance, but is based

on the assumption that the greatest number of vessels would be used for each project. How will this be mitigated?

Response GP238-30

The Draft EIS does not specify exact combinations of vessel types to ensure berth capacity is not exceeded.

Comment GP238-31

Based on the combined traffic for the proposed projects and future vessels, **the studies found there would not be a substantial impact on the navigation channel traffic.** The increase in vessels from the proposed projects **would not** affect the movement of other large commercial vessel traffic in Grays Harbor. You have got to be kidding! How can this be possible? Ships and barges will be using the harbor every day of the year—in good weather and bad. Near the entrance into the Grays Harbor estuary from the Pacific Ocean, less buoyant saltwater (from the ocean) flows beneath more buoyant freshwater (from the numerous rivers and streams that drain into Grays Harbor). During ebb tide, bouyant freshwater at the ocean/estuary innerface expands. Coupled with high winds brought on by severe winter storms, wave conditions near the entrance to Grays Harbor can be intense *(Grays Harbor Geographic Response Plan December 2013).*

The Grays Harbor Bar can be closed for days to weeks!

Response GP238-31

Refer to Draft EIS Chapter 3, Section 3.17.5.2, *Proposed Action*, for the channel capacity analysis. Section 3.17.3.2, *Impact Analysis,* describes the methods used in the analysis.

Comment GP238-32

In addition, the navigation of Grays Harbor can be difficult! Due to shoals and flats, the navigable channel into Grays Harbor narrows to 0.6 miles wide with a number of turns where well judged course changes are required. A breaking bar at the entrance to Grays Harbor, coupled with strong and sometimes erratic currents, can present a navigational challenge to commercial and recreational vessels entering or leaving port. Periods of limited visibility (fog, rain, and darkness) can add to this challenge. Submerged sections of the north and south jetties at the Grays Harbor entrance extend seaward about 0.2 and 0.9 miles (respectively). Hazardous breakers can occasionally be present near these jetties, especially during periods of heavy weather.

Response GP238-32

Draft EIS Chapter 3, Section 3.17.4.4, *Vessel Traffic Management*, discusses the systems that are in place to manage vessel traffic in Grays Harbor safely. Chapter 4, Section 4.6, *Environmental Health Risks—Vessel Transport*, presents an analysis of potential impacts from increased risk of vessel collisions, groundings, and allisions and related consequences (e.g., release of crude oil) under the proposed action, and proposes mitigation measures to reduce the likelihood of a vessel incident.

Comment GP238-33

Pilotage rules for commercial traffic must be followed in order to reduce the risk of groundings, collisions, or other accidents (Grays Harbor Geographic Response Plan December 2013). When conditions deteriorate, vessels may not be able to enter port due to a bar closure. Should a vessel experience a casualty, tug assistance from nearby coastal ports may be unavailable due to conditions on the bar. Brief windows of improved weather may cause waiting vessel traffic to get under way to cross the bar, potentially leading to heavier than usual vessel traffic during marginal conditions around harbor entrances.

Response GP238-33

The pilotage rules contained in WAC 363-116 are in effect for the Grays Harbor pilotage district (state rules) and enforced by the Board of Pilotage Commissioners. Federal pilot requirements for proposed action vessels are contained in 46 CFR 15.812 and are enforced by the U.S. Coast Guard. Refer to Draft EIS Chapter 3, Section 3.17.4.2, *Large Commercial Vessels*, for a discussion of escort tug use in Grays Harbor as related to the proposed action vessels. As noted in Section 3.17, *Vessel Traffic*, pilot and escort tug capacity would not be exceeded because of proposed action vessel operations. Refer to Section 3.17.4.4, *Vessel Traffic Management*, for information about how vessel movements are managed in Grays Harbor.

Comment GP238-34

Who bears responsibility for damage when a tanker runs aground or a collision occurs? How will this be mitigated?

Response GP238-34

Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP238-35

Chapter 7 Economics, Social Policy and Cost Benefit Analysis

Who pays for site-cleanup in the event of a bankruptcy?

Response GP238-35

Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS.

Comment GP238-36

You assume that oil production in Alaska and from OPEC might decline in amounts equivalent to the amounts proposed for Grays Harbor. We have no guarantees of that and OPEC appears unwilling to give up market share.

We have no hope of stopping climate change if we continue to build new fossil fuel infrastructure. We need to transition away from fossil fuels, not strengthen our dependence on them. Once a facility is built, investors such as pension funds will demand a return on investment for the rest of the century.

We are in an oil glut. You ignore the impact that increased supply of oil will have on consumer interest in fuel efficient cars. You suggest that maybe production in North Dakota might replace production from OPEC or Alaska, but there are no guarantees of that.

Response GP238-36

Comment acknowledged.

Comment GP238-37

In your economic summary, you make a chart of economic benefits and costs assuming there would be NO job losses and no accidents, you did not include the harm to jobs in the fishing industry. You didn't include the decay that will set in, as businesses and people move away.

Statewide economic impacts

Adequacy of Financial Responsibility

The Economic Impact Analysis Planning model used by ECONorthwest in relation to the fact that oil trains are prone to catch fire.

Where is the minimal analysis of the cost of a small spill in Grays Harbor, a moderate spill in Grays Harbor, a large spill in Grays Harbor?

If you can analyze the positive impacts to the Grays Harbor economy—why can you not analyze the potential negative impacts?

Response GP238-37

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis.*

Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS.

GP239, **Figlar-Barnes, Ron**

Comment GP239-1

My name is Ron Figlan-Barnes, resident of Elma. And thank you for this opportunity to, you know, give testimony on these two projects again.

I've got all this written here, you know, WAC 197-11, WAC 560. Lead Agency, what the agency must do. I have all this stuff, you know, saying what -- how lousy the, you know the DEIS really is because it misleads. I don't want -- and then you have two minutes to be able to say anything, you know.

Brian Shay, this is like the third or fourth time that I've talked while you've listened. Still the permit process continues. This is not a good situation for Grays Harbor. You need to pull the permits, period. And you have all these good folks giving you all the reasons why. If you can't see that, then I feel sorry for you.

Response GP239-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP240, **Finke, Jeanne**

Comment GP240-1

I care about the economic impacts on Grays Harbor. The DEIS seems to value only the economic benefits from the terminals, including a small number of jobs and annual taxes. The DEIS fails to adequately analyze the harms and negative impacts of these terminals, not only if there is an accident, but impacts on other proposed developments, the marine resources economy, tourism, and property values.

Response GP240-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4, *What are the costs of the proposed action?* describes the range of associated costs that could be expected in general terms, including impacts on affected businesses and property owners. Final EIS Section 7.3.4.2, *Potential Impacts on Property Values,* has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP240-2

I live in Ocean Shores, WA right on the North Bay shore so I can visualize clearly the devastating impact of oil spillage on oystering operations, seining off Damon Point, the Bay itself which is the

Pacific flyway resting site for bird migrations who gather here, razor clamming on our ocean beaches, surf fishing, and the attraction of our beach areas to tourist to enjoy, and the livability and value of my own home as it sits on this waterfront view property. I care about the respiratory and neurological health impacts for all the people in the communities along the rail lines from beginning of the rail route as it enters the state of Washington, following the Columbia River Gorge to Vancouver, then north to Centralia/Chehalis, then west along the Chehalis River to the terminals in Hoquiam.

Response GP240-2

Comment acknowledged.

Comment GP240-3

The increase in these rail car shipments and hence the increase in diesel emissions will increase the pollution of the fresh air here that we of all ages seek to enjoy. Diesel emissions have been identified and linked by the WSMA to increase in asthsma and increase in neurological disorders in children. My mother, Dorothy H. Kullberg, President of Portland Transit Savers organization, fought in the 1950's against diesel bus service replacing electric trolley rail service in Clackamas County. That battle was lost to more powerful interests, but over 50 years later, the MAXX electric rail trains now have emerged to serve the airport and several areas in the greater Portland area and Clackamas County. Oregonians finally awoke to take environmental actions to work to preserve the livability of their state. We can do that too in Grays Harbor and all along the rail line! The Department of Ecology and Hoquiam should fill the gaps and inadequacies in the DEIS analysis. The analysis and findings of significant environmental impacts that cannot be mitigated in the DEIS should be used to reject these proposed oil shipping terminals.

Response GP240-3

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP241, **Finke, Jeanne**

Comment GP241-1

I would like the DOE to identify the risk taking entitites associated with these projects,as well as the order of precedence in ownership of responsibility for risk mitigation and risk acceptance. (For example, based on what I have just read about the Fry Creek mineral oil spill November 16, 2015, the Grays Harbor PUD was first to respond then the DOE was secondary. It appears the DOE will determine the fault and ask for compensation from the offender, e.g., the PUD or the railroad company for the train that hit the transformer.) Potential Oil spills and oil train fires are the biggest risks for the Westway and Imperium projects. If the commercial companies involved in the transportation and storage and shipping process are not financially capable of assuming the risks associated with these projects, the tax payers will end up owning the costs which would include litigation. The costs that cannot be recouped could end up bankrupting the small towns or counties along the railroad lines and the seafood and tourism industries. If the state and the federal government are willing to accept these financial risks, we all will be paying the bill for the damage.

Response GP241-1

Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS.

GP242, **Fjachie, Craig**

Comment GP242-1

Grays Harbor is a unique and vital natural resource and key estuary in our marine ecology. A terminal to export oil in Grays Harbor is immoral and extremely short-sided, given the urgent need to reduce, not expand consumption of fossil fuels.

Response GP242-1

Comment acknowledged.

GP243, **Ford, Robert**

Comment GP243-1

Specific Item Which Should Be Considered In More Significant Depth Within The Draft Environmental Impact Statement Presented For Public Comment Oct. 8, 2015:

Presented for consideration by Robert M. Ford, III, FAIA,

Architecture/Planning (Northwest)

1335 E. First Street

Aberdeen, WA 98520

DANGER OF LANDSLIDES OVER TRACKS INTO CHEHALIS RIVER

This year, in January 2015, Hoquium and Aberdeen experienced significant rainfall within a relatively small period of time. Many people awoke to water standing on their city streets. In fact at 6am the standing water at my house on the East end of First Street, near the Wishkah River, was over 8” deep. As daylight broke, I walked along my street in ankle deep standing water. On close examination I realized many neighboring houses actually had water up to or above their door sills. And it was still raining. I parked my little car in my neighbors driveway to get it above the standing water.

Later that morning, as I was watching the water very slowly subside, a neighbor asked if I had heard about several houses sliding down a hill over near the hospital? And about that time I heard a cracking sound as five mature trees across the Wishkah River slid down the hill into the river! They are still there as a bit of a hazard to fishermen and their boats. No one accepted responsibility. An act of God?

Response GP243-1

Comment acknowledged.

Comment GP243-2

On January 5th I had to drive into Olympia, but was faced with large D.O.T. trucks and heavy equipment attempting to open up Highway 12. Seems a major hillside slide had engulfed all four lanes of the highway, and in fact toppled the guard rail with earth then falling down over the next lower hill, across the railroad track and into the Chehalis River!!!!!

What if 20 0r 30 rail cars of Baaken Crude had been traveling through on its way to those proposed tanks in Hoquium??? "So long" to Grays Harbor fisheries, clams, oysters, crabbing. The flowing river and ebb-tide would quickly carry the oil out to West Port ..... in several hours. No time for response!

This week I read a clear article by correspondent Kyle Mittan of the Daily World. He had researched that slide area thru the Department of Transportation (article attached) Seems that particulars spot is still sliding on occasion. They have attempted to install drain pipes all the way up the hill to the ridge and they must monitor the slide area each day!! And in fact that bluff has experienced eight slides since 1994!!! The "worst slide to date was in 1996, resulting in closure of all four lanes for several days." (see full Daily World article attached)

If this or similar slide area were to hit a Crude Oil Train we might no longer talk of the threat of bringing crude oil thru our cities. We would simply look for a new place to live. The only rational answer is to say NO TO CRUDE OIL!!!!

Response GP243-2

Based on the recent landslide occurrences that exceeded the predicted landslide flow distance, Final EIS Chapter 3, Section 3.1, *Earth*, acknowledges the distance that debris flow has traveled in the past. Despite the recent landslide events that exceeded the predicted landslide flow distances, the rail and road segments for 12 of the 19 miles described are estimated to have the same level of risk for interruption by landslides as previously described in the Draft EIS.

All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP244, **Ford, Robert**

Comment GP244-1

My name is Robert Ford, architect planner, living at the end of First Street near the Wishkah River. I'd like to talk about landslides. In January we had 11 inches of rain. I woke up one morning and there was eight inches of water in my street, a lot of water all over town, and in a lot of houses.

A neighbor of mine said, Have you heard about the houses that slipped off the hill over in Hoquiam? They're still there at the bottom of the hill. I looked around me and I heard a cracking noise and there were five trees cross the river from me that came down the side of that hill into the Wishkah River. The trees are still there. Nobody bothered to get them out of there.

The next day I went into Olympia down Highway 12 -- or up over Highway 12 and there had been a landslide. I didn't realize that. I couldn't get through. They were moving dirt. The landslide came down, hit Highway 12, knocked out the guardrail, gone over the hill, gone down over the railroad tracks and touched the river.

What if that had been that Bakken crude oil train? It would have been in the river. The contents, because of the ebbing tide and the flowing river, would quickly be down to Westport. There's no time for response. There's no way to mitigate that kind of a problem. I urge you to vote no, please.

Response GP244-1

As stated in Draft EIS Chapter 3, Section 3.1.5.2, *Proposed Action*, *Rail*, the potential for landslides along the rail line would be the same under the proposed action as the no-action alternative; however, increased rail traffic related to the proposed action would slightly increase the likelihood of a landslide affecting a train along the PS&P rail line. Draft EIS Chapter 4, Sections 4.5, *Environmental Health Risks—Rail Transport*, presents the analysis of risk of oil spills, fires, and explosions along the PS&P rail line under the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures. Nonetheless, implementation of these measures would not completely eliminate the possibility of an incident. Depending on the specific circumstances of an incident, the environmental impacts could be significant.

Refer to the Master Response for Purpose and Focus of the EIS.

GP245, **Forster, Charles**

Comment GP245-1

I urge a refusal of ANY oil-train terminal on Washington's coast. We all know (from more examples than can be listed in 4000 characters) that where-ever oil is shipped by pipeline or rail or freighter eventually there will be a large spill. our coastline and the ocean fauna is already under threat from warming ocean waters. Please, let us use common sense and deny any effort to further threaten our coast and ocean waters.

Response GP245-1

Comment acknowledged.

GP246, **Francy, Joshua**

Comment GP246-1

I have a few concerns about companies shipping oil through grays harbor and transferring it to boat to transport it overseas. There are a number of reasons why this is not a good plan. They are the condition of the railways, the usual weather in the harbor, and the risk of a spill.

I have lived in this area for over a quarter century. I have enjoyed living in this area with its various biomes. This area has many rivers that join together to form the waters of Grays Harbor. Close to this area we have the temperate rainforest, beaches, lakes, hills, and forests. Our local economy fell apart after the timber industry lost its profit margin. Our local shorelines provide the areas to farm cranberries, oysters, and clams. We have a very unique environment that would be destroyed if these companies are allowed to ship oil through this area. We have a rainforest close to where we live so we have more rain than else were.

Our harbor usually has high winds that causes conditions that would prevent the oil from being contained when it spills. Booms will not function correctly. I have seen it with my own eyes.

Response GP246-1

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment GP246-2

I have seen a number of train wrecks here. I live close to the tracks. I have seen the damage caused by four train wrecks over the past few years. I also see the space that is used to store full biodiesel tankers in Aberdeen does not have a fence and is not monitored for long periods of time. I am attaching some pictures of two different wrecks. One was caused by antiquated and faulty equipment and the other was caused by the rail road company transporting something too large that snagged a fiber optics cable and knocked a transformer and mineral oil into a local creek. The first collage of pictures should show railroad tracks & a track switch covered by rain. The railroad company stated that the switch being covered with water shorted it out and caused it to send the train down tracks that don't exist anymore. It happened during the end of April in 2014. That caused two railcars to wreck and spill grain onto the ground. The grain and railcars were left next to the railroads for over a month. The grain was there so long it molded. The second set of pictures is more recent. This happened only a few weeks ago. The story I was told was that the train over hauling something oversized and that snagged a fiber optics cable and power transformer. The transformer had mineral oil in it and that spilt into a local creek. I came across the scene two days after the accident. The booms were placed on both sides of the last culvert before the creek enters Grays Harbor. Those booms were tangled due to the tide. Both times I went to the site it was unmonitored. I called spill response after I came across the site. The booms were floating at high tide the next day, but was still unmonitored. Both of these incidents showcase how train wrecks affect the local area.

If these corporations are allowed to ship crude oil through this area it will destroy our local livelihood and only a small amount of people will benefit while the rest of our safety is risked.

See original attachment for photos [Photos reviewed but not reproduced.]

Response GP246-2

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures

with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

GP247, **Franklin, Teri**

Comment GP247-1

Good evening. My name is Teri Franklin. I'm from Grays Harbor. I'm third generation.

I'm three quarters of the way through reading your EIS. My background is watershed analysis. I find it willfully inadequate. I've been involved in projects here with the Land -- Shadle Space and Land Trust, the Shadle Space and Partnership, Thurston County Conservation, Lewis County Conservation. We've spent hundreds of millions, and I mean hundreds of millions of dollars cleaning up our fish runs, doing all kinds of work and restoration, and this is like a slap in the face for all those volunteer hours, all that time, all that energy to put something like this in the mouth of the Chehalis River. It's craziness.

There's no mitigating any of this. If it spills over there's -- it's never -- our fisheries are going to be gone. All that work, all those years. I've been at this since 1992. That's a lot of volunteer hours. This is craziness. Absolute craziness.

These are the most hokey documents I've seen in a long time. And you will be getting my written testimony because I can't even begin to tell you how crazy it is in two minutes. So I really hope that you will look at this and look at all the money, time, and energy that we have spent cleaning the mess up here. And take a look at this building, because this is the last major debacle you guys let through here.

So, please, think twice about, you know, what you're up to. Thank you.

Response GP247-1

Comment acknowledged.

GP248, **Franklin, Teri J.**

Comment GP248-1

November 28, 2015

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To all agencies that will use this information to determine if permitting will be allowed please read carefully, it is not that long and is a summary of events that were undertaken to protect the natural resources of this area. All information pertaining to my statement can be found on the internet at the Federal, State and Local government agency level, you should have better access and an easier time then I did obtaining all the information concerning costs. If you track the money spent you will be surprised.

It appears to me that you have totally ignored the Chehalis Basin Partnership Management plan by entertaining the thought of the projects being proposed for Westway, Imperium and US Development. You are also ignoring the entire chapter of RCW 77.85. I find this totally unacceptable.

In the past 17 years we have spent over $137.4 million dollars, of taxpayer's money cleaning up the water quality, restoring as much habitat as we could afford and doing restoration projects on the Chehalis and its tributaries, all for the preservation of the salmon. It will take years for the results of these efforts to be realized. Allowing these storage tank projects to go on is ludicrous, I am so tired of government officials with a single stroke of a pen undermining the hard work of all the people who have volunteered their time, energy and money to make this a reality.

The people of Grays Harbor allowed Westway Terminal Company LLC into Grays Harbor without opposition because they were going to do bio-diesel which we saw as a better alternative technology to fossil fuels. There are a great many progressive thinkers in Grays Harbor County. Our quality of life and our natural resources are extremely important to help secure our vision for a sustainable community using our natural resources and attempting to add the benefit of a more eco-tourist type economy into the mix.

We find Westway's attempting to change over to some of the worst crude oil this planet has seen humans extract, a huge slap in the face to all of us.

What our Port Officials are promoting is not the general consensus of the people of this area. It is also contrary to what the Port of Grays Harbor signed on for by signing up with the Chehalis Basin Partnership. Their lack of vision as to the risks they are taking to secure 20-40 permanent jobs while putting 1000's of natural resource jobs at risk is appalling.

The added rail traffic and the long trains will disrupt all who use the roads in this area since we have 100's of crossings and maybe three over road trestles. There are no trestles or underpasses for emergency services for Elma, Montesano, Aberdeen or Hoquiam to gain access to portions of their individual communities and the cost to build them is prohibitive for the people of this area.

Response GP248-1

Comment acknowledged.

Comment GP248-2

The added crude rail traffic will require some serious attention to the area's along the rail that cross all the culverts, wetlands and streams. The increase in rail traffic of these 1 ¼ mile long trains will vibrate the ground causing erosion issues that could derail a train. I have notice in the last mouth there are areas in Grays Harbor where the speed of trains has been increased recently that are now causing the rails to become wavy. The trains may need to travel at lower speeds which would than cause more congestion. I do not see anything in the DEIS that truly makes any changes that will relieve these problems.

Response GP248-2

As noted in Draft EIS Chapter 3, Section 3.7, *Noise and Vibration*, implementation of the proposed action is not expected to result in changes in speeds and therefore, no changes in vibration or speed-related increased in congestion along the PS&P rail line.

Comment GP248-3

There are marble murrelet nesting sites in WRIA 22 and they do use the Chehalis. The vessel and rail route include many environmentally sensitive areas including streams, rivers, wetlands, fishing areas, shellfish beds, migratory bird habitat and a national wildlife refuge. This is our natural resources that we are trying to keep intact and this proposal does not do that. Federal Law through the endangered species act requires us to protect the fisheries of this area and no amount of spill prevention preparedness is going to do that. This proposal does not fit with this area. My state representatives gave a town hall meeting in the Elma area and told us that we have the best spill response teams around. I was told that they see the tankers going to and from the Strait of Juan de Fuca on a daily basis. Well you tell me how many intact salmon runs are left in Puget Sound. Not that many, imagine that. We have taken steps here in the Chehalis Basin to preserve what we have and to enhance what we can, to protect this resource as required by law. These types of proposals undermine that work. No mitigation is going to be able to protect the investment, either monetarily or physically, we have made in our natural resources which are highly valued by the people of the Chehalis Basin. Our commitment to the long term planning for this area proves this. These permits should be denied and this type of industry should never be considered for Grays Harbor again we have invested too much time and money to have it undermined by proposals such as these. We have taken steps to stop any future thought of oil storage in Grays Harbor through the political process putting ordinances in place that will make this impossible in the future and due to the sensitive nature of Grays Harbor we are asking that these permits be denied. As evidence to what I am stating I give you the following:

The Chehalis Basin Partnership was formally created through an intergovernmental agreement dated August 31, 1998; however, the group formed and began meeting in the fall of 1996 in response to water resource issues that had emerged in the Chehalis Basin. In 1998 the Partnership took advantage of the legislative enactment of the Watershed Management Act (Engrossed Substitute House Bill 2514, Revised Code of Washington 90.82), to begin a voluntary planning process for the Chehalis Basin. The Chehalis Basin includes two state-designated Water Resource Inventory Areas or WRIAs: the Lower Chehalis Basin (WRIA 22) and the Upper Chehalis Basin (WRIA 23). Together, they comprise one of the largest watersheds in Western Washington.

The state-authorized watershed planning process allows local governments and interested groups and citizens to assess and manage the water resources of a river basin and to develop strategies within the basin to address water quantity, water quality, fish habitat and in-stream flows. Watershed planning is intended to support economic growth and promote water availability and quality for the state.

Between 1996 and 2008, project partners received almost $96 million to improve and protect water quality in the Chehalis River Basin. Nonpoint source project funding included $675,000 in CWA section 319 grants; $2.2 million in Centennial Clean Water Fund (CCWF) grants to Thurston, Mason and Lewis County CDs; $500,000 in Local Toxics Control Account grants for stormwater improvements; $400,000 in Aquatic Lands Enhancement Account grants for habitat improvement and vegetation control; and $502,000 in special appropriations administered by the state's Shoreland Environmental Assistance Program. Landowners and project sponsors contributed an additional $1 million toward those projects in cost-share funds. Although the FC pollution was primarily nonpoint source-related, significantly more funding was channeled to point source controls to support the high cost of maintaining and replacing sewage treatment plants. Funding for treatment plants included $75.5 million in state revolving fund loans and $16 million in Washington's CCWF grants.

The group's stated mission that guided the development of the Plan was to: develop a management plan that will result in effective, economical, and equitable management of the water in the Chehalis Basin to sustain viable and healthy communities and habitat conditions necessary for native fish.

Chehalis Basin Partnership
ORGANIZATION AND MEMBERSHIP
ORGANIZATION OPERATIONS

The Chehalis Basin Partnership became a WRIA planning unit through an intergovernmental agreement in August 1998 for the purposes of watershed assessment, planning and management:

"This Agreement shall designate a planning unit and a lead agency for purposes of assessing and managing the water resources of the Chehalis River Basin and to pursue strategies within the Chehalis River Basin which include the key elements of flood reduction, fisheries, recreation, watery quality and water quantity and examine their relationship to economic health and sustainability."

Shortly after its formation, the CBP adopted Bylaws. The adoption of an Operating Procedures Manual followed on September 24, 2004.

Intergovernmental Agreement
Bylaws
Operating Procedures Manual
MEMBERSHIP
Printable Membership List

The Chehalis Basin spreads from the headwaters near Pe Ell, up to the reaches of the Humptulips River in the Olympics, and into Grays Harbor. It includes parts of eight different counties; Cowlitz, Grays Harbor, Jefferson, Lewis, Mason, Pacific, Thurston, and Wahkiakum, and is one of the largest watersheds in Washington. Below is a list of partnership members:

MEMBER COUNTIES

Grays Harbor County
Commissioner Frank Gordon
360-249-3731

Lewis County
Commissioner Bill Schulte
Lee Napier, Alternate
360-740-1419

Mason County
Vacant
360-427-9670 x419

Thurston County
Commissioner Karen Valenzuela
Cindy Wilson, Alternate
360-786-5440

MEMBER TRIBES
Confederated Tribes of the Chehalis Reservation
Chairman David Burnett
Mark White, Alternate
Glen Connelly, Alternate
360-273-5911

MEMBER PORTS
Port of Centralia
Art Lehman
Charles Caldwell, Alternate
360-736-5192

Port of Grays Harbor
Charles Caldwell
360-249-4651

MEMBER CITIES & TOWNS
Aberdeen
Lisa Scott
Bob Waite, Alternate
360-537-3238

Centralia
Bonnie Canaday, Mayor
Kahle Jennings, Alternate
360-330-7674

Chehalis
Councilman Terry Harris
Patrick Wiltzius, Alternate
360-354-1042

Hoquiam
Councilman Paul McMillan

McCleary
Vacant
360-495-3200
Montesano

Mayor Ken Estes
360-249-5424

Napavine
vacant

Ocean Shores
vacant
360-289-2486

Pe Ell
vacant

MEMBER WATER DISTRICTS

Thurston PUD
Commissioner Chris Stearns
360-357-8783

Grays Harbor Water District #2
vacant
360-533-3490

MEMBER CITIZEN REPRESENTATIVES

Citizen - Grays Harbor County
Gary Waltenburg
Citizen - Lewis County
Lyle Hojem, Jim Hill, Bill Barmettler, Chris Cheney
Citizen - Mason County
Peter Hiebert, Jim Bottorf, Laurie Cox, Neal Cos
Citizen - Thurston County
Chanele Holbrook-Shaw, Earl Emerson, J. Roach

MEMBER STATE AGENCIES

Washington Department of Agriculture
Vacant
360-902-2051

Washington Department of Ecology
Chris Hempleman
360-407-0239

Washington Department of Fish & Wildlife
Bob Burkle
360-249-1217

Washington Department of Natural Resources
Chuck Turley
360-575-5002

MEMBER STAKEHOLDER GROUP REPRESENTATIVES
Business Representative
vacant

Fishery Interests: Chehalis Basin Fisheries Task Force
Terry Nielsen, Lonnie Crumley
360-482-2347

Agricultural Interests: Lewis County Farm Bureau
John Lucas, Julie Balmelli-Powe
360-249-4854

Forestry Interests: Weyerhaeuser
Annette Grainger
360-291-5540

What is the point of long range planning if no one follows the plan? Why would we invest hundreds of millions of dollars to preserve the salmon runs, and water quality if the result was oil storage tanks in the area at the mouth of the Chehalis? We made sure that our government officials were on board with the Chehalis Basin Partnerships plans and as officials sometimes due they see dollar signs and forget every thing else that has gone on before.

I want to reiterate these permits should be denied and this type of industry should never be considered for Grays Harbor again, we have invested too much time and money to have it undermined by proposals such as these. We have taken steps to stop any future thought of oil storage in Grays Harbor through the political process putting ordinances in place that will make this impossible in the future and due to the sensitive nature of Grays Harbor we are asking that these permits be denied.

Thank you for your time and consideration,

Teri J Franklin
tfrank655@techline.com

Response GP248-3

Chapter 3, *Affected Environment, Impacts, and Mitigation*, addresses potential impacts from construction and routine operation of the proposed action. Increased risk of incidents (e.g., storage tank failure, train derailments, vessel collisions) and potential consequences (e.g., release of crude oil) are addressed in Chapter 4, *Environmental Health and Safety*. Section 4.7, *Impacts on Resources*, describes the general types of impacts on water, plants, and animals that could occur as a result of an oil spill, fire, or explosion.

GP249, **Freiberg, Pat**

Comment GP249-1

Hi. I'm Pat Freiberg, and I'm here today from Vancouver to say that every oil train reaching Grays Harbor passes through Centralia, Ridgefield, Vancouver, Camas, and points west to Spokane.

What happens with oil trains in Grays Harbor affects every community that the Bakken crews unit trains pass through. The DEIS ignores this fact, as if Westway, Imperium and Grays Harbor were together on an island, but we all know that this isn't so.

Response GP249-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP249-2

Federal Railroad Administration statistics show that once a month on average there's a major derailment involving spilled cargo, a fire explosion or loss of human life. It's strictly the math. For every one million rail miles traveled, there will be a catastrophic derailment, as seen in West Virginia in February and Illinois in March.

Response GP249-2

Comment acknowledged.

Comment GP249-3

Unit trains coming into Grays Harbor cross over at least 15 bridges that are over 100 years old. I read that one bridge was built in 1890. These bridges are built on wooden pilings and were never intended to carry the loads involved in modern oil by rail traffic.

The DEIS does not address how these bridges will be upgraded or reinforced. That's because it's a railroad problem, not an oil company problem.

My question is, will these bridges be upgraded at all, or will it require a catastrophic accident before the obvious problem is addressed? And who will pay for the upgrades? It won't be the oil companies. And it's probably not the railroad. As usual it will probably be the taxpayers. I urge you to deny this permit.

Response GP249-3

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless,

compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

GP250, **Freiberg, Pat**

Comment GP250-1

I am here today from Vancouver, to say that every oil train reaching Gray's Harbor passes thru Centralia, Ridgefield, Vancouver, Camas and points east to Spokane. What happens with oil trains in Grays Harbor affects every community the Bakken crude unit trains pass through. The DEIS ignores this fact as if Westway, Imperium & Grays Harbor were together on an island. We all know this isn't so.

Response GP250-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP250-2

Federal Railroad Administration statistics show that once a month, on average, there's a major derailment involving spilled cargo, a fire or explosion or loss of human life. It's strictly the math. For every one million rail miles traveled, there will be a catastrophic derailment as seen in W. Virginia in February or Illinois in March.

Response GP250-2

Comment acknowledged.

Comment GP250-3

Unit trains coming into Gray's Harbor will cross over at least 15 bridges that are over 100 years old. One bridge was built in 1890! These bridges are built on wooden pilings and were never intended to carry the loads involved in modern oil by rail traffic. The DEIS does not address how these bridges will be upgraded or reinforced. That's because it's a railroad problem not an oil company problem. My question is will these bridges be upgraded at all? Or will it require a catastrophic accident before the obvious problem is addressed? And who will pay for the necessary upgrade? Not the oil companies. Probably not the railroad. Most likely us, the taxpayers.

Response GP250-3

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge

management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

GP251, **Freiberg, Patricia**

Comment GP251-1

COMMENT DEIS WESTWAY, IMPERIUM (REG) PROPOSAL GRAYS HARBOR OCTOBER 8, 2015

PATRICIA FREIBERG 8327 NE 54TH STREET VANCOUVER, WA 908662

Anyone who has been around industrial areas involving crude oil knows that it's associated with a foul odor for a couple miles in all directions. The issue of odor is not addressed in the Draft EIS, not even in section 3 which focuses on the "aesthetics, light and glare" of this proposal. In fact, there is a vast emptiness in the Draft EIS regarding the considerations of smell, noise and vibration which will obviously impact the homes and businesses in the port vicinity.

Response GP251-1

Final EIS Chapter 3, Section 3.2, *Air*, reflects the addition of a discussion of potential impacts related to odor. The only compound with sufficient emissions to have the potential to have a perceptible odor is hydrogen sulfide. The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, are expected to reduce emissions of air pollutants, including hydrogen sulfide, to below the odor threshold for the most sensitive individual.

Draft EIS Chapter 3, Section 3.7, *Noise and Vibration,* provides an analysis of noise and vibration impacts related to the proposed action.

Comment GP251-2

The proposal requests adding 5 storage tanks to the existing 4 that are already on site. The 5 new tanks will be 150 feet wide and 64 feet tall which exceeds the City of Hoquiam height restrictions. The 4 storage tanks already in place are 24 feet shorter while the grain silos are 63 to 71 feet taller and also exceed the height restrictions but appear to operate under a conditional use permit from the City of Hoquiam. This proposal requests a conditional use permit be granted to the applicants to accommodate the height of the 5 new crude oil storage tanks that will be built. I suggest that this permit be denied.

Response GP251-2

Comment acknowledged.

Comment GP251-3

These tanks will store volatile Bakken crude and will need a venting system to prevent pressure buildup. What kind of venting system will be in place and how foul is the odor that will be vented

into the surrounding air space? Is there a filtration system in existence that can eliminate the stench accompanied with crude oil?

Because the issue of foul odor is not addressed and because the proposed storage tanks exceed Hoquiam's height restrictions, this proposal should be denied.

Response GP251-3

The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, would reduce emissions from onsite stationary sources. Refer to Response to Comment GP252-~~3~~ 1 on potential odor.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP252, **Freund, Sylvia**

Comment GP252-1

Months ago, I submitted my concerns on this project but I shall repeat them here. Although I live in Centralia, my Grandfather was an early settler and the second State Senator elected from the Hoquiam area. I cannot address the issues that city will face but I know how I will be impacted. I've lived in a historical neighborhood here since 1975. When we first moved here, there was a vacated railroad several blocks away that was only used to bring greens to be made into wreathes and swags at Christmas time. Then, about 25 or so years later traffic on the line began to increase, especially all night long and it is used as a "parking line" for traffic on the main line through town. If this project is approved, it is my understanding that the little parking rails will be revamped, the neighborhood north of the line will be cut off from our side of the rails, the children will be cut off from their neighborhood school and what is a historical, residential neighborhood will become an industrial thoroughfare. The possible danger we will face with the transported coal, the increased rail traffic, and the lowered property values will bring us NO benefits.

On an even larger scale, at a time when we face the disasters resulting from global warming, we will be victims of something that profits few at the expense of ourselves and our environment. At a time when we are trying to pursue cleaner energy sources, this project would encourage continued environmental damage and we would reap that not only in the transportation through our neighborhoods but also in the polluted air streams returning to us from Asia.

I know Grays Harbor and Lewis County are two of the highest unemployed counties in the State...but, perhaps, you instead of adding to our problems...could become leaders in solutions, like harvesting tidal energy? I feel I am talking to the wind...all of the logic will have no bearing on what will be decided it is a foregone conclusion. But I have to protest.

Response GP252-1

Comment acknowledged.

GP253, **Fuquay, Anita**

Comment GP253-1

Gmail: Oil Trains

Anita Fuquay swampgramma@gmail.com
Fri, October 9, 2015, 3:28 PM
Draft

Big corporations are asking the people of Grays Harbor to make a wager. We are to ante up our environment, our fisheries, our scenic beauty, our very lives and the lives of our loved ones. Against this bet, big corporations make a relatively modest investment in the community and promise us 245 permanent jobs. There is a 75% chance that we will lose this bet.

Any sane person in Las Vegas would simply turn away from a bet such as this. We here on the Chehalis estuary have everything to lose and almost nothing to gain, while Big Oil companies have almost nothing to lose and everything to gain. The odds are in favor of Big Oil. To them, it's like taking candy from a baby.

Even if the other 25% happens to prevail…and there is no catastrophic spill (and in this place, ANY spill would be a catastrophe) the Harbor would still end up filled with ugly storage tanks and our roads would be choked with blockages from the long oil trains.

When the oil corporations…which are already suffering from a glut of product on the market?ante up as much or more than we would have to here…such as their very lives, their jobs, their families' lives, their homes and everything dear to them…only then would the bet be a fair one. And we would still say "NO!!!"

Anita Fuquay
swampgramma@gmail.com

Response GP253-1

Comment acknowledged.

Comment GP253-2

I tried to send this via e-mail, but the address given is not viable. Guess that's one way to keep people from responding to the situation. When you say "all comments will be valued equally", does that just mean that nothing the public says will be considered at all?

Anita Fuquay

P.S. – Does the snail mail address not work, either?

Response GP253-2

The commenter does not provide any details about what email address did not work. Comments were received in writing (via email, U.S. mail and at public meetings), through oral testimony at public hearings, and via the web portal. All comments were entered into a comment

processing software and reviewed, and each individual comment within each submission was responded to. All comments were considered in updating the Final EIS.

GP254, **Garnett, Kathryn**

Comment GP254-1

I speak to you today as a member of the Faith Community in Grays Harbor. And I speak in opposition to the proposed moving and storage of crude oil in our community. God created our world and we are fortunate to live in one of the most beautiful areas of that creation. But even as we have been given this gift of beauty, we have a responsibility to care for it. The earth is fragile as are all the creatures, including we human creatures. We are the ones who must protect our environment. It is the heart and soul of Grays Harbor County.

Jesus talked to us about the consequences of failing to honor our commitment to protect God's creation. When we allow corporate profits to hold sway over God's creation and all the living things that inhabit this creation, we have warped our priorities and failed in our commitment. Jesus said: "For what shall it profit a man, if he shall gain the whole world, and lose his own soul?

The movement and storage of crude oil brings with it the potential for major environmental and economic disaster. Not only would this bring serious financial consequences to Grays Harbor, it would negate any potential economic gain that might be realized by additional industry in the area.

We all know that we live in an area that is beautiful, but environmentally fragile. Are the risks of moving and storing potentially dangerous materials being faithful caretakers of God's creation? Jesus asked if it profits one to gain the world, but lose ones soul. I would put that question to those who are weighing this decision.

Response GP254-1

Comment acknowledged.

GP255, **Gere, Susan**

Comment GP255-1

My name is Susan Gere. I live in Portland just across the Willamette River not far from the oil trains. It would destroy my home in the event of a fire caused by a derailed oil train. This fuel drive is a regional issue. No matter where they end up burning, we all live downwind.

Our planet is on the verge of irreversible disaster. We need to move away from fossil energy immediately if we have any hope of us having a sustainable and recognizable future. Convert to green energy as quickly as possible. For this and 1,000 other reasons detailed by others, you must deny these permits.

Thank you.

Response GP255-1

Comment acknowledged.

GP256, **Gervais, Anthony**

Comment GP256-1

Hello, I am writing today to strongly oppose the proposed Westway and Imperium Expansion Projects. I am a Puget Sound resident and frequent visitor (4-6 times per month) to the Grays Harbor area. Washington's ocean, waves and beaches are vital recreational, economic and ecological treasures that will be polluted by an increase in the transportation of fossil fuels thru sensitive ecological areas. Instead of pursuing transient and environmentally harmful ways to meet America's energy needs, we should seek comprehensive and environmentally sustainable energy solutions, including energy conservation.

The risk of an oil spill or accident is not theoretical, and far outways the benefits of this project. I do not support the proposed project. Thank you for your time and consideration. Anthony Gervais

Response GP256-1

Comment acknowledged.

GP257, **Gesseit, Kate**

Comment GP257-1

Climate Working Group 966 Jackson Eugene, OR 97402

Dear Director Maia Bellon,

Please oppose the building of oil terminals in the Grays Harbor. We would be transporting dirty oil from fracking to foreign buyers mean while producing large quantities of greenhouse gasses.

Sincerely,

Kate Gesseit Carey D Thompson Joan Kleba M. Gesseit Manetta O'Byrne Eric O'Byrne

Response GP257-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP258, **Gibbs, Virginia**

Comment GP258-1

As a former resident of Washington state, I have been following this project for some time with great concern. Frankly, I'm appalled that anyone would consider the Grays Harbor area for a fossil fuel terminal. Every time there's an oil train derailment somewhere in North America, I think "That'll happen in Hoquiam some day." Every time there's a tanker run aground somewhere, spilling crude oil on delicate coastal fisheries and recreational shores, I think "Someday, Grays Harbor will be ruined that way." The infrastructure for the terminal will be ugly and unattractive - even if there are no incidents, tourism will be affected. Property values will go down for those near the terminal or within sight. Is it worth it? I don't think those property owners would think so. A devastating

ecological accident only has to happen ONCE - and then ALL the other dependent industries such as fisheries and tourism are ruined for decades. Please don't risk ruining a beautiful and valuable resource like Grays Harbor.

Response GP258-1

Comment acknowledged.

GP259, **Giddings, Roxy**

Comment GP259-1

Name: Roxy Giddings
City/State/Zip: Tacoma, WA 98444-5118

Thank you for having this hearing. It is a good thing to study projects before we do them. I hope all the folks assigned to be trained on safety are already trained for the emergencies listed in the EIS. We are already being impacted.

Creating an EIS makes jobs—so good for us on that score.

Projects like these ask us to sacrifice this part of our state on the altar of dirty energy.

Mitigation is not just notification of trains & ships coming and going so we can stay out of their way. Of course that might ensure that the "accidents" are the fault of God alone.

The real question to me is economic. How much will it cost to replace Grays Harbor—its clean water, air, and life or lives.

No one should have to clean oil off of birds.

Response GP259-1

Comment acknowledged.

GP260, **Giddings, Roxy**

Comment GP260-1

I'm Roxy Giddings. I want to thank you for having this hearing. And it's a good thing the studies are published where people can review them. I see the folks with signs for safety. That has been mentioned. We already have trains because we're already doing this. This is an expansion. Projects are already in effect and therefore require you... I suggest that maybe businesses and everybody and in all the counties all the way around, because that's what you have to do, you have to look at what we've done with fires. They brought in people from all over.

And even having a golf tournament in Tacoma, University Place in Lacey, they had to bring people from all around for safety reasons and I suggest you carefully look at all around here.

Projects like these ask us to sacrifice this part of the state of Washington on the altar of dirty energy. Mitigation is not just a notification of trains and ships coming in and going so we can stay out of way.

The real question to me is economic. How much would it cost to replace Grays Harbor, and clean water, and all the lives of the things that are alive, including us?

No one should have to clean oil off of birds. I'm talking about in 1988, down at Long Beach. And I hope I never have to have my children or grandchildren or great-grandchildren have to clean birds because of these expansion projects.

Thank you.

Response GP260-1

Comment acknowledged.

GP261, **Giesler, Sheila**

Comment GP261-1

Name: Sheila Giesler
Organization Name (if applicable): St. Patrick's Catholic Church
City/State/Zip: Lynnwood, WA 98037

My comments relate to both the Westway and Imperium Draft EISs.

It has been proven that the oil trains are unsafe, running on unsafe rails. They are endangering our fragile environment.

As Washington State needs to (& is) rapidly moving away from fossil fuels, it is foolish to build more infrastructure to support yesterday's energy needs, rather than tomorrow.

Response GP261-1

Comment acknowledged.

GP262, **Gilmore, Thomas**

Comment GP262-1

Track defects are the leading cause of derailments and internal rail flaws account for the most damaging of them, according to an analysis of government data and academic reports. Those tasked with identifying and fixing track flaws say more needs to be done to improve track inspection, including more frequent checks.

Response GP262-1

Comment acknowledged.

GP263, **Goldberg, R. David**

Comment GP263-1

The state of Washington is already facing significant adverse, immitigable impacts from anthropomorphic climate change. The Washington Department of Ecology acknowledges this in a document posted on their website entitled "Climate Change: Disrupting our Economy, Environment and Communities". The numerous adverse impacts listed there include:

- Decreased snowpack- which leads to summer droughts and longer and more intense fire seasons, like the one we experienced

- Acidification of our oceans- which is decimating Washington's shellfish industry.

- Lower and warmer stream flows which are a threat to salmon survival.

- Disappearing glaciers http://www.ecy.wa.gov/climatechange/effects.htm

Are assertions like these reliable? According to Department of Ecology document "Q and A SEPA and Greenhouse Gas Emissions" yes they are. "Are the environmental impacts from climate change too speculative to include in a SEPA analysis? The impacts resulting from greenhouse gas emissions are reasonably foreseeable. Both the Security and Exchange Commission and the National Association of Insurance Commissioners require they be disclosed. The U.S. National Oceanographic and Atmospheric Administration has climate related information on a national scale while the University of Washington's Climate Impacts Group has information for the Pacific Northwest." http://ecy.wa.gov/climatechange/docs/sepa/faq.pdf The Department of Ecology acknowledges significant adverse, immitigable environmental impacts based on settled science. The projects must be denied. And since we are at the beginning stages of this crisis there are many more serious impacts of global warming on the horizon. The U.N. Refugee Agency estimates "that between 250 million and 1 billion people throughout the world" will become climate refugees in the next 50 years. http://www.world bank.org/en/news/feature/2014/10/14/cambio-climatico-mas-desplazados-que-un-conflicto-armado If our emissions continue at their current pace researchers lead by Benjamin Strauss of Climate Central conclude that as many as 600 cities or municipalities will be lost to the sea in the near future. https://www.washingtonpost.com/news/energy-environment/wp/2015/10/12/this-iwwws-how-rising-seas-will-reshape-the-face-of-the-United-States/ The lead agencies must decide whether the 139 permanent jobs and the 115 temporary construction jobs projected for these two projects are worth risking Washington's future. Use your substantive SEPA power to deny these projects.

Response GP263-1

Draft EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, *Climate Change*, describes the projected impacts of climate change in the Pacific Northwest. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP264, **Goldberg, R. David**

Comment GP264-1

I would like to comment on Bakken shale's contribution to global warming. My thesis is that the production and distribution of Bakken shale increases the worldwide supply of gasoline, which lowers the cost of gasoline, encouraging US drivers to buy bigger vehicles, travel more miles and emit more CO2, worsening global warming. Gas prices have gone way down. As KTVZ.com reports, nationally, gasoline prices for the peak summer driving season of 2015 were down 89 cents per gallon over the same period in 2014. Looking to the Northwest, Oregon gas prices are down an average of $1.10 over last year. http://www.ktvz.com/news/oregon-gas-prices-falling-but-still-well-above-us/35161634 Why are gas prices dropping? According to the "New York Times" . . . it boils down to the simple economics of supply and demand" attributed to the production of Bakken shale oil among other factors. http://www.nytimes.com/interactive/2015/business/energy-environment/oil-prices.html?action=click&contentCollection=Energy%20%26%20Environment%20&module=RelatedCoverage®ion=Marginalia&pgtype=article

Bakken shale is not replacing oil from other sources, as claimed by the DEISs for the Westway and Imperium projects but contributing to a worldwide glut. As a result of these lower gas prices American consumers are buying larger, more fuel consuming vehicles and driving more miles. According to InsideClimateNews.org automakers are reporting increased sales of SUV's and pickup trucks and declining sales for small fuel efficient cars. We are returning to levels of gasoline consumption not since record levels set in 2007. From 2007 to 2013 gas consumption actually went down every year, sometimes by as much as 18%. But in 2013 due to increased supply from the Bakken shale and an improving economy, gas consumption started to rise again. Gas consumption for January through May 2015 rose 2.9% as compared with the same period in 2014. American drivers in the period from January 2014 through June 2015 travelled 3.08 trillion miles, topping the record set in 2007-2008 for the same period. During the last week of July 2015 American drivers used 9.68 million barrels of gasoline, almost beating the old record of 9.75 million barrels of gasoline set in July 2007. As a result of these trends CO2 emissions from gasoline in 2013 were up almost 1%, 1.4% in 2014. http://insideclimatenews.org/news/12082015/americans-cheap-fuel-gas-emissions-rise-climate-suffers Several authorities feel that Bakken shale is increasing supply and decreasing gas prices everywhere. Bakken shale oil is not "replacing" oil from other sources. Climate activists hoped that 2007 would represent the peak year for US gasoline consumption followed by yearly decreases. But US consumption after stunning decreases for 6+ years are reaching the resumed peak levels of 2007.

Response GP264-1

Comment acknowledged.

GP265, **Goldberg, R. David**

Comment GP265-1

The DEISs for the Westway and Imperium projects do not look at the emissions that are created throughout the entire process of drilling Bakken shale oil in North Dakota and transporting it to

terminals in Washington and beyond. While the DEISs consider only end use emissions and those produced by rail transportation within the state of Washington, lead agencies are encouraged by statute to study projects' green house emissions from their source regardless of state or local boundaries. Documents posted to the Department of Ecology's website acknowledge global warming's significant, adverse effects on our environment. http://www.ecy.wa.gov/climatechange/effects.htmIn another document DOE concludes forecasts of these effects of global warming are based on sound science and that the effects of global warming are "easily foreseeable". http://ecy.wa.gov/climatechange/docs/sepa/faq.pdf The Department of Ecology acknowledges serious environmental adverse impacts on our environment.

SEPA law grants great flexibility to decision to deal with new circumstances. Since the grave dangers of global warming are now becoming more apparent we should use SEPA's substantive power to deny these projects. Greenhouse gas emissions from the Bakken shale wells in North Dakota are immense. Because the oil produced is worth more than the natural gas that leaks from their wells drillers spend every nickel they can on drilling more wells and next to nothing on capturing the gas. In 2012 drillers flared off approximately $1 billion worth of natural gas. That's the emissions equivalent of 1 million cars on the road for a year. Fracking for oil is five times more energy intensive than more conventional methods. It also requires additional energy to transport the massive amounts of water used in the fracking process greatly adding to Bakken's greenhouse footprint. Can the EIS consider emissions produced at the source of Bakken crude? According to the DOE's own Greenhouse Gas Guidance document the answer is yes. The section on "Evaluating Emission Sources" states "Scope Three emissions can include embodied emissions from the extraction and transportation of purchased goods." WAC 197-11-060 (4) (b) states "In assessing the significance of an impact a lead agency shall not limits its consideration of a proposals impacts within its jurisdiction, including local or state boundaries." If we can consider these emissions, why wouldn't we? Especially considering global warming's effects on our salmon, shellfish industry and our forests.

Response GP265-1

Final EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, has been updated to include estimated emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

Comment GP265-2

Regarding our forests- In May of 2015 we experienced fires in the Olympic Rain Forrest something previously unheard of. Wildfires charred 300,000 acres this year in Washington and we currently face a fire season that is 35 days longer than in 1950. Scientists at the National Oceanic and Atmospheric Administration predict that in parts of the Western U.S. (including parts of Washington) large fires will increase six-fold due to global warming. The future of our planet versus a few hundred full and part-time jobs? This project should be denied.

Response GP265-2

Comment acknowledged.

GP266, **Goldberg, R. David**

Comment GP266-1

The DEIS's state that the projects will only contribute a small percentage to Washington's greenhouse totals. But quoting DOE's "Q and A" on global warming "..some commenters have suggested that the emissions of greenhouse gasses from a single proposal will never qualify as significant in light of the fact that a that a project's emissions a a mere fraction of the entire global problem, Federal and state courts have already rejected similar arguments."

Response GP266-1

Comment acknowledged.

GP267, **Goldberg, R. David**

Comment GP267-1

The oil terminals in Grays Harbor will lead to a net increase of up to 70,000 barrels per day more than there would be if the terminals were not built. This figure is based on a study commissioned by The Sightline Institute. Sightline chose Oil Change International to perform the study because they performed the analysis of the Keystone Pipeline climate impacts for the EPA. http://www.sightline.org/research_item/tracking-emissions/ Shipping Bakken shale to west coast ports are more profitable than sending it anywhere else. So oil companies will make more will start more projects. If new oil fully"replaced" old sources oil prices would not go up or down.

Response GP267-1

Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

GP268, **Goldberg, R. David**

Comment GP268-1

The DEISs for these projects state the resultant emissions would represent "..less than .001% of the national 2025 target and less than .01 of the state 2050 target." But according to DOE's Q and A SEPA and Greenhouse Gas document: http://www.ecy.wa.gov/climatechange/docs/sepa/faq.pdf "Some commenters have suggested that the emissions of greenhouse gasses from a single proposal will never qualify as significant in light of the fact that a project's emissions are a mere fraction of the entire global problem. Federal and state couts have already rejected similar arguments." So the DEIS are bring up arguments already rejeced by courts.

Response GP268-1

Comment acknowledged.

GP269, **Golde, Hellmut and Marcy**

Comment GP269-1

HELLMUT & MARCY J. GOLDE
116 Fairview Avenue N, Apt. 428, Seattle, WA 98109
Telephone & Fax: 206-254-1633
E-mail: hgolde@golde.org, marcy@golde.org'

October 5, 2015

Department of Ecology
State of Washington
PO Box 47600
Olympia, WA 98504-7600

Re: Comment on DEIS regarding the Imperium and Westway Oil Companies

We have been residents of the State of Washington since 1960 and continue to spend much of our leisure time on the Olympic Peninsula, where we enjoy the scenic beauty and wildlife. We believe that oil terminals in Grays Harbor County and elsewhere on the Washington Coast are an invitation to increased pollution and potential ecological disaster. The damage to our wildlife and our way of life could be enormous. We encourage you to deny these companies the permits to build new fossil fuel export terminals.

Instead of adding to the pollution and global warning, companies should be encouraged to invest in clean, renewable energy production and distribution.

Sincerely yours,

Hellmut Golde

Marcy J. Golde

Response GP269-1

Comment acknowledged.

GP270, **Golde, Hellmut and Marcy**

Comment GP270-1

Hellmut and Marcy J. Golde 116 Fairview Avenue N, Apt. 428, Seattle, WA 98109 Telephone & Fax: 206-254-1633 E-mail: hgolde@golde.org, mercy@golde.org

October 27, 2015 Westway and Imperium Expansion Projects EIS c/o ICF International 710 Second Avenue, Suite 550 Seattle, WA 98104

Subject: Westway and Imperium proposed oil-by-rail terminals

Dear Washington State Department of Ecology and City o~Hoquiam staff and elected officials,

We are writing in support of the letter written and submitted by Pat McLachlan, which opposes the Westway and lmperium proposed oil-by-rail terminals. We have visited the west coast of the Olympic Peninsula at least once a month for the last 40 years, travelling through the towns of Aberdeen and Hoquiam, Washington. We have a vacation home above the beach north of the Raft River, and cherish the coastal beach. We have a personal interest in the decisions you are about to make. That coast is vulnerable to damage from any ocean oil spill. Grays Harbor is one of the most dangerous harbors on the Pacific Coast with its tide-dependent bar.

We urge you to· deny all requests for permits and authorizations for construction of the Westway and Imperium oil-by-rail terminals or associated facilities to trans-ship such oil.

The people, including the tribal villages of Taholah and Queets and all the small towns along the coast, fishing industry, the natural runs of salmon and other fish and various forms of coastal wildlife and the world famous Olympic National Park with it exposed coast all would be placed at risk by the creation of the Westway and Imperium terminals and the most of all by the whole plan to ship oil through the port of Grays Harbor. We urge each of you to turn down any plan to trans-ship oil through the Port of Grays Harbor.

In addition there are 7 federally declared and protected Wildernesses on the Olympic peninsula. They are the Washington Islands (right off of Hoquiam and the rest of the coast northward), Colonel Bob, Wonder Mountain, Mount Skokomish, The Brothers, Buckhorn, and the Olympic Wilderness. These Wilderness areas and the life within them would be irreparably damaged by spills and explosions that would be likely to occur in a setting where millions of gallons of dirty, crude oil are transported on trains into this area, stored in oil tanks, and loaded onto ships that travel the coastlines to refineries.

Response GP270-1

Comment acknowledged.

Comment GP270-2

Additional risk comes from the threat of a very large earthquake along the Cascade Subduction Zone. The odds of the big Cascadia earthquake of an 8. to 8.6 magnitude happening in the next 50 years are roughly 1 in 3. The odds of the very big one of a 8.7 to 9.2 are 1 in 10. Any such quake would cause tank rupture and risk a huge tsunami.

Please do not increase the risks by adding two or three oil transshipment facilities to Grays Harbor and the Olympic Peninsula's natural riches. Sincerely,

Sincerely yours,

Hellmut Golde Marcy J. Golde

Response GP270-2

Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory

requirements and proposed mitigation measures would reduce potential impacts related to these events.

GP271, **Golding, Will**

Comment GP271-1

From my understanding there is a lot of resistance to this project from many of the local communities that will be impacted by implementing this proposed project. How will this proposed project benefit the local communities?

How can the operations of this proposed project impact local communities on a daily basis?

Response GP271-1

Refer to Draft EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP271-2

What measures will be taken to ensure the safety and future prosperity of local communities that will be impacted this proposed project?

Response GP271-2

Refer to the Master Responses for Purpose and Focus of the EIS and Mitigation Framework.

Comment GP271-3

What methods will be implemented to ensure the structural integrity of the proposed infrastructure implementations?

Response GP271-3

The project design development and review would adhere to applicable building code requirements. Structural requirements specific to seismic risks are discussed in Draft EIS Chapter 3, Section 3.1, *Earth.*

Comment GP271-4

What effects will this proposed projects cause to the local marine environment?

Response GP271-4

Chapter 3, *Affected Environment, Impacts, and Mitigation*, addresses potential impacts from construction and routine operation of the proposed action. Increased risk of incidents (e.g., storage tank failure, train derailments, vessel collisions) and potential consequences (e.g., release of crude oil) are addressed in Chapter 4, *Environmental Health and Safety*. Section 4.7, *Impacts on Resources*, describes the general types of impacts on water, plants, and animals that could occur as a result of an oil spill, fire, or explosion.

Comment GP271-5

What are the environmental considerations of this proposed project both in regards to its effect on the local natural environment, and overall effects on global warming producing climate change?

Response GP271-5

Draft EIS Chapter 3, *Affected Environment, Impacts, and Mitigation*, addresses potential impacts of construction and routine operations of the proposed action. Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from the proposed action. These estimates have been updated in the Final EIS. Draft EIS Section 6.5.1.2 describes the projected impacts of climate change in the Pacific Northwest.

Comment GP271-6

What effects would rising sea levels have on this proposed project and its ability to ensure environmental protection from possible leaks contaminating local water systems?

Response GP271-6

As discussed in Draft EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, based on the site elevation and predicted sea-level change in the study area, flooding is not expected to affect the proposed facilities. Final EIS Section 6.5.1.2 reflects further clarification.

Comment GP271-7

What benefits will this proposed project provide for the State of Washington?

Response GP271-7

Draft EIS Chapter 7, Section 7.1, *Economics*, identifies the employment, income (including benefits), and economic output that would be generated in the region by the proposed action during construction and routine operation.

Comment GP271-8

If problems arise during the life of the proposed project, what cost will the State of Washington be required to cover?

Response GP271-8

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP271-9

What effects will this proposed project have on Marbled Murrelet populations that rely on Washington's coastal areas to survive?

Response GP271-9

Draft EIS Chapter 3, Section 3.5, *Animals,* describes impacts of construction and routine operation of the proposed action on animals, including birds; Chapter 4, Section 4.7, *Impacts on Resources*, describes impacts on resources that could result from potential spills, fires, or explosions.

Comment GP271-10

What measures are being taken to ensure environmental protection of the areas where crude oil is being extracted in the Bakken Shale?

Response GP271-10

Refer to the Master Response for Purpose and Focus of the EIS. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

Comment GP271-11

How will environmental protection procedures be monitored over the life of the proposed project?

Response GP271-11

For more information about the development, implementation, and enforcement of mitigation measures, refer to the Master Response for Mitigation Framework.

Comment GP271-12

What forms of actions will be enacted if contamination of the surrounding natural environment is detected during the life of the proposed project?

Response GP271-12

The regulatory framework in place to identify, respond to, clean up, and compensative for oil spills is described in Chapter 4, *Environmental Health and Safety*. Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS.

Comment GP271-13

What effects could this proposed project have on native salmon populations?

Response GP271-13

Draft EIS Chapter 3, Section 3.5, *Animals,* describes impacts of construction and routine operations of the proposed action on animals, including salmon; Chapter 4, Section 4.7, *Impacts on Resources*, describes impacts on resources, including salmon, which could result from potential spills, fires, or explosions.

Comment GP271-14

How would a major oil spill from this proposed project affect the local environment and also all of the Washington Pacific Coastal areas?

Response GP271-14

Final EIS Chapter 4, *Environmental Health and Safety*, presents an analysis of potential impacts from increased risk of accidents (e.g., storage tank failure, train derailments, vessel collisions) and related consequences (e.g., release of crude oil) under the proposed action in the study area. Final EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area, which are generally anticipated to be similar to those identified in Final EIS Chapter 4, Section 4.7, *Impacts on Resources*.

Comment GP271-15

What effects could an earthquake or tsunami have on this proposed project?

Response GP271-15

Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events.

Comment GP271-16

Is this proposed project objected by any indigenous peoples groups throughout the country?

Response GP271-16

All comments received on the Draft EIS are included in and responded to in the Final EIS.

Comment GP271-17

Have negative human health risks been associated with local populations in areas with similar existing projects?

Response GP271-17

Draft EIS considers the following impacts related to human health.

- Chapter 3, Section 3.2, *Air*, describes potential impacts on air quality and the potential for increased cancer risk from emissions of diesel particulate matter related to construction and routine operation of the proposed action.

- Chapter 3, Section 3.7, *Noise*, describes potential impacts on sensitive receptors near the project site and transportation corridors from increased noise and vibration related to construction and routine operation of the proposed action.
- Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, describes potential impacts on public safety and emergency vehicle access from increased vehicle delay related to rail traffic from routine operation of the proposed action.
- Chapter 4, Section 4.7.1.7, *Human Health*, describes potential impacts of an oil spill on human health.
- Chapter 4, Section 4.7.2.3, *Human Health*, describes potential impacts of a fire or explosion on human health.

GP272, **Gooding, David**

Comment GP272-1

We must stop supporting dirty energy in the world theater and place our efforts in alternative solutions. We are contributing to our own foul health, poisoning the earth. The coal dust goes freely into the air, there have been explosions, fires and consequent deaths from these coal trains. We cannot allow more tragedy in populated areas and sports stadiums. STOP THEM NOW!

Response GP272-1

Comment acknowledged.

GP273, **Gordon, Diana**

Comment GP273-1

Washougal is located along the Columbia River straddling the rail tracks. We get the cumulative effect of every oil or coal train that goes by. They delay us at our 5 at grade crossings, endanger our schools, our downtown, parks, and damage our livability as well as our property values. Since our home is our largest investment, I very much oppose the idea of more oil terminals here.

Response GP273-1

Comment acknowledged.

Comment GP273-2

We are between the Washougal and the Columbia Rivers so we have flooding issues occasionally, for example, in 1996. I was curious about flooding issues you might have so I looked in the DEIS, Appendix E, to look over the FEMA maps for your area.

The maps in the DEIS are old and small and not at all up to date. The one from 1978 is interesting in that it shows the marine slip that was filled in starting in 1983 and is currently being used by Westway and Imperium for their terminals. A map from 2006 to reflect the new Zone C rating is also included. This area went from a watery boat slip to a Zone C which reflects a 100 year flood risk in just a few years.

[Maps reviewed but not reproduced.]

But the 2006 map does not give us a clear picture of the flood risk for the project site because it is of a very small area. The project area is at the mouth of the Chehalis River which is quite a large river system - 2600 square miles. It is 'wild' river with no flood control or hydroelectric dams to slow down the water in case of a flood event. This looks like many miles of flooding on a river that comes out right at the project site where the elevation is about 10 feet. In fact, this part of the port is surrounded by areas that are in the 100 year floodplain so in the event of a 100 year flood the project will become an island.

This is a 2015 Digital Flood Insurance Rate Map from the Department of Ecology clearing showing that circumstance. I do not understand why it was not included in the DEIS. You can see the swollen Chehalis River covering the neighborhoods around the project site and cutting off all road access to it.

We know that with climate change the sea level is rising and that severe weather events are slated to become more extreme. Right .now, there are four other extreme weather events going on around the world in addition to the awful flooding in South Carolina. The Letter of Map Revision sent to the cities explaining the 2006 maps says that a comprehensive restudy of these communities' flood hazards could establish greater flood hazards in this area. They may then require higher floodplain management criteria. The communities' criteria will take precedence over the federal ones.

I feel this comprehensive restudy should be undertaken to understand the full impacts of various kinds of floods on this critical area.

Diana L. Gordon
6421 Street
Washougal, · WA 98671-1129
October 8, 2015
tndgardens@comcast.net
360-835-77 48

Response GP273-2

The floodplain maps in Draft EIS Appendix E, *FEMA Flood Insurance Rate Maps,* are the currently approved Federal Emergency Management Agency (FEMA) flood maps for the project site and are therefore, used in the analysis of impacts on floodplain. However, as explained in the Chapter 3, Section 3.3.4.4, *Floodplains*, and based on the new comprehensive preliminary Flood Insurance Study conducted by FEMA in 2013 (in coordination with Washington State Department of Ecology and Washington State Department of Natural Resources), the floodplain maps at the project site were revised and remapped by FEMA in October 2013. The new floodplain map is currently pending approval from FEMA. As stated in the Draft EIS, the project site is outside of floodplain based on the new and revised floodplain study and mapping effort. The elements of the proposed action that would require new construction are in an area mapped as Zone X, which is outside of the 100-year and 500-year floodplains (i.e., areas determined to be outside of the 0.2% annual chance of flood). Therefore, the project site poses no risk to the floodplain because the proposed action's construction or placement of any new structure (e.g., storage tanks and new rail spurs) would occur outside of the floodplain and would not affect or be affected by floods or flood flows. The revised 2013 floodplain map, which the commenter references as Washington State Department of Ecology's

"2015 Digital Flood Insurance Rate Map," is included in the Draft EIS and is the basis for the floodplain assessment.

Final EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts, Climate Change*, reflects clarification regarding predictions of sea level change in the project area and potential for flooding at the project site. With predicted sea level rise in the project area for 2050 of 1.57 feet, the project site will remain approximately 5 feet higher than the projected high tide. As such, it would not be subject to flooding even during extreme storm events.

All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

Comment GP273-3

The RR has added new siding to tracks that ran through town near schools & shopping areas. I don't think anyone in Washougal likes to see mile-long oil trains parked for hours just a few yards from our h.s., m.s., & our school district offices.

Our school board took the extraordinary step of adopting a resolution asking state agencies to refuse permits for any further increases in oil train traffic in Washington. As a retired teacher I couldn't agree more.

Response GP273-3

Comment acknowledged.

GP274, **Gordon, Diana**

Comment GP274-1

A DEIS must carefully and thoroughly assess the impacts of a proposed project on the area where it is actually located. It must also, however, consider impacts that the project could have on other areas that it affects. The trains serving the Westway Terminal will be from the Bakken Oil Fields of North Dakota. On their way to Grays Harbor, they will pass through numerous communities in the Columbia River Gorge and Eastern Washington, as well as many, many others all the way back to North Dakota.

We live in Washougal, Washington at the mouth of the Gorge, and are very much opposed to an increase in oil train traffic. We already have several trains of explosive, Bakken crude coming through our community every week. Sometimes we see them pulled over on a recently added siding across the road from our high school, middle school, district education offices, and a shopping center housing Safeway, our only supermarket. These trains tie up our 5 at grade crossings making access to our downtown difficult. Our only overpass, which is supposed to handle emergency traffic, is often backed up especially at rush hours due to the volume of traffic.

These trains pass through our downtown, feet from city hall, the library, the senior center, many business including the famous Pendleton Woolen Mills and hundreds off residences. We receive increased air pollution from diesel train engines and idling cars as well as considerable inconvenience.

We also face decreasing property values from being located in a 'fossil fuel corridor'.

Needless to say, any mishap - a spill, a derailment, an explosion - would have a devastating effect on Washougal. Please deny this project. Diana Gordon November 28, 2015 642 I Street tndgardens@comcast.net Washougal, WA. 98671-1129

Response GP274-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP275, **Gordon, Diana**

Comment GP275-1

After testifying at the hearing in Aberdeen on October 8, 2015, I went next door to an information center. My question: Could the Grays Harbor projects switch over to shipping tar sands oil without re-permitting. Unsettlingly, the answer was affirmative.

Oil from the Alberta Tar Sands is a nasty business. It is very thick and will not flow readily so they add propane and other substances to make it easier to handle. We are never exactly sure what we are getting when we are dealing with 'dilbit', or diluted bitumen. Fortunately, it does not explode readily, but, if spilled as the result of an accident, derailment, puncture, earthquake, etc., it oozes along the ground coating everything in its path. Worse still, if spilled in water, it sinks and coats the bottom of the waterway killing vegetation and organisms (oysters, crabs, and so on) in its path. We know that fresh water, turbulence, and sediment in the water speed up the sinking. The PS & P Railroad runs right along a 'wild' river which probably furnishes all 3 factors along most of its length. Tar sands oil is difficult to see and difficult to clean up. The Enbridge tar sands spill in the Kalamazoo River in Michigan in 2010 has stretched at least 20 miles downriver and cost $1.21 billion so far. The clean up is not yet finished. If tar sands oil got into the salt marshes at Grays Harbor, it could have far reaching consequences for the estuarine and marine food web. Clearly, a tar sands spill would have a devastating effect on Grays Harbor's fishing, oyster, crab, and tourist industries. Paying for such an accident is a huge problem. If a spill occurred in Grays Harbor, who would pay? If a spill occurred further up the Chehalis Rver and the oil spread downstream into Grays Harbor affecting fisheries there, who would pay then? I think these questions should be answered before this project is allowed to go forward, and that the project should be discontinued at this time. Diana Gordon November 28, 2015 642 I Street tndgardens@comcast.net Washougal, WA 98671-1129

Response GP275-1

As noted in Draft EIS Chapter 4, Section 4.2, *Applicable Regulations*, such plans are not required prior to operations and have not been developed. However, once the plans have been submitted to Ecology, such as the contingency plan required by WAC 173-186, they will be available for public

review and comment for a period of 30 days. Refer to the Master Response for the Purpose and Focus of the EIS.

To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS.

GP276, **Gordon, Diana**

Comment GP276-1

One of the major problems in this Grays Harbor project is the rail link between the main BNSF line and Grays Harbor. This small line, the Puget Sound and Pacific, would be admirably suited as a scenic excursion trip for tourists. It is not, however, ready, for this project. The PS & P is about 125 years old. It was not built to carry extremely heavy mile plus long trains filled with hazardous materials. These are some of the questions I have about it: > Can the bed support the weight of these trains passing week after week? > Are the 52 bridges and culverts strong enough to sustain this long and repetitive weight over time?> The tracks run along a 'wild' river, one with no flood controls or dams. This area has experienced considerable flooding in the past. If an oil train were passing through, could the rail bed, bridges, and culverts sustain a powerful flood without a derailment or spill? > We are in earthquake territory - how large a quake could this railroad sustain without incident? a 4.5? a 7.0?

Response GP276-1

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant. Regarding earthquakes, refer to Final EIS Chapter 3, Section 3.1, *Earth*, the Master Response for Seismic Risk and Design Requirements, and the Master Response for Purpose and Focus of the EIS.

Comment GP276-2

What is the Spill Plan for this small, Class 2 railroad? > In the event of a spill, derailment, or explosion, who will be responsible for the damage to life and property as well as downstream economic and ecological damage to the salt marshes and estuarine ecosystems?

Response GP276-2

Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS.

Comment GP276-3

Where are the closest HAZMAT teams? I think Olympia or Tacoma. Their response time could be 2-3 hours.

Response GP276-3

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks.

Comment GP276-4

This project raises many environmental, seismic, flooding, economic, and safety concerns, many of which cannot be mitigated. Shipping crude oil by rail is new, developed mostly in the last 5 years. We are not yet aware of and do not yet have the capabilities to deal with all the problems it can present. We do not yet know the cumulative effects of shipping oil this way over time. We certainly do not yet have in place even the most basic safety measures, such as foam to be used in the event of an explosion. I do not think the fragile area of Grays Harbor is ready for this enterprise at this time. I think it would be irresponsible for the safety of human life and the environment to proceed.

There does not seem to be a real need for these terminals right now and they should be denied until they can be done with safety. Diana Gordon November 28, 2015 642 I Street tndgardens@comcast.net Washougal, WA 98671-1129 360-835-7748

Response GP276-4

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP277, **Gordon, Diana**

Comment GP277-1

Truth be told, geology has a tendency to make my glaze over. However, we all know the Pacific Northwest is an earthquake zone and locating oil terminals in an quake zone is a risky business. In 2004 the world watched in horror as a huge quake devastated southeast Asia and again in 2001 as a

9.0 quake hit Fukushima , Japan. The resulting tidal waves did unspeakable damage, killing thousands of people and permanently disabling the Fukushima power plant. The ensuing environmental disaster will haunt us for decades. The Pacific Northwest receives a very large quake, 7.0 plus, about every 350 years. We are overdue, and likely to receive one within 50 years. This would be a subduction zone quake where the coastal plate slips under the North American plate, usually generating a huge tidal wave. We would assume that in an earthquake prone country like Japan, a nuclear power plant like Fukushima would be built to a very high standard, a higher standard than an oil terminal placed on fill material in a harbor. Yet it took took only minutes for the earthquake's tsunami to compromise Fukushima permanently, spreading radioactive material far and wide. Grays Harbor is not a good place for these terminals. The fill material under the tanks will liquify in a quake and the tanks would likely be punctured in a tsunami spreading oil that will damage the environment and plague us for years.

The best solution to the earthquake is to find another place to locate these terminals if they are deemed truly necessary and not just a revenue generator for the port. Putting oil terminals in Grays Harbor really is a disaster waiting to happen and it could easily happen within our lifetimes.

Response GP277-1

Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events.

As noted in the Master Response for Project Objectives and Alternatives, the EIS analyzes the potential impacts of a private project on a specific site; the objectives and proposal are defined by the applicant.

GP278, **Gordon, Diana**

Comment GP278-1

This year the Quinault Nation was able to open its crab fishing season more than a week earlier than Oregon and most parts of Washington. Their crab fishing area was spared the toxic algal bloom that plagued other areas. I doubt they dodge the bullet every time some thing like a toxic bloom occurs. However, we should take all possible precautions to preserve their vibrant and lucrative fishing industries. Quinault engage in ocean fishing using Grays Harbor as home port; they manage razor clams near Grays Harbor as well as fishing for crab. They have subsistence and commercial fishing rights. These treaty rights are part of our Northwest culture and safe guarding them is important to all of us.Fisheries, etc, will be much more at risk if these terminals go in. They bring an increased risk of spills and fires both at the terminal and along the rail line. A crude oil incident would be serious and damaging. A dilbit spill (where the oil oozes along the bottom of the waterway) would be potentially devastating. Tankers and tank barges also have mishaps. One spill affected beaches from Vancouver, B.C. to Oregon. The Quinault are already facing increased ocean acidification from increased world wide levels of green house gases and this project would result in still more. Acidification is a serious threat to shellfish whose shells are affected by increased acidity. (Witness

the recent move of some Northwest oyster farms to the less acid waters of Hawaii.) Please safeguard the fishing rights of the Quinault (and everyone else). Do not allow these terminals to be built in Grays Harbor.

Response GP278-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP279, **Gordon, Diana**

Comment GP279-1

An important concern about terminals in Grays Harbor is the amount of greenhouse gases they will generate. Greenhouses gases will be produced by the trains hauling the oil, the volume of traffic idling at crossings waiting for the trains to pass, the production of crude itself, and the eventual use of these fuels. We know that increasing levels of gases in the environment accelerates global climate change. The temperature has been inexorably rising for many years and we can see higher water levels around the globe as water in the ocean heats up and causes a rise in sea level. Melting glaciers and ice sheets also contribute, The Grays Harbor terminals are in a 500 year flood plain by just a few feet and are surrounded by 100 year flood plains. Pictures of the existing tanks surrounded by flood water and cut off by road from the surrounding neighborhood and therefore any emergency response vehicles are easy to find on the Internet. We should not assume that tanks only 9 feet above sea level are safe. South Carolina is recovering from 100 year floods a few months ago. We would all like to think that this kind of thing is rare, but it is not. This is the sixth one-in-a-1000 year weather event occurring since 2010 in the U.S.

I feel that we at the state level must deny these projects. We cannot count on the federal government, the President, or anyone else to help with these choices. We can see that the Grays Harbor projects are dangerous on many levels. They provide very few permanent jobs and have the potential to decimate an economically and environmentally vibrant part of our state. Please say no to these terminals.

Response GP279-1

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively, in the context of emission inventories and reduction goals. The Final EIS has been updated to include estimated emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

Final EIS Section 6.5.1.2, *Climate Change*, clarifies predictions of sea level change in the project area and potential for flooding at the project site. With a predicted sea level rise of 1.57 feet in the project area by 2050, the project site will remain approximately 5 feet higher than the projected high tide. As such, it would not be subject to flooding during extreme storm events.

GP280, **Gordon, Diana**

Comment GP280-1

My name is Diana Gordon. And I live in the state of Washington. Washougal is located along the Columbia River straddling the rail tracks. We get the cumulative effect of every oil and coal train that go by at at-grade crossings, and that can be a problem.

They endanger our schools, our downtowns, our parks, and damages our livability as well as our property values. Since our home is our largest investment, I oppose the oil terminals here.

Now, in Washougal the railroad has added new signage to the tracks that run right through town, near the schools and shopping areas. I don't think anyone in Washougal feels comfortable to see a mile- long oil train parked for hours right next to our schools, businesses, and offices.

Our school board took the extraordinary steps of selecting the resolution asking state agencies to refuse permits for any further increase in oil train traffic through our state. As a retired teacher I couldn't agree more.

Thank you.

Response GP280-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP281, **Gordan, Don**

Comment GP281-1

My name is Don Gordan. The DEIS states, In this city there are broader involving issues that could affect the project site, transportation, including landslides, and slope instability, earthquake and earthquake-related activity, volcanic activity.

I have been concerned about the Westway and Imperium terminals here in Aberdeen. And some of the concerns for the EIS forecasts involving around earthquakes and tsunamis. For instance, forecast for the terminal range magnitude from 6.0 to 9.0 earthquake. The terminals will have tides from two to 9.61 feet instantaneous. This means the oil tanks will fall. The terminal site is a safety issue. The earthquake would be followed by a tsunami ranging from two feet up to 26 feet above ground. The design is threatened according to minimum design standard defined by the International Building Code. These are not required in the consideration -- to be considered, such specific tsunami risks the tanks that are already there withstand the tsunami earthquakes that might come.

Thank you.

Response GP281-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

GP282, **Gordon, Frank**

Comment GP282-1

Frank Gordon, Grays Harbor Planning Commission, speaking for myself. Hi, how you doing?

I guess everybody spoke so well out here but I just have a couple things. One on safety. I don't care how well the tracks are made and whatnot, as you can see, like the airline industry we have the best trained people in the world. Most accidents are caused by human error. I don't care how well we have it, we're going to have human error. Most of these train wrecks we've had that go down, they're caused by human error. I don't think we can stop the potential accident from happing.

The second thing is, when we were talking about jobs, okay 30 percent of the jobs are created with marine resources. That doesn't count our Native American jobs, our Native American (inaudible) in Grays Harbor County. It's the biggest employer we have here.

And then we've left East County of Grays Harbor and Lewis County. And we have a (inaudible) on the river in the wintertime and we have high tides in the fields (inaudible), and fields are useless for years and years and years. It will destroy our dairy industry. It's not even just the seafood, it's the whole thing. And we have a culture here. We have a culture that's so important, I'm asking you personally, please say no, we just ask not afford the loss for such a short-term gain. Thank you very much. Appreciate it.

Response GP282-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP283, **Gordon, Frank**

Comment GP283-1

My name is Frank Gordon, Grays Harbor County Commissioner for District 2. My constituents are seafood people, and so I would like to speak my opinion and the people that I represent we are against crude oil because crude oil cannot be brought in safely.

We are not against oil per se. We all have gas vehicles and everything like everybody else, but they don't have the ability or the skill to control if we had a spill and the loss of jobs that would overwhelm and destroy the harbor.

That's just my short statement I would like to reinforce. I spoke last week so I just want to reinforce that. Thank you.

Response GP283-1

Final EIS Chapter 4, *Environmental Health and Safety*, acknowledges that, while the risk of an oil spill is low, if one were to occur, it would likely cause unavoidable and significant adverse environmental impacts and that significant impacts to human health and the environment could occur even as the result of smaller incidents. The specific impacts would vary based on the location, amount spilled, type of liquid, river flow, time of year, and weather conditions.

GP284, **Gordon, Frank**

Comment GP284-1

Name: Frank Gordon
Organization Name (if applicable): GH Commission Dist 2
City/State/Zip: Montesano, WA 98563

My comments relate to both the Westway and Imperium Draft EISs.

1. We are in a earthquake zone
2. Rail line not built for traffic of oil cars
3. Harbors main source of job marine
4. Spill would change our way of life
5. Heavy crude (no tools to clean off bay, river bottom)
6. Land where tanks get would go liquid during earthquake

Response GP284-1

Comment acknowledged.

GP285, **Gordon, Pat**

Comment GP285-1

My name is Pat Gordon. I'm a resident of Aberdeen. I've been on the harbor for 53 years. I'm concerned about my children, my grandchildren, and my great grandchildren.

We want no oil. The spill will take away our fishing jobs, all kinds of jobs that are done with fishing. I love my clams. I hope you do too.

So that's my statement. I do not want crude oil.

Response GP285-1

Comment acknowledged.

GP286, **Gordon, Thomas**

Comment GP286-1

I am concerned about earthquakes and that their full range of effects have not been addressed in the DEIS. The oil tanks would have to withstand not only the force of magnitude 6.0 to magnitude 9.0 earthquakes, but an earthquake does not always just span a second or a few seconds. A large earthquake could last minutes. The DEIS does state that the side to side motion of an earthquake could be up to 0.7 g, where a g is the force of gravity. This is like a 200 lb man being slammed in his side with 120 lb. However, this could go on for minutes. How could a 150 ft wide oil tank survive crude oil sloshing around inside with such force for minutes? Thank You, Thomas Gordon

Response GP286-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

GP287, **Gordon, Thomas**

Comment GP287-1

The DEIS describes the material that the proposed terminals would be built on. This ranges from peat to sand to sandy-gravel to gravel, which extends down to bedrock which is 150 to 200 or more feet down. Tanks would be built on pilings, but the DEIS also states that some of these various layers could move partially or completely, leaving sloping ground holding up the 150 foot wide tanks filed with crude oil. The pilings, if not broken, would be under tremendous strain to keep the oil tanks from rupturing. This is a bad place to place oil tanks. Thank You, Thomas Gordon

Response GP287-1

Proposed piles would be driven to necessary depths to reach required embedment into competent soils. Final EIS Chapter 3, Section 3.1, *Earth*, clarifies that, based on investigations completed at the project site (Hart Crowser 2013, as cited in Chapter 3, Section 3.1, *Earth*), competent soil is generally reached at 150 feet below-ground surface.

GP288, **Gordon, Thomas**

Comment GP288-1

My concerns are many, but one main one earthquakes. According to the DEIS, an earthquake, depending on the strength of the earthquake of magnitude 6.0 to magnitude 9.0, would have an instantaneous subsidence of 2 to 9.61 feet. This means the oil tanks would fall 2 to 9.61 feet. The DEIS does not take into account this force the tanks would be subjected to and have to withstand. A tsunami could accompany the earthquake and devastate the tanks, if any remained intact. Thank You, Thomas Gordon

Response GP288-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

GP289, **Gordon, Thomas**

Comment GP289-1

I oppose the oil terminals in Aberdeen and Hoquiam. The City Council of Aberdeen opposes these terminals. The SCOPING form requesting public comments last spring, 2015, said ". . . this project is likely to have adverse impact on the environment." These are only a few that oppose the oil terminals proposed by Westway and Imperium. Commercial fishermen and crabbers also oppose

these terminals. With such opposition, both public and private, the EIS should reflect this concern from many quarters. In the end, these projects should be canceled.

Response GP289-1

Comment acknowledged.

GP290, **Gordon, Thomas**

Comment GP290-1

I oppose the proposed oil terminals in Grays Harbor by Westway and Imperium. One of my areas of concern involves the railroad into the Grays Harbor area. Many of the bridges from Centralia on the PS&P Railroad are over 100 years old. With an estimated 37.5 trains a day, these structures would be put under tremendous strain. Landslides occur even now blocking the rail line every so often just from slope failures. The entrance into town is below a sharp cliff of sedimentary material, mainly compressed sand, which is prone to collapse. If this should collapse, both the highway and railroad would be covered. This is no place to put oil terminals, with the danger of transmission of oil on this old railroad, to unstable slopes adding to the hazard. All of these things should be expanded on in the EIS and the recommendation should be against these terminals.

Response GP290-1

As described in Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, the proposed action would add 1.25 unit train trips per day on average along the PS&P rail line to the 3 train trips under the no-action alternative.

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

GP291, **Gordon, Thomas**

Comment GP291-1

I oppose the proposed oil terminals in Grays Harbor by Westway and Imperium. With a projected 37.5 trains a day coming into the area each day, access for both emergency vehicles and normal traffic would be greatly hindered at rail crossings in Aberdeen and Hoquiam. The towns people and tourists would not be enamored with waiting for unit trains over a mile long to snake their way through town. Waits of 20 minutes or linger would be common. More importantly, emergency vehicles would not be able to transport people to the hospital and fire engines would not be able to

respond to fires in a timely manner. Please address these issues in your EIS and recommend against these terminals.

Response GP291-1

As described in Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, the proposed action would add 1.25 unit train trips per day on average along the PS&P rail line to the three train trips under the no-action alternative.

Emergency vehicle impacts are addressed in Draft EIS Section 3.16, *Vehicle Traffic and Safety*, for the proposed action, and Section 6.5.5, *Vehicle Traffic and Safety*, for the cumulative projects. The Final EIS clarifies the potential for unavoidable and significant adverse impacts.

GP292, **Gordon, Thomas**

Comment GP292-1

TESTIMONY ON THE PROPOSED WESTWAY OIL TERMINAL ABERDEEN, WA, OCTOBER 8, 2015

The DEIS states "In the study area, the broader geologic conditions that could affect the project site and transportation corridors include landslides and slope instability, earthquake and earthquake-related hazards, and volcanic activity."

I have many concerns about the proposed Westway oil terminal here in Aberdeen and some of them concern the DEIS forecasts revolving around earthquakes and tsunamis.

For instance, forecasts for the terminal range from a magnitude 6.0 to 9.0 earthquake, state that the terminal will have subsidence from 2 to 9.61 feet instantaneously. This means the oil tanks will fall, that's right fall, 2 to 9.61 feet No where in the DEIS did I see this factored in. The tanks would have to withstand this, while accompanied by powerful shaking up to 0.7 g back and forth, where 1 g is the strength of gravity. In fact, the terminal site is Class E, which is the worst for increased ground shaking with the materials the site is built on, which range from peat to silt to sand to gravel, while hard rock is 150 to 200 or more feet down .Any oil tank would have to withstand great strains to not rupture.

The earthquake would be followed by a tsunami, ranging from 2 feet up to 26 feet above ground level. ''The new tanks are expected to be designed and constructed according to minimum design standards as defined by theInternational Building Code, adopted through State Building Code [RCW 19.27) and City Building Codes [HMC 2.08 andAMC 15.08] do NOT require consideration of site-specific tsunami risks."

Could the tanks that Westway already have there holding methanol withstand these forces?

Thomas Gordon 642 I Street Washougal, WA 98671 (360)835-7748 tndgardens@comcast.net

Response GP292-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction. The Draft EIS

presents an analysis of potential impacts of the proposed action; it does not analyze the existing facility.

GP293, **Grace, Lise**

Comment GP293-1

Dear WA Dep't of Ecology and City of Hoquiam: The DEISs for Westway and Imperium oil terminal proposals must be substantially revised to fully disclose the risks of oil spills, train accidents, increased train / oil tanker traffic, air pollution, noise, tribal culture and resources, delays at railroad crossings, negative impacts on the Columbia River Gorge National Scenic Area, and climate change. It is highly likely that the indirect and cumulative environmental impacts would be significant and impossible to mitigate.

Furthermore, the DEIS failed to substantively address the concerns raised by many environmental groups and individuals, in particular the concerns related to the Columbia River Gorge National Scenic Area. This is inconsistent with the scenic area act, and it is illegal under the State Environmental Policy Act to ignore these impacts. Some specific examples of this include:

1. The DEIS fails to analyze the indirect project impacts to grade crossings in the Gorge, the extent that the increase in oil trains would impact the level of service for local traffic, and any necessary mitigation measures, such as new overpasses.

2. The DEIS fails to analyze the cumulative impacts to grade crossings from the proposal and other oil and coal export proposals, the likely need to construct additional sidings, overpasses, and second tracks, and the need for additional emergency response capacity along the entire rail route.

3. The DEIS fails to list the Columbia River Gorge National Scenic Area Act and Management Plan as an applicable regulation, despite the fact that the cumulative impact of additional oil train traffic would require new construction in the National Scenic Area.

4. The DEIS fails to disclose the actual risk of an oil spill or explosive accident in the Gorge. The DEIS provided analysis of the risk of a spill or explosion near the facility where maximum speeds are limited to 25 mph. The DEIS completely fails to disclose the risk of spills and explosions in the Gorge, where the maximum speed is 50 mph for unit trains of oil and 60 mph for mixed-commodity trains with up to 34 oil tank cars dispersed throughout the entire train.

5. The DEIS fails to analyze the likelihood of a spill in the Columbia River along hundreds of miles of the BNSF rail line. Along with failing to analyze the likelihood of a spill, the DEIS fails to analyze safety impacts to local communities, environmental impacts to threatened and endangered salmon species in the Columbia River, and operational impacts on Columbia River Dams. There is simply too much risk and too little reward from these proposals: Grays Harbor and rail-line communities would take on the risk and oil companies would reap the profits, while Grays Harbor and the Columbia River Gorge would become a through-way for oil going elsewhere. What makes these regions special would be put at risk. A single major oil spill could devastate the area's maritime economy, productive fisheries, tribal cultures and economies, spectacular coastal waters, sensitive habitats and protected lands and waters in the Columbia River Gorge. The alarming safety record of oil trains means an explosive oil train derailment is a question of when, not if. Less dramatic but equally concerning is the air pollution, spill risks, and traffic delays oil trains would bring to communities along the rail line from Aberdeen to Chehalis, through the Columbia River Gorge, and all the way to

the source of the oil in North Dakota and elsewhere. Washington State is rapidly moving away from fossil fuels and towards clean, renewable sources to meet our electricity needs and respond to global warming. Building large infrastructure for yesterday's energy is the wrong path to meet today's energy needs and a big economic gamble for Grays Harbor. Washington state should continue to lead on safe, renewable, clean energy solutions and say no to more oil and coal. I urge you to to stop dirty and dangerous projects.

Response GP293-1

The proposed action does not involve construction in the Columbia River Gorge National Scenic Area.

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

GP294, **Graham, Bill**

Comment GP294-1

Thank you, Mr. Keillor. My name is Bill Graham and I'm from Ocean Shores here in Grays Harbor County.

Unlike the others, I want to direct this to a particular scientific sort of thing. And before I begin, I'd like to say that I want to spell salmon P-S-A-M-M-O-N and not S-A-L-M-O-N.

Thank you, Mr. Keillor, for a chance to describe dangers likely from the river. (Inaudible) are transferred oils into the harbor. The oil grades of interest here include those which cannot be modeled by GNOME even were the trajectory models and the contour models available to address my concern, which they're not.

My concern is the salmon and other inverted (inaudible) are dependent upon the periodic position and replacement of alluvial deposits in North Bay and South Bay by Tulips River and the other large rivers from the south.

These are washed in, washed out, and they're tidal and they bring down a constant flow of silt and other things that are absolutely vital not only to the inverted (inaudible) but everything that depends on it, the huge migration of the western (inaudible) that stops here and is dependent on the biomass available.

So, wide-raging biochemical magnification of these organic derivatives in inevitable and seems probable.

So I'd like to know, what are the long-term dangers of soluble oil components and the density and diversity of the inverter community in the harbor? Thank you for this opportunity.

Response GP294-1

The chemical properties and mechanisms of oil impacts on animals are described in Draft EIS Chapter 4, Section 4.7, *Impacts on Resources*. The primary impacts on animals from exposure to oil would occur through direct physical contact and chemical mechanisms as well as through chronic or more persistent mechanisms if a prolonged exposure occurred. These mechanisms are summarized in Table 4.7-1, *Chemical Properties and Mechanisms of Impact on Plants and Animals*. Discussion of impacts on invertebrates is found throughout Section 4.7.

Refer to the Master Response for Oil Spill Modeling Methods.

GP295, **Graham, Bill**

Comment GP295-1

Good afternoon. I'm Bill Graham, and I live in Ocean Shores. I've been so happy to be able to live here for the last four years and blessed in an area that seems to me, obvious this afternoon, over a dozen unmitigatable conclusions reached in testimonies.

My original concern was for the nonvolatile components, the horrible stew that the crude oil from that portion of the Plains in the Dakotas has in it both organic and inorganic. It's basically in the EISs unstudied, unmodeled, the number of things of which we're dealing with.

And I hope you reject this. It's just too great. I just don't think it would be wise in any way to accept at this time with what we know about this substance into this pristine harbor.

And I was so happy to hear this young person who spoke and lots of people in between. Most of them getting younger than I am every day, I think. So I want to read a couple of stanzas from my favorite poem.

Maggie, and Milly, and Molly, and May went down to the beach to play one day. And Maggie discovered a shell that sang so sweet that she couldn't remember her troubles.

And Molly befriended a stranded star whose rays five languid fingers were.

And Molly was chased by a horrible thing which raced sideways while blowing bubbles.

And all of these things will be lost to the young generation.

Response GP295-1

Comment acknowledged.

GP296, **Graham, William**

Comment GP296-1

I came in the fall of 2011 as a trailing spouse. My mother-in-law's declining health was no longer remediable from a distance, and we moved here for support. I had long wanted to retire in a verdant and healthful climate such as came to me. I am committed—if the area avoids further deterioration of its natural benefits—to living a productive engaged life here in Gray's Harbor.

The proposals by Imperium and Westway are more than disappointing. Even a brief scan of the large documents shows several "show stopper" conclusions that cannot be supported. The obvious inadequacy in the route of rail transport amazes me. The condition and location of the oil route makes it unusable. This is too obvious to need detailed documentation. The bridges and bed of the rail nearly require tipping, spillage, or worse--ignition and probable explosion.

Response GP296-1

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP296-2

The core parameters of the GNOME modeling are poorly chosen. Many vital parameters are missing from this EIS. These this do not account realistically for drift, deposition, decay or permanence in the bay. Thus, the EIS addresses environmental impact in language but not with facts or data. The scope of needed mediation is missing or inadequate, perhaps based on unavailable or underutilized data. Many issues suggest the impossibility of mediation. Throughout the DEIS regulatory minima are used as target goals by the companies. In lay terms they seek the necessary, not the desirable. For example, geological phenomena natural here—earthquakes and resulting tsunamis—are dis-considered in the construction of piping, tanks, valves, and processors in the tank farms. Is this not offloading external cost from Westway or Imperium onto tax payers in Hoquiam, Aberdeen, and Gray's Harbor?

Response GP296-2

As noted in Draft EIS Chapter 4, *Environmental Health and Safety,* oil spill modeling was completed to provide information about the potential movement of spilled oil for a subset of the risk scenarios

addressed in the risk assessment based on conditions that could occur within the study area. The consequences associated with any single scenario would vary depending on the conditions at the time of an incident. Refer to the Master Response for Oil Spill Modeling Methods for a discussion of the assumptions, methods, and limitations of the oil spill modeling. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami.

Comment GP296-3

The tides in the harbor are incorrectly modeled. The seven rivers that flow into Gray's Harbor produce, even in summer, a net outflow. The 4-6 knot tidal bore is well known. Why have these extremely vital data been modeled with disregard?

Response GP296-3

Oil spill modeling requires consideration of wind, tide, and other site-specific environmental factors that influence the trajectory of oil after a spill. GNOME uses Location Files that contain site-specific information about the area being modeled. This modeling effort used a Location File that contained information about Grays Harbor. GNOME Location Files are prepared by the National Oceanic and Atmospheric Administration and contain prepackaged tide and current data based on historical data. According to the GNOME User's Guide, each Location File contains generalized information about the tides, currents, and shorelines in the region it covers. For most parameters (e.g., currents), the location files use averages of historical data. Although actual conditions may vary from historical averages at any particular time, the use of the location file is the most reasonable approach to representing conditions in Grays Harbor. For additional information about the approach, assumptions, and limitations, refer to the Master Response for Oil Spill Modeling Methods.

Comment GP296-4

Oil spilled in the terminal area will travel into all bays. Have the influences of such distillates and carried constituents been assessed with regard to adsorptive permanence?

Response GP296-4

As discussed in the Master Response for Oil Spill Modeling Methods, Draft EIS Appendix N*, Oil Spill Modeling*, provides information about the weathering behavior of these types of oil in the environment. Appendix N presents a comparison of the behavior of the medium crude oil proxy, Bakken crude oil, and diluted bitumen in the environment, which was competed using ADIOS.

Comment GP296-5

The tank cluster will be kept at the top of the bay. Have the latest Cascadia Subduction Zone models been incorporated with regard to damage from tank rupture or destruction from the likely scenario?

Response GP296-5

Refer to the Master Response for Seismic Risk and Design Requirements for a description of the earthquake source model and hydrodynamic modeling method used in the site-specific tsunami analysis conducted for the project site and presented in Draft EIS Appendix C, *Tsunami Impact*

Modeling and Analysis. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP296-6

Are Westway's and Imperium's placing of all external costs onto tax payers as an unfunded mandate legal? For these general reasons and many more detailed ones, I request the permits be denied.

Response GP296-6

The commenter does not provide sufficient information about how external costs are placed on taxpayers to allow for a response. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP297, **Graham, William**

Comment GP297-1

I came in the fall of 2011 to Ocean Shores as a trailing spouse. My mother-in-law's declining health was more demanding, and we moved here for support of her. I had long wanted to retire in the verdant and healthful climate of the Pacific Northwest. Then the chance came to her son, my spouse. I am committed—if the area avoids further deterioration of its natural benefits—to living a productive engaged life here in Gray's Harbor. My resources will be spent here where I remember that the term "Pacific Northwest" means to most people "cleanliness," a place where wealth is measured many ways.

The proposals by Imperium and Westway are disappointing. A brief scan of the large documents shows several "show stopper" conclusions that cannot be supported.

The obvious inadequacy in the route of rail transport amazes me. Along the ineffably sensitive Columbia, Chehalis River, and at last the Hoquiam River these plans mandate passage of hypo-insured oil tank cars. The condition and route of the oil route makes it unusable. The redundancy in the many descriptions of bridges, weak railbeds, and slumping hillsides threatening the track precludes needs for mention again here. The bridges and bed of the rail nearly require tipping, spillage, landslide overturns, or worse--ignition and probable explosion within the waterway itself. The Dakotan volatiles make this inadequately stabilized oil product yet more polluting and incendiary when shipped in moving vehicles. Velocity itself we review,is the largest factor in force (Force = Mass * Velocity^2), is idealistically one to avoid when transporting explosive masses.

Response GP297-1

Refer to Response to Comment ~~GP297~~GP298-1.

Comment GP297-2

The core parameters of the GNOME modeling are inappropriately chosen. Many historically considered and vital geo- and biological parameters are missing from these EISs. These this do not

account realistically for drift, deposition, decay or permanence in the bay. Thus, these EISs addresses environmental impact in language but not with historical, bioassayed, relevant data. These data bend heavily to those regarding appearance rather than ecosystem deterioration.

The scope of needed mediation is missing or inadequate, perhaps based on unavailable or underutilized data. My amateur scan of government data banks and reports (many machine readable) reveals many data available appropriate to the analysis of poisons and flows in Gray's Harbor. Several great failures in this model are clear.

- Only Gray's Harbor is modeled. This is inadequate given historical events and spills here.

As Appendix N-1 states we must assume that "the NOAA Grays Harbor Location Files used in the GNOME trajectory analysis were developed to address hydrodynamic conditions within the harbor and are not meant to model accurately the movement of oil outside of Grays Harbor."

- The channel rather than shellfish and other invertebrate habitats of interest to prey organisms such as migratory waterfowl is emphasized. Again N-1 states the NOAA Grays Harbor Location Files "are limited to the geographic extent of the Location Files when, during an actual spill, oil could continue to spread over time and travel beyond the immediate vicinity of the harbor depending on the existing current and wind conditions at the time of the spill." The files were developed earlier and used, though they fail to extend to concerned areas of the harbor.

- Flows are not based on historically available data from the seven rivers into the harbor although the ADIOS attempt at approximation and amelioration is applied. One must question why accuracy has been sacrificed for research efficiency. Flows are chaotic and weather-dependent. Rivers are short and periodic, though viable in all season. Modeling these conditions demands greater care than that applied in each EIS.

Some issues suggest the impossibility of mediation, though appropriate longer-term analysis could very well dispel such objections. But one would be wise to believe that destruction of the basis for healthy diversity in reproducing populations is at risk because of these contaminants. Current data suggest the likelihood of irreversible permanent damage.

These seeming irregularities suggest questions.

1. Why are the data for drift/trajectory and downward migration not applied to the North Bay? The movement of water in the channel is emphasized, but both outflow and water speed are not as observed in modern times. The figures are wrong so the model is useless. Why are incorrect and inadequate data accepted for modeling water related parameters?

2. Why are spills emphasized over the more damaging chronic leakage? Oil cars, tanks, pipes and valves are all human monitored in part—even if remotely aided—and inevitably drip. They drip and have accidents without human operation too. Our rail lines are outlined in spilled contents as even a short stroll with interest will make clear. Runoff to North Bay and the Southern Elk and John's River embayments is vitally damaging. Why are long term effects on invertebrate prey populations in the visible periphyton and psammon communities of these commercially important estuaries unmodeled?

3. Why are the long term effects within the photic and aphotic zones not compared? The smell of rotting biomass via anaerobic decay caused by inorganic and organic ingredients in crude oil is inevitable. Data modeling could provide instruction. Has anaerobic decay caused by these spills been considered?

For these general reasons and many more detailed ones, I request the permits be denied.

Response GP297-2

Most parameters in the GNOME Location Files are based on historical averages and therefore use of the Location Files is considered appropriate for representing conditions in Grays Harbor for the purposes of the EIS. The oil spill model is not designed to identify potential impacts on individual species such as invertebrates but rather to track potential trajectories of oil spilled in the harbor. The results of the model were then used to describe in general terms the types of impacts that could affect animals, plants, and other resources, as described in Section 4.7, *Impacts on Resources*. Specifically, Section 4.7.1.3, *Animals*, describes impacts on invertebrates from oil in the water column and along the shoreline. Appendix M, *Risk Assessment Technical Report,* Section 5.2.1, *Spill Sizes and Release Probabilities*, notes that overall oil spills into the waters of Grays Harbor have been infrequent and small (Table 11, *Estimated Quantity of Oil Reported Spilled in Grays Harbor*). Between 2007 and 2014, an average of 112 gallons of oil per year was released into Grays Harbor based on U.S. Coast Guard data. Refer to the Master Response for Oil Spill Modeling Methods.

Draft EIS Chapter 3, *Affected Environment, Impacts, and Mitigation*, addresses the impacts associated with routine operations, including the potential for spills and leaks. As noted in Section 3.3, *Water*, the potential for impacts associated with such spills would most likely be minimized by containment features and best management practices. The potential for widespread environmental damage related to the risk of oil spills, fires, and explosions is addressed in Chapter 4, *Environmental Health and Safety*. As noted in Chapter 4, spill scenarios include the release of up to a specified volume of oil, meaning that smaller spill volumes are included in the assessment of risks.

Refer to the Master Response for Purpose and Focus of the EIS.

GP298, **Grant, Brenda**

Comment GP298-1

Imperium and Westway proposed oil-by-rail terminal projects
Public Hearing, October 8, 2015
Aberdeen, WA

My name is Brenda Grant
I live in Aberdeen.

I'm a family doctor in Aberdeen and I'm particularly worried about the health risks the oil trains pose to Aberdeen and other communities along the rail route.

The Draft Environmental Impact Statement predicts that a medium pipeline or storage tank spill will occur once in 1,100 years. It further predicts that a large spill will occur once in every 22,000 years. But human error was to blame for 30% of the 1,193 spills that happened on the west coast in 2014. These predictions grossly underestimate the probability of an accidental spill, whether at the terminal or along the rail line.

Bakkan crude oil has been shown to have a high percentage of Volatile Organic Compounds like benzene and xylene, making it flammable at lower temperatures and more combustible. When tank cars have ruptured during derailments these gasoline-like volatiles have exploded.

Railroad employees report that the rail industry has resisted a range of safety, staffing and track and equipment monitoring programs that could improve safety. The Washington State Council of Firefighters takes an official position opposing the shipment of crude oil by rail.

History shows that the handling of crude oil produces accidents, fires and explosions. The question is not WHETHER major accidents will happen, only WHEN and how often. The oil industry's record in recent years strongly supports this observation.

The Draft Environmental Impact Statement does not mention that when spills and derailments happen people will burn and die. The probability of this is high. A train of more than 100 cars, carrying three million gallons of a highly combustible product, traveling through population centers, is a public health catastrophe waiting to happen.

How would the damage of burn injuries and death be mitigated?

In my opinion the permits must be denied because the risks to human health are too great.

Response GP298-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or within Grays Harbor, respectively. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur by an oil spill, fire, or explosion.

GP299, **Graser-Lindsey, Elizabeth**

Comment GP299-1

Please deny the Westway and Imperium EISs. The environmental effects of new fossil fuels is devestating directly and thought global climate change which is causing local problems such as decreasing snow pack and increasing summer drought and increasing temperatures.

Response GP299-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP300, **Greef, Fred**

Comment GP300-1

Westway and Imperium Draft EIS Comments

Thank you for this comment opportunity. Both of these DEIS documents are very weak and fail to meet some basic SEPA EIS requirements. They fail to inform agency decision makers, and the

majority of those citizens of this state who are most at risk, of many of the worst case impacts of both of these proposals.

The scope of significant impact consideration is far too narrow in geographic area, largely misses some significant impacts, and fails to provide adequate detail or worst case scenarios for others. No reasonable alternatives are considered or even dismissed with any explanation. No alternatives besides the no-action were considered. There is no EIS summary for either document that meets the SEPA rule requirement at WAC 197-11-440(4).

There are many uncertainties, but there are also acknowledged significant potential impacts, and the level of detail of impact analysis is not commensurate with the potential impact scale or even the location of most of the worst potential impacts (WAC 197-11-402(2)). The documents are poorly constructed (especially the missing summary) and weak in assessing some major impacts. This makes it hard to understand the effectiveness of any proposed mitigation, or the full consequences of moving forward with either of these proposals. The narrow geographic realm of impact consideration violates WAC 197-11-060(3)(a) and (b), (4)(d) and is one of the biggest flaws. There are also violations of WAC 197-11-080, WAC 197-11-330, WAC 197-11-402, WAC 197-11-440, WAC 197-11-660, and WAC 197-11-792. Both DEISs fail to adequately consider significant impacts as required under WAC 197-11-330(1)(b), and 330(3)(a), (3)(e)(i), (3)(e)(ii), and (3)(e)(iv). WAC 197-11-960 should be used to help determine significant impacts to all environmental elements. Impacts at WAC 197-11-960 Part B (2, 5, 7, 8, 12, and 14) were missed. Missed and weakly assessed impacts of most significance are discussed below.

Response GP300-1

As summarized in Draft EIS Chapter 3, Section 3.0, *Introduction*, Chapter 3, *Affected Environment, Impacts, and Mitigation*, addresses potential impacts from construction and routine operation of the proposed action. Increased risk of incidents (e.g., storage tank failure, train derailments, vessel collisions) with the potential to result in the release of crude oil are addressed in Chapter 4, *Environmental Health and Safety*. The resource areas considered include those listed in WAC 197-11-960, Part B.

For more information about the scope and approach to the analysis presented in the Draft EIS, including the reasons the analysis of impacts in the extended study area are addressed qualitatively, refer to the Master Responses for Purpose and Focus of EIS and Geographic Scope of the EIS.

Refer to the Master Response for Environmental Health and Safety Analysis for a discussion of the risk scenarios evaluated in the EIS, including the definition of a worst-case discharge.

Comment GP300-2

WAC 197-11-060(3)(a) says that agencies shall make sure that proposals are properly defined. Both proposals are poorly defined. WAC 197-11-060(3)(a)(iii):

(iii) Proposals should be described in ways that encourage considering and comparing alternatives. Agencies are encouraged to describe public or nonproject proposals in terms of objectives rather than preferred solutions.

These proposals may be largely private but were not well defined, and not properly scoped. The scope of analysis for both EISs missed proposal components, alternatives, and impacts. The Westway proposal only offers a preferred solution. WAC 197-11-060(2)(c) says the scope must

meet WAC 197-11-792 (Scope). WAC 197-11-792(2) says the scope must consider three types of (a) actions, (b) alternatives, and (c) impacts. The three action types include single, connected (Imperium and Westway proposals), and similar action types, such as the current Tesoro/Savage proposal at the Port of Vancouver, and the Shell refinery proposal at Anacortes. These were not considered or acknowledged as having similar impacts. Both EISs missed an adequate assessment of widely known similar current actions, and obviously cumulative, and highly significant potential rail transport-related impacts. The three impact types required in EIS analysis at WAC 197-11-792(2)(c) include direct, indirect and cumulative impacts.

The EIS requirements at WAC 197-11-792(2)(b) for alternative consideration include a look at other reasonable courses of action and mitigation that is not part of the proposal. This was simply not done in either EIS. Other reasonable alternatives besides the no-action, and reasonable and effective mitigation options that actually address most of the significant impacts were not adequate, partly because proposal parts and impact types were missed. I will specify a few reasonable alternatives and reasonable mitigation options below that should be considered.

Response GP300-2

Refer to the Master Response for Project Objectives and Alternatives for a discussion about the basis for selecting alternatives to be evaluated in the EIS.

Refer to the Master Response for Connected or Similar Actions and Cumulative Impact Analysis for a discussion of the approach to considering other similar projects in the EIS.

Refer to the Master Responses for Purpose and Focus of the EIS and Geographic Scope of the EIS for a discussion of the scope of the EIS, including the reasons the potential impacts in the extended study area were evaluated qualitatively.

Comment GP300-3

WAC 197-11-440(4). EIS summary

Neither EIS provides the EIS summary required for a SEPA EIS. The failure to look at reasonable alternatives (WAC 197-11-786) and effective reasonable mitigation is likely associated with the failure to meet some of the EIS summary requirements and the failure to properly describe the proposals (objectives, and purpose and need) as required at WAC 197-11-440(4), and (5). One "objective" was found in the Westway proposal "executive summary":

The objective of the proposed action is to expand the existing bulk liquid storage terminal to receive crude oil by train, store the crude oil, and load crude oil onto tank vessels at the Terminal 1 dock for shipping to refineries on the West Coast and potentially abroad.

This single objective is actually the preferred solution. Perhaps the "objective" represents the proposal purpose? If so the proposal objectives, and the underlying proposal need are still missing. This violates the EIS summary requirements at WAC 197-11-440(4) and unfairly restricts alternative considerations.

Response GP300-3

As noted, Draft EIS *Summary* identifies the project objective. Final EIS Chapter 2, *Proposed Action and Alternatives*, has been revised to more clearly highlight the objective of the proposed action,

including the purpose and need to which the proposal is responding consistent with WAC 197-11-44-(4). Refer to the Master Response for Project Objective and Alternatives for additional information about the consideration of alternatives in the Draft EIS.

The Final EIS and Summary have also been revised as discussed further below.

As noted in Draft EIS, Chapter 3, Section 3.0.5*, How was mitigation identified*? mitigation measures are considered when applicable regulations, permit conditions, and required plans do not adequately reduce potentially significant impacts. Refer to the Master Response for Mitigation Framework for additional information about the development, implementation, and enforcement of mitigation measures.

Comment GP300-4

Other required EIS summary components are also largely missing. The extent to which other required EIS summary parts have been partially addressed is difficult to determine because they are not summarized anywhere. They are hard to find, and widely scattered over 66 pages. This fuzzy 66-page "executive summary" does not much help decision makers or the general public. The required brief EIS summary was also not included in the cover letter, fact sheets, the introduction, or anywhere in chapters one or two.

The Imperium EIS is also missing an EIS summary meeting WAC 197-11-440(4):

"The EIS shall summarize the contents of the statement and shall not merely be an expanded table of contents. The summary shall briefly state the proposal's objectives, specifying the purpose and need to which the proposal is responding, the major conclusions, significant areas of controversy and uncertainty, if any, and the issues to be resolved, including the environmental choices to be made among alternative courses of action and the effectiveness of mitigation measures."

The Imperium "executive summary" is 69 pages and still misses the same requirements, but the "objective is better stated and thus a bit more useful. There is no proposal purpose, or statement of the proposal's underlying need, or a statement of the proposal objectives. These are also absent in the cover letter, fact sheets, the introduction, and in chapters one and two. The other EIS summary requirements are also difficult to find and never summarized in the 69 pages, even though the word "summary" is in the header of all of those pages, just as with the Westway proposal. Executives and public need a summary, not a 66 page fuzzy document missing many requirements and never summarizing things.

Response GP300-4

Consistent with WAC 197-11-440, the Draft EIS *Summary* includes a discussion of the project objective, significant areas of concern, and major conclusions. A brief project description is included in the Draft EIS Cover Letter, Fact Sheet, and Summary. Final EIS Chapter 2, *Proposed Action and Alternatives*, reflects the addition of the project objective, specifying the purpose and need to which the proposal is responding. For additional information about the proposed action's objectives and the consideration of alternatives, refer to the Master Response for Project Objective and Alternatives.

Portions of the comment specific to the REG (formerly Imperium Terminal Services) Expansion Project would be addressed in responses to comments as part of the Final EIS for that proposed project.

Comment GP300-5

Alternatives

Please add reasonable alternatives and reasonable mitigation to these EISs. The failure to meet SEPA rule EIS summary requirements leaves us little basis for creating reasonable alternatives or reasonable mitigation, or for objectively assessing relative merits of alternatives. The EIS Summary failure is thus a serious flaw, but it should not be used to justify not looking at any other reasonable alternatives or reasonable mitigation. I would suggest that the real proposal purpose (for both proposals) was something like "storage capacity expansion" to meet the underlying need "oil-related business growth at the Port of Grays Harbor in Hoquiam."

Alternative modes of delivery and alternative oil-related fuel products would meet the proposal need. These include pipeline, trucking, or boat/tanker product transport alternatives and less volatile and explosive products as mitigation. These are far safer with less severe potential environmental consequences to the most sensitive resources, but were not offered as alternatives or as mitigation measures. WAC 197-11-786 says reasonable alternatives must at least approximate the proposal objectives at a lower environmental cost. It is hard to approximate those objectives when they have not been shared. No reason was provided why any alternatives were dismissed or even whether any were considered. Choosing not to share the proposal purpose and underlying need, or list of proposal objectives with the public or decision-makers is not enough reason not to consider reasonable alternatives and lower environmental impacts, especially when potential impacts are so large. WAC 197-11-440(5)(b):

(b) Reasonable alternatives shall include actions that could feasibly attain or approximate a proposal's objectives, but at a lower environmental cost or decreased level of environmental degradation . . .

Other oil delivery modes meet the reasonable alternative test of lower environmental cost to those elements of the environment most at risk of significant impacts statewide from the oil trains. The potential significant impacts of oil trains are simply too large to ignore without any reasonable alternative consideration and with very little effective mitigation consideration. The scope also largely missed the statewide oil train impacts of largest significance. Too many human lives are potentially threatened statewide by the oil trains not to consider other transport modes, and safer oil products to address the most significant likely potential impacts.

The imperium "objective" statement is more useful than the Westway statement at fostering alternatives, since it does not limit oil delivery to trains. It more closely meets the WAC 197-11-440 requirement for the proposal "purpose," and does seem to allow for multiple oil delivery alternatives and mitigation options. Imperium "objective":

The objective of the proposed action is to expand the existing facility to receive and load bulk liquids in addition to those already permitted.

Unfortunately reasonable alternatives were not proposed for this EIS either. The stated objective does not specify rail transport, but the facility currently uses rail transport, the largest share of the new liquid storage capacity is anticipated to be unit-train delivered Bakken or Alberta crude oil, and rail construction is part of the proposal, to accommodate this large increase in rail transport. Statewide unit train crude oil transport is a fully anticipated and major part of both proposals for EIS consideration based on WAC 1097-11-060(3)(b). This is especially true because the direct,

indirect, and cumulative impacts of these trains are potentially huge and have never been looked at before in another EIS.

Alternative Suggestion: One more lower-environmental-cost EIS reasonable alternative may be to **not allow** Alberta oil-sand Bitumen shipments by rail as they are even worse environmentally than Bakken crude oil by rail. Alberta Bitumen formulations are also volatile and explosive, fumes are much more harmful to humans, has worse impact on fish habitat in Columbia River if it spills, creates huge amounts of high-sulphur petrolium coke waste from refineries (if refined on west coast), is even dirtier than coal and would have to be shipped overseas as a cheap coal substitute since it cannot be burned in US or Canada. We cannot block export of the bitumen crude either since it comes from Canada. We really do not want to deal with the waste product on our west coast. No good reason to send world's dirtiest petroleum products overseas through our state.

One other required form of reasonable alternative consideration is missing from both EISs:

WAC 197-11-440(5)(c) Alternatives

. . . (vii) Discuss the benefits and disadvantages of reserving for some future time the implementation of the proposal, as compared with possible approval at this time. The agency perspective should be that each generation is, in effect, a trustee of the environment for succeeding generations. Particular attention should be given to the possibility of foreclosing future options by implementing the proposal.

Since this WAC was violated, I propose adding an alternative or mitigation option that delays the Westway and Imperium approvals until at least one EIS takes an adequate look at all the worst case unit train impacts and includes at least some consideration of reasonable alternatives or reasonable mitigation measures. Then all the other proposals can incorporate that impact analysis by reference. Until that is done such impacts are largely unknown, although they are known to be potentially very significant.

You could delay the Westway and Imperium approvals, or delay EIS completion until EFSEC completes a likely more comprehensive EIS on the larger oil-train based proposal at the Port of Vancouver (likely covering oil train impacts statewide). The EFSEC EIS just came out and is not yet very good or adequate, but it is a more complete EIS and can still be fixed. Much impact analysis work might then be incorporated by reference to the extent that it better informs decision-makers and citizens of the true consequences of worst-case massive increases in unit train impacts, other indirect impacts, and also the smaller increases due to each single proposal's share of the explosion- and fire-prone volatile crude oil transport statewide. Some of the risk assessment is flawed still, but will likely be improved.

Response GP300-5

Refer to the Master Response for Project Objective and Alternatives for an explanation of the alternatives evaluated in the Draft EIS. Refer to the Master Response for Geographic Scope of the EIS for information about the analysis of impacts associated with rail and vessel transport in the extended study area.

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action.

Portions of the comment specific to the REG (formerly Imperium Terminal Services) Expansion Project would be addressed in responses to comments as part of the Final EIS for that proposed project.

Comment GP300-6

Statewide Unit Train Impacts

This proposal is one of several current proposals that can cause very significant impacts if the full nature and extent of the most serious impacts is not first assessed and disclosed to the decision-makers and to all Washington citizens statewide who are most at risk. Decision-makers must know the full impact risks, so they cannot claim ignorance when the first disaster strikes. Ecology's March 2, 2015 Marine and Rail oil Transportation Study Rail, while flawed in several respects (discussed at the end), did say that oil train disasters cannot be prevented. SEPA is required to look at known, highly significant environmental impacts in an EIS before agencies can approve any of these dangerous crude-oil unit-train delivery proposals that will increase the risk of very significant impacts. The most significant impacts require the most extensive consideration in an EIS. WAC 197-11-440(5)(c):

(iv) Tailor the level of detail of descriptions to the significance of environmental impacts . . .

Cumulative unit-train impacts from the Westway and Imperium expansion projects (oil trains), Tesoro/Savage Port of Vancouver (oil trains) the Shell Oil facility proposal at Anacortes Washington (oil trains) and all other already known or highly likely current proposals in Oregon or Canada that are proposing unit-train crude oil transport through Washington, whether just through Spokane, Tri-Cities, and along the Columbia Gorge; or passing through Vancouver area, but heading to Oregon; or those heading north past Centralia to Tacoma or points north, must all be included as part of the cumulative impacts assessment for these two EISs. The Westway and Imperium proposals add cumulatively to the same Washington transport routes from North Dakota, and add to the risk of major disasters all along the way. Please at least expand the scope to look at the huge potential impacts at Spokane Valley, Spokane, and from there to Centralia.

This type of EIS assessment must occur before any of these proposals can be approved. One EIS could first take the broader look at these cumulative impacts and the rest could incorporate that analysis by reference. Until then, approval decisions for all these proposals must wait until the worst-case oil train impacts are known by the decision-makers and made public. These proposals must be properly defined as required by WAC 197-11-060(3)(a) and (b). This includes a look at all parts of each proposal. Explosive Bakken and Alberta crude oil rail delivery is part of both proposals and adds to the cumulative impacts of all other such current Bakken and Alberta oil by rail proposals. Please see WAC 197-11-060(4)(b):

(b) In assessing the significance of an impact, a lead agency shall not limit its consideration of a proposal's impacts only to those aspects within its jurisdiction, including local or state boundaries (see WAC 197-11-330(3) also).

Significant impacts beyond the arbitrary boundary of Centralia require much more extensive consideration in one or both of these EISs. Many potential rail transport impacts beyond the local boundaries of Centralia to Hoquiam are more significant than those that are more extensively assessed by these two EISs. WAC 197-11-330(3)(a) requires a look at other locations where the same proposal may have a significant adverse impact. The SEPA Responsible Official is also required

to look at the following factors when considering what impacts are significant under WAC 197-11-330(3)(e):

(i) Adversely affect environmentally sensitive or special areas, such as loss or destruction of historic, scientific, and cultural resources, parks, prime farmlands, wetlands, wild and scenic rivers, or wilderness;

(ii) Adversely affect endangered or threatened species or their habitat; and

…(iv) Establish a precedent for future actions with significant effects, involves unique and unknown risks to the environment, or may affect public health or safety.

The Columbia Gorge is an environmentally sensitive and special area that is extremely susceptible to oil train derailment impacts. It is the primary source of threatened and endangered chinook salmon, sockeye salmon and sturgeon and their habitat, and vast world-class scenic recreation and fishing opportunities. The DEIS for Tesoro/Savage, Port of Vancouver proposal suggests one oil train derailment is likely along the Columbia River every two years form its proposal alone. I think their calculations greatly underestimate the frequency of severe oil spills/fires/explosions, especially if other proposals such as Westway or Imperium are also approved. They have also severely underplayed the environmental significance of oil spills in the 216 mile Columbia River Allignment from Pasco to Vancouver.

Westway and Imperium might be the first approvals that spur the growth of dedicated120-car volatile Bakken crude oil unit-trains in this state. Please add this additional risk to the assessment of both EISs. This indirect impact of spurring more unit train traffic must be looked at as required under WAC 197-11-330(3)(e)(iv) and also under WAC 197-11-060(2)(c). This includes added potential significant impacts to the Columbia Gorge, T&E salmon and sturgeon, farm goods transport, and human lives and air quality impacts statewide, if these are some of first potential oil-train dependent proposal approvals. The first approval(s) will not only bring more dangerous oil trains through our state, but will likely establish a precedent for more growth in oil train traffic as well. All of these trains, whether just those from this proposal or from the precedent these proposals establish, will threaten the public health and safety of many more Washington residents than just those living between Centralia to Hoquiam.

Please add to the EISs an assessment of worst case impacts of major derailments, fire and explosions to at least a worst case sample of the many Washington towns that are much more at risk of larger disasters than Centralia or Hoquiam. Consider train speeds, topography, larger populations close to the rails, and also sole source aquifers, other sensitive resources, etc. that might help screen for examples of the worst case impact locations. Spokane, Spokane Valley (Sole source aquifer easily penetrated and contaminated by a Bakken crude spill), Tri-Cities, Cheney, Stevenson, Bingen, Camas or Washougal, and many other small towns where the trains do not slow as much come to mind. Some of the small towns along the Gorge such as Stevenson are at very severe risk due to proximity of the tracks and adjacent topography.

Additional EIS analysis is needed for potential significant direct or indirect oil train impacts to the following resources from the Westway and Imperium proposals

Columbia River Salmonids and Sturgeon] (T&E fish) and habitat impacts for both crude oil types

Transportation ---E. Washington farm produce transport impacts all the way to ports and ships

Recreation---Columbia River fishing and recreation impacts

Env. Health Hazards---fires and explosions in large and small towns along all Bakken crude rail lines---potential for vast losses of human life and property

Air Quality
• Canadian (Alberta) oil-sand bitumen impacts on GHG emissions and climate change due to petroleum coke use as a low grade, high-sulphur, cheap coal substitute if exported.

• Train diesel engine exhaust and PM 2.5 one-hour national ambient air quality standard & possible CO standard violations also in Spokane, Seattle, Vancouver, Yakima, and Columbia Gorge neighborhoods near the tracks. Emission factors, pilot studies, and monitoring records must be disclosed to assure humans will still be protected by the total increases in giant dirty diesel engines moving slowly through residential neighborhoods.

See: Diesel particulate matter emission factors and air quality implications from in–service rail in Washington State, USA, by Daniel A. Jaffe, Atmospheric Pollution Research 5 (2014) 344-351. He said a 50% increase in unit train rail traffic in Seattle could cause a national ambient air quality PM 2.5 air quality violation. The Anacortes proposal alone might be a 40% increase. More studies are needed before there is any increase, especially a 700% or 1000% increase. We also need to be sure all these trains replace all their engines with the new far cleaner diesel engines before any increased unit train traffic is allowed. Diesel emissions are very toxic. These levels kill elderly folks and those with compromised health. How many people are we killing without even spilling the oil? The EIS should do this kind of public health impact assessment. That is why we have air quality standards. Ecology has some top notch air quality modelers in their Air Quality program that can and should do some diesel railroad engine emission calculations based on the worst case number of increased unit train traffic over the next 10 years before we allow the traffic to increase.

Response GP300-6

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*, which presents a cancer risk analysis from emissions of diesel particulate matter in the study area related to proposed operation.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions (no-action alternative), and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

Comment GP300-7

A broad EIS look at explosive unit-train impacts statewide has never been conducted. This is needed before the individual contributions statewide from each separate proposal can be understood. The March 2015 Rail Safety Study was very weak and falls far short of the SEPA analysis required for these two EISs. (See that discussion towards the end of these comments.) Piece-meal analysis of each separate proposal is not allowed until at least one EIS takes a broader look at all the cumulative impacts from current similar contributory proposals, before any proposal can be approved. WAC 197-11-060(3)(b) requires each proposal with an oil train component to look at the complete interdependent oil train transport part, since you will not have the dangerous oil trains without these oil transport proposals. These oil-train dependent proposals are directly responsible for and are the cause of increases in oil train disaster risks. These are the most significant potential impacts. Worst-case scenarios must be looked at beyond the Centralia region in these EISs as required under WAC 197-11-080(3)(b).

Please add the worst-case total cumulative increases in unit train traffic across this state, and the resulting indirect impacts to farmers and their produce transport to at least one of the EISs before we approve any new or expanded oil train facilities.

Include the additional cumulative unit-train rail traffic impacts associated with the current coal port proposals in Cherry Point, and the Millenium Longview proposal as part of the total projected increase in rail traffic statewide. Assess the cumulative total impact on farm produce transport and the likely impact of train derailments caused by sulphuric acid damage to railroad ties. Coal unit trains and oil unit trains both compete with eastern Washington farm produce transportation (SEPA checklist questions B-14-g, and h). Farm produce hauling via trains is the cheapest option for farmers and any loss of train access due to the unit train transport across our state effects the success of eastern Washington farmers getting their goods to ports.

Response GP300-7

Draft EIS Chapter 6, *Cumulative Impacts*, addresses cumulative impacts in the study area. Refer to the Master Response for the Cumulative Impacts Analysis for an explanation of the projects considered in this analysis. Regarding the geographic scope, refer to previous response.

Comment GP300-8

Coal trains spill huge quantities of Montana Powder Basin high-sulphur coal dust which then forms sulphuric acid and rots the ties. This common cause of train derailment can cause the Bakken oil trains to derail and explode. Please assess this increased risk or if unknown include a worst case derailment factor in both EISs due to rotten ties. Any increased likelihood of major disasters should be looked at, especially since UTC says they do not have enough rail inspectors, and the railroads will not commit to adequate rail inspections either.

Response GP300-8

Refer to the Master Response for Geographic Scope of the EIS.

Comment GP300-9

Please add origin locations, all train routes, and all destinations and all Washington town names near any of these rail routes for an adequate SEPA EIS cumulative effects analysis of unit train impacts. This information should be readily available for both proposals.

Response GP300-9

Final EIS Chapter 5, *Extended Rail and Vessel Transport,* reflects additional information related to the likely sources of crude oil under the proposed action and the assumed routes. Chapter 5 addresses the potential for impacts from rail and vessel transport in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP300-10

Please add the maximum likely total of unit trains per week of Bakken crude versus Alberta oil-sand bitumen, versus coal, at least along all lines that might supply these two proposals. Please also include the nature of all possible Bakken oil train shipments in terms of flammability, explosiveness, and all of the likely train transport formulations, and assess the transport risk of each. Some formulations may provide reasonable mitigation measures or lower environmental cost alternatives to reduce the severe risks by first treating the Bakken crude in North Dakota to reduce flammability and explosiveness prior to rail transport.

Please be sure to also disclose the volatility, fumes, and properties of all potential formulations for Alberta oil-sand bitumen which requires dangerous volatile additives to dilute it. The fumes are more harmful to people than Bakken crude, the high risks of fire and explosion are similar, and consequences to the Columbia River fish habitat than with Bakken oil spills are potentially worse. These oil properties require disclosure due to the likely potential impacts to threatened and endangered fish species. Bakken is more soluble and easily dispersed. The Alberta Bitumen crude clings more to sediments and likely disrupts more T&E fish habitat.

Response GP300-10

As noted in Draft EIS Chapter 4, Section 4.2, *Applicable Regulations*, such plans are not required prior to operations and have not been developed. However, once the plans have been submitted to Ecology, such as the contingency plan required by WAC 173-186, they will be available for public review and comment for a period of 30 days. Refer to the Master Response for the Purpose and Focus of the EIS.

To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP300-11

Please document the worst case potential impacts to all the small towns, cities, citizens closest to the rail lines, and those citizens and communities most at risk and why. This is not rocket science, but is

a required part of SEPA public disclosure when the potential disasters are so huge to so many of our citizens and to the environment along the Bakken crude oil train routes.

Response GP300-11

Refer to the Master Response for Oil Spills, Fires, and Explosions and the Master Response for Risk Assessment Analysis.

Comment GP300-12

What does a 300 foot high fire ball or an explosion involving multiple rail cars do to a suburb of Spokane such as Spokane Valley? What does a major explosion do to a smaller but moderately populated residential area? Quebec was really lucky the town was so much smaller and only 47 people died. Worst case impacts to many Washington towns are far more severe and SEPA requires such disclosures at WAC 197-11-080(3)(b).

A good map is crucial, with all of the most likely rail routes and towns for Canadian bitumen, Bakken crude, and coal, both separate and overlaid. Both proposals say oil train transport of Alberta oil-sand bitumen is a likely potential part of their total proposal and there are currently at least two major coal unit-train proposals.

Response GP300-12

Comment acknowledged.

Comment GP300-13

Please verify how many unit trains might pass through Spokane, Tri-Cities, Columbia Gorge, and Yakima each day, or at least all towns with Clean Air Act State Implementation Plans resulting from poor air quality, and any towns where air quality pilot studies or air quality monitors have been studying train related emissions. Decision makers and the public need to know the latest science on large increases in large diesel engine traffic through any residential areas already known for poor air quality. Projected increases in train traffic caused by these proposals, or resulting indirectly from these proposals, or adding to existing cumulative air quality problems, may violate the Clean Air Act in some neighborhoods. Please model worst case projected diesel emissions from total projected increases in unit trains to prove that large increases in unit train traffic will not cause Clean Air Act one-hour violations. This is an indirect and a cumulative impact, but it must be considered under SEPA especially since people die from these Clean Air Act violations. The study in Seattle (cited above) indicated violations are likely.

Please also verify name **all** the small towns oil unit-trains will pass through, at what speeds, and where the speeds will be up to 40 MPH along the Gorge, or near any small towns. Show the small towns along the train routes and show all locations where trains are allowed to run at speeds of 40 MPH or more. This should also be combined with topog maps showing potential consequences of steeper downhill or uphill topography near the tracks. This will help determine where train cars could roll down steeper grades or into big rocks if they derail. These maps will help calculate many of the worst-case derailment locations, or areas along Columbia River where whole trains could be pulled in with massive spills. Larger cities may have larger emergency response capability than the small towns. All citizens along the tracks must be told the increased risk of getting blown up or burned up by the volatile oil. Since this information may not be known but is not costly to obtain, it

must be included in the EIS because it is essential to understanding where the most significant potential impacts might occur.

Response GP300-13

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP300-14

Environmental Health Impacts (SEPA checklist questions B-7-a-4) and 5))

Please include percentage increase in risk from these proposals and from worst case growth in all proposals of fully dedicated Bakken oil train spills. Please also explain the risk of exposure to toxic chemicals, and the risk of explosions and huge fires to all of the many inhabited areas along the rail lines. The special emergency services (spill/fire/explosion) that will be needed by every town along the Bakken crude unit train rail routes through this state must be determined, discussed and acknowledged for each location. State what the biggest resulting consequences are for each representative major disaster worst case scenario.

The biggest problem locations and worst case impact scenarios should be used for disaster response planning and to determine mitigation needs. Spill, fire, and explosion response capabilities all along the rail routes must be determined not only for people but also for fish and fish habitat. Please include worst case disaster impact scenarios of spills of hazardous waste on threatened and endangered salmonids and sturgeon in the Columbia River for both Bakken crude, and for oil-sand bitumen. The likelihood for derailments down steep rocky embankments into the Columbia River, how many cars might get pulled in in worst case, and all of the dangerous locations and worst case scenarios along Highway 14 should be disclosed along the gorge since the risks to towns, fish, and recreation are greatest here. The warmer waters this last summer have already weakened fish populations. This additional cumulative effect to Columbia River fish populations must also be assessed as part of the cumulative effects to these threatened and endangered fish that might make them even more sensitive to oil spills.

The disaster in Quebec destroyed half the downtown, but only killed 47 people because it was such a small town. We have to consider how much worse the potential impacts might be to many of our larger. communities and whether any increased risk of such a disaster is acceptable.

Along the Columbia River and Columbia Gorge the steep topography and very narrow flatter zone along the river forces the rail lines to be directly adjacent to the small towns and Highway 14 and the River. A derailment there can destroy an entire town and its fire department with explosions and fire, and the primary access route (Highway 14) for any other emergency responders, and might also have a devastating impact on T&E salmonid populations, their habitat, and fishing recreational opportunities etc. Drive Highway 14 someday and see how close the rail lines are and how directly uphill from the River they are and how they are directly over large directly connecting water bodies to the river in many locations. The trains may go slow through Spokane, Tri-Cities and Vancouver. Please disclose train speeds in both EISs along all small towns and along the Columbia River to determine potential impacts. Please also disclose all track inspection status and maintenance records in the EISs in order for the decision makers to know the true risks of Bakken crude rail transport before deciding to add additional unacceptable risks. If not available worst case

assumptions (such as no inspections) must be assumed. SEPA impact analysis requires worst case assumptions when we do not know just how bad the impacts will be (See WAC 197-11-080(2) and (3)(b)). Let's look at the true impacts or the worst case impacts before we approve any increased risk of major disasters.

Columbia River T&E fish species are recently further at risk of extinction with the warmer water (possibly resulting from, or expected to worsen due to climate change), as evidenced by the large die-offs noted this last year to several species including sturgeon. There is already talk of removing the four lower Snake River dams to provide more salmonid access to cooler water in higher elevation Idaho streams. The impacts of worst case oil spills on Columbia River T&E fish populations, both Bakken crude and oil-sand bitumen from Alberta (which may cause a bigger fish habitat impact) should be added to both EISs. Use this same information to help assess fishing and recreation impacts along the Gorge. The tracks are right next to, and uphill from the river for many miles. Travel speeds along all those stretches should be calculated to help determine rupture potential in case of derailment

Oil train crashes with rupturing and or exploding oil cars would dump huge volumes of Bakken crude directly into the Columbia River since it is so close below and downhill from the tracks for so many miles. The worst case volume of oil entering the river must be calculated, because we know that even the safer model cars rupture in crashes of less than 40 MPH. The steep embankments and rugged rocky slopes directly down to the river from the tracks will not be gentle on the oil cars and could pull huge sections of unit trains and ruptured cars down into the river with massive explosions and spills.

Please determine relative impacts of oil-sand bitumen derailments and ruptures spilling into fish habitat, and the worst-case impacts to fish, fishing, and other recreation use of the scenic Gorge. The fish habitat impacts specific to a giant worst case influx of oil-sand bitumen to the Columbia River should be determined in the EIS. It sticks to the sediments in the river is likely more disruptive of T&E fish, fish habitat and fishing. How much fishing would be ruined? Some, worst case spill locations in terms of potential for most ruptured cars and most sensitive fish habitat reaches should be determined, especially if there are locations where whole trains may roll down jagged rocky slopes and get pulled into the river. When there are so many unknown factors SEPA requires worst case assumptions and maximum impacts to be considered. WAC 197-11-080(3)(b).

Response GP300-14

Draft EIS Chapter 4, *Environmental Health and Safety*, notes that the proposed action would result in a new potential for oil spills, fires, and explosions associated with unit train transport of crude oil in the study area. Final EIS Chapter 6, *Cumulative Impacts*, discusses the cumulative risks associated with the implementation of the proposed action in the study area. Final EIS Chapter 4, Section 4.7, *Impacts on Resources*, includes a discussion of the type of impacts that could occur in the event of an incident involving the release of crude oil, including information about toxicity and exposure. For the reasons discussed in the Master Response for Geographic Scope of the EIS, impacts in the extended study area (i.e., on the mainline railroad throughout the state) are addressed qualitatively. Final EIS Chapter 5, *Extended Rail and Vessel Transport*, reflects additional information on risks under existing conditions, the no-action alternative, and the proposed action.

Comment GP300-15

Eastern Washington Farm Produce Transport Impacts

Very significant cumulative impacts have already started to hit Eastern Washington farmers, who cannot compete with the more lucrative unit train use of Washington railroads to get their crops to market, including the grain farmers on the Palouse. We cannot afford to limit the EIS to only a train delivery alternative for crude transport at expense of farming transportation losses.

Ecology's new SEPA checklist Question B-14-g requires consideration of impacts to agricultural and forest product transport conflicts. Grain farmers in the Palouse are already suffering from transport competition with the unit trains. Much grain has been traditionally barged on the Columbia from Lewiston area to Portland, but those barges to Portland or Kalama Washington are not cheaper than train cars and their days may be numbered. Please see Washington State University, Final Report TNW 2001-2006, Impacts of a Snake River Draw Down on Energy and Emissions, Based on Regional Energy Coefficients. Department of Agricultural Economics, W.S.U., by Trent Ball and Kent Casavant.

It is no longer economical to keep subsidizing the 4 lower Snake River dams that make barge transport possible, due to high maintenance costs that have been subsidized by taxpayers. If the dams are removed it will mean 80% more Palouse grain crops will need train transportation instead to get products to ports for export. Those transport problems do not stop in Eastern Washington either, but follow oil train use all the way to port and loading docks and dock-workers. Boat access and ship loading priority and shipping lane priority conflicts are all part of agricultural transport. Please assess the most significant cumulative and indirect worst case farm produce rail transport impacts attributable to the Westway and Imperium proposals, using the maximum worst case coal and oil unit-train growth numbers. How much more unit train traffic does it take to push our farmers out of business?

Many Washington farmers were adversely impacted by the dock-workers strikes on the west coast last year when much of their produce spoiled in shipping crates sitting on the docks waiting to load. Those losses might be assessed as one measure of potential impacts resulting from transport competition with oil trains.

Oil deliveries are not time sensitive. Crops spoiled in shipping crates during the dockworker strike last summer, and that devastated many Washington farmers. Agricultural transport impacts can occur all the way to the loading docks, ships, and shipping lane access and timing at the ports. These indirect, but cumulative oil train impacts must be assessed in at least one EIS before any of these proposals to increase and set a precedent for any more unit train use in this state is approved.

The number of farming jobs that, and might be lost in eastern Washington due to poor access to farm produce transport by rail (cheaper than trucking), and having to compete with the more lucrative oil trains can probably be calculated. This is an indirect impact that SEPA should look at since it is a result of transportation impacts to farming. Please contact the Washington State University economists cited above for help with any farm produce transport impact calculations. Qualitative if not rough quantitative significant adverse impacts to farm transport should be added to both EISs. The oil jobs may only last for 15 years, whereas the farming economy is sustainable if we do not allow big oil companies to displace it.

The cumulative unit train rail traffic impacts associated with the two large current coal port proposals in Cherry Point, and the Millenium Longview proposal should be considered to the extent that they also compete with eastern Washington farm produce transportation (SEPA checklist questions B-14-g, and h). All unit train increases hurt farm goods transport and the effects are cumulative. Farm produce hauling via trains is the cheapest option for farmers and any loss of train access due to the unit train transport across our state effects the success of eastern Washington

farmers getting their goods to ports for export. The worst case total cumulative likely increases unit train traffic and the resulting adverse impacts on agricultural transport across this entire state should be considered by at least one SEPA EIS before any of these proposals is approved. I do not know if this is a significant impact, but I think it is. It is one of the SEPA elements that must be considered. You will at least need to document why it is not significant if the economists at WSU think it is.

Response GP300-15

Refer to the Master Responses for the Purpose and Focus of the EIS. Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP300-16

Marine and Rail Oil Transportation Study (March 2, 2015)

The Governor's $300,000 rail car safety study is no substitute for a comprehensive SEPA EIS look at all the direct, indirect, and cumulative environmental impacts associated with vast increases in unit train traffic across this state. The rail study said disasters are inevitable, did not look at alternatives to rail transport, or even consider many potential risk prevention measures. It did not do a good or thorough assessment of worst case risk scenarios for all the communities along the tracks and the bigger risks along the Columbia Gorge. The primary focus was spill response, but that effort was also weak. A much better worst case look is required by a SEPA EIS when impacts are likely significant but largely unknown (WAC 197-11-080(3)).

Many rail transport spill prevention measures were ignored. Stronger rail cars were proposed for Bakken crude transport and certainly should be mandated, but they do not prevent ruptures and explosions of highly flammable and explosive Bakken or Alberta Bitumen crude at speeds of less than 40 MPH. They plan to go at least 40 MPH much of the time. Three of the primary authors of Ecology's "Rail Safety" study, David Hatzenbuhler, Robert G. Patton, Eric Lymanused of the Texas-based company MainLine Management—all held senior positions with Burlington Northern Sante Fe railroad company for decades. BNSF, has enjoyed large profit margins as a result of the oil boom, as one of its primary clients, at the expense of less lucrative clients such as Eastern Washington grain farmers and other Washington farmers.

It basically says there will be spills, they cannot be prevented, so all we have to worry about is emergency response and put a few cent tax on each barrel delivered to help pay a little bit of the spill response costs. It says there are currently about 19 Bakken oil unit trains per week and that current proposed terminals will increase that to about 137 or more. This would create more than seven times the current risk of a giant Bakken oil fire and or explosion disaster, or spill into the Columbia River. The Shell Anacortes proposal would add about 7 trains per week, a 40% increased risk of a giant disaster on route to Anacortes. Even that increase is probably not acceptable with so many lives at risk. The Imperium proposal might add 14 trains per week. This would be an 80% increased risk of massive death and environmental destruction. Westway would add about 9 trains per week which would be almost a 50% increase from the current 19 trains per week. The actual increased risks of a major disaster are probably much higher as I will explain below.

Please verify where these numbers came from, what assumptions were used, to verify the true worst cases. Were any likely proposals for Oregon ports missed that would also require Bakken unit train passage through Washington State and the Columbia Gorge? The lease for the giant Tesoro/Savage Port of Vancouver proposal allows them to build a second terminal if they exceed 400,000 barrels per day. This means at least 800,000 barrels should be used in the worst case EIS analysis. I think this is hidden in the new Tesoro Savage DEIS. I do not know what figure was used in Ecology's rail transport study. Trains/week is only a small part of the needed unit train impact analysis. Many other parts were also missing in the "Rail Safety Study," such as real prevention measures, alternatives, and many better mitigation measures.

I am also told that the current 19 trains per week from the rail safety study is a bogus number for risk comparison. Most of these 19 trains are not dedicated to oil transport. Instead they only have about 30-35 Bakken cars in one part of the train. The comparative risk of one part of the train derailing is much smaller than with 120-car dedicated Bakken oil trains with volatile oil in every car. This could easily triple the true increased risks of fires, disasters, and explosions from all of the current proposals that will use dedicated Bakken or Alberta bitumen trains passing through much of our state. Please disclose the true increased risks in these EISs. Please verify if proposed increased risk figures are based on current multi-cargo trains that include some Bakken cars, or are based on the true fully dedicated unit-train risk numbers with Bakken oil in all 120 cars. If unknowable please give us the worst case risks required under WAC 197-11-080(3). Please also include cumulative increased worst case derailment risk from rotten rail ties resulting from projected increases in coal transport. Mitigation could include inspection of all ties on a regular basis before any proposals or any increased train use is approved. The problem is nobody wants to inspect all the tracks.

Response GP300-16

Refer to the Master Response for Geographic Scope of the EIS for a discussion of the qualitative approach to and the extent of the scope of the risk analysis in the extended study area.

Refer to the Master Response for Connected or Similar Actions for a discussion of how other projects are considered in the Draft EIS.

Refer to the Master Response for Risk Assessment Methods for a discussion of the assumptions, methods, and data sources used in the risk assessment and for a discussion of why the figures graphically depicting risk were removed from the Final EIS.

Comment GP300-17

SEPA mitigation measures

No export of any oil products from this state that are not intended for use in this country, should be one of the many needed mitigation measures for any proposal to transport oil by rail through our state. It will eliminate the global warming impacts associated with disposal of high-sulphur coke petroleum residues from Canadian oil-sand bitumen that would otherwise collect at the Anacortes refinery, and likely be sold to Mexico or China as a cheap low grade coal substitute. It might effectively eliminate all shipments of Alberta oil-sand bitumen if it cannot be exported.

New stronger oil rail cars required for all Bakken crude transport---full disclosure is also needed that they can and have still ruptured and or exploded at speeds of less than 40 MPH, and all such studies as to their true safety in crashes must be acknowledged in the EIS.

Full track and track support structure inspections with regular complete status reports on all lines prior to approval of any facilities, and prior to any increases in Bakken unit train transport in this state, and prior to any new terminal approvals. Replacement of wood ties with concrete ties might be another option.

Regular and frequent brake inspections on all Bakken oil trains prior to entry into this state, and prior to any new facility approvals. All oil trains in this state must have frequent brake inspections of all brakes.

A railroad disaster insurance requirement of at least perhaps $5 billion dollars as one mitigation requirement commensurate with the scale of a moderate (worst-case would be easily over $20 billion) disaster for all rail companies that choose to haul Bakken crude in this state. Otherwise these costs will likely be paid by Washington taxpayers. That is one great reason to calculate worst case impacts, but another is so we know where the weakest response capabilities are. All of the rail carriers must be adequately insured in case of the inevitable disaster with all the associated lives and property that might be lost, not to mention the potential environmental impacts. Without worst case analysis we do not know if $5 billion is enough. A disaster in a larger metropolitan area like the route through Spokane with a 300 foot high fireball could easily cost $20 billion or more. Class one railroads only carry about $1.5 billion. The disaster in Quebec was relatively small but still cost about $2 billion. See Siteline Institute, RISK ASSESSMENT FOR RAILROADS--How taxpayers will end up paying for the costs of a worst case oil train derailment, by Eric de Place and Rich Feldman, May 19, 2014.

The federal government did not choose to help us pick up wildfire property losses last summer and may not help with railroad fires and explosions in our towns either. Let taxpayers know this.

Washington farmers should be given highest priority to rail transport access, ahead of unit train use in this state, to get their produce to market. Farm produce should also have top priority at all ports loading their farm products for export.

New cleanest low emission diesel engines required for all unit trains that pass through any residential neighborhoods in this state.

No coal trains with high-sulphur Powder River Basin coal allowed in our state because of the threat to so many human lives resulting from sulphuric acid rotting the railroad ties and no regular railroad tie inspections and replacements.

Total replacement of all wood railroad ties with sulphuric acid resistant concrete ties prior to any new facility approvals.

Thank you for reading my scoping suggestions. If they are not used in the EISs I hope you can let me know why not.

Sincerely,
Fred Greef (private citizen)

Response GP300-17

The Final EIS includes the proposed mitigation measures for the proposed action. Refer to the Master Response for Mitigation Framework for additional information about the development and enforcement of mitigation measures.

GP301, **Green, Richard**

Comment GP301-1

Please deny these permits. In the face of the onslaught by the oligarchs of oil and coal, it is imperative that we stand up and refuse to allow their greed to jeopardize life along the rail and at the terminals. At a time when carbon fuels are less in demand & prices are dropping, its time to focus on alternatives and put an end to the immoral stranglehold Big Carbon has had on all of us.

Response GP301-1

Comment acknowledged.

GP302, **Greenridge, Connie**

Comment GP302-1

I am a resident of Ocean Shores and have lived here for forty years. I have been involved in the commercial fishing, am a clam digger, avid kayaker and walk and enjoy the waterways on a daily basis. I have seen what happens when we don't take care of our resources. With this personal knowledge, I believe that furthering the transportation of oil is a danger for our environment. My vote is a NO! I understand that our area needs jobs for people but please rethink this oil transport idea. There is too much potential for disaster. Thank you for your time Connie Greenidge Connie Greenidge

Response GP302-1

Comment acknowledged.

GP303, **Greenridge, Connie**

Comment GP303-1

I am writing to oppose the transport of crude oil. I have resided in Grays Harbor for 40 years and recreated in Grays Harbor all my life. Because of this long term exposure to the waterways in the this area and beyond, I understand that we would not fair well if there was an oil spill. I have not observed any movement to improve the rail system and have seen what happens when goes off its track, not to even mention what damage is caused when there is an oil leak, in or upon our waterways. I do understand that our area needs jobs and how important that is, but, to me, this is too big a price to pay for the eventual still. Thank you for you time. Again my vote is a resounding NO!

Response GP303-1

Comment acknowledged.

GP304, **Greenridge, Frederick**

Comment GP304-1

I have lived in Ocean Shores for about 40 years, long enough to realize the damage an oil spill could do to this harbor and surrounding beaches. Grays Harbor business, jobs and tourism is largely dependent on the quality of its water. Sea life, be it shellfish, fin fish, mammals or birds can only survive and reproduce in clean water. Oil spills are guaranteed with the increase shipping of any sort of oil in the confined space of Grays Harbor. A huge volume of water crosses Grays Harbor Bar daily, in and out. Any oils spills will spread rapidly thru-out the Bay and for many miles on both North and South beaches. Oil booms will be totally useless to contain fast moving oil on and in this water. We don't have Boeing or Microsoft to fall back on when the oil spill happens. Jobs here depend on water quality for business and recreation. Haven't we seen enough oil soaked birds? There is already enough risk for oil spills from existing rail, tank farms and oil shipping that are in place. NO! on increased oil terminals for Gray Harbor. Respectfully Submitted, Frederick Greenidge Former Salmon Troller

Response GP304-1

Comment acknowledged.

GP305, **Grellier, Penny**

Comment GP305-1

As a surfer, hiker and Surfrider member, I enjoy visiting the Washington Coast, especially the area around Grays Harbor. I go to enjoy the natural beauty of the coastline, do some bird- and wildlife watching, spend time in the water and along the beach, and I support the local small-town economies while I'm there. I am opposed to expansion of oil terminal services in Grays Harbor because it puts at risk all of those things that I place value on and that are unique to Washington State. The EIS fails to take into full and realistic consideration the wide range of adverse effects oil trains and storage facilities would have on Grays Harbor and adjacent areas. Transport of oil through rural, ecologically fragile sections of Southwest Washington is a dangerous prospect for residents, human and wildlife alike. The rail lines are not designed to handle such traffic and a derailment would have a catastrophic impact on the surrounding communities and environment. Storing oil at sea level in a seismically-active tsunami zone puts people, animals, ocean and air health at high risk. Even a small spill would negatively impact the livelihood of anyone who earns their living in the fishing industry, not to mention the destruction of habitat and loss of life among marine animals and birds. Visiting the coast means peace, solitude and unspoiled landscape. It showcases the wild parts of our state that are protected places for animals to thrive. It means recreational activities, tourism and spending money in local businesses. Oil terminals have the potential to ruin all of this even before there is a critical incident. Please don't bring that to Grays Harbor.

Response GP305-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP306, **Grossman, Zoltan**

Comment GP306-1

My name is Zoltan Grossman. I'm a geography professor at the Evergreen State College, and I'd like to speak in favor of the two oil terminals. Just kidding. I just wanted to see what that sounded like.

In the cumulative impact section of the DEIS, it says that the Bakken oil would, quote, Replace oil currently used in U.S. refineries, there will be no net increase in overall emissions in greenhouse gasses. But this dismisses the geographical point.

This is not just any oil that can be interchanged with oil from Alaska or elsewhere, byproduct of Bakken oil fracking. The cumulative period of new Bakken oil terminals on the West Coast are necessary to keep the Bakken Basin operating into the foreseeable future and making a profit. And right now oil fracking is in financial trouble even in North Dakota. The high financial debt incurred in oil fracking mixed with dropping oil prices, decline in production from existing oil wells, and decline in the number of new wells all indicate a bust in the fracking industry.

Bloomberg News reports that the U.S. shale patch is facing a shakeout as drillers struggle to keep pace. Last week, Fortune Magazine reported that, Frackers could soon face mass extinction, because market analysts are refusing to lend to frackers.

This is one extinction that we should help hasten. Without this shipping off via the West Coast, that's how we can maybe hasten a fraction process to an earlier end. We have a geographic responsibility as the trump point for shipping between North America and Asia to use our location to mitigate carbon pollution.

Oil is like heroin. With oil companies as the pushers, the rail companies are the smugglers, all of us are the addicts, and climate change is the overdose. But instead, investing more attention by stopping the crime through our state and finish treating the symptom.

The Bakken man camp has created a hell hole in North Dakota. With traffic of sexual assault, we have become complicit in evil not only towards the environment...

Response GP306-1

Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

GP307, **Grossman, Zoltan (Evergreen State College)**

Comment GP307-1

Testimony to Washington Department of Ecology and City of Hoquiam

Hearing on Westway and Imperium Draft Environmental Impacts Statements

Dr. Zoltan Grossman, October 8, 2015

My name is Zoltan Grossman, a professor of geography at Evergreen, and co-editor of Asserting Native Resilience: Pacific Rim Indigenous Nations Face the Climate Crisis.

The Cumulative Impacts section of the Westway EIS asserts, "It is anticipated that the majority of crude oil to be handled and stored at the proposed facilities would come from domestic sources (e.g., Bakken crude oil). This crude oil can only be transported to U.S. refineries, which are limited in capacity by law. Therefore, this oil would replace oil currently used in U.S. refineries and there would be no net increase in overall emissions."

But this misses the geographical point. This isn't just any oil that can be interchanged with oil from Alaska or elsewhere, but a product of Bakken oil fracking. The cumulative series of new Bakken oil terminals on the West Coast are necessary to keep the Bakken Basin operating into the foreseeable future. Just like Montana coal or Alberta tar sands, the Bakken needs that shipping infrastructure in order to sustain the companies' profit.

And right now, oil fracking is in financial trouble, even in North Dakota. The high initial debt incurred in oil fracking, mixed with dropping oil prices, declining production from existing oil wells, and declining numbers of new wells, all indicate a looming bust in the fracking industry. As early as May last year, Bloomberg News reported that "The U.S. shale patch is facing a shakeout as drillers struggle to keep pace with the relentless spending needed to get oil and gas out of the ground. Shale debt has almost doubled over the last four years while revenue has gained just 5.6 percent." Just on September 26, Fortune magazine reported that "Frackers could soon face mass extinction." Because more banks are refusing to lend to frackers, many companies may start going bankrupt after the annual audits this month.

This is one extinction that we should help hasten. Without cheaper shipping options via the West Coast, that bust may be hastened and fracking brought to an earlier end, and the remaining oil left in the ground instead of turned into greenhouse gasses. We have a geographical advantage as the chokepoint for shipping between North America and Asia. It is our geographical responsibility to use our location to mitigate carbon pollution. Oil is like heroin, with the oil companies as the pushers, the rail companies as the smugglers, all of us as the addicts, and climate change as the overdose. But instead of preventing more addiction by stopping the smugglers, our State has been only treating the symptoms and enabling the pushers with new rail and terminal infrastructure.

Response GP307-1

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, the proposed action would not result in additional drilling or Bakken production because the transportation capacity to move crude oil out of the Bakken formation is more than adequate.

Comment GP307-2

The increase in oil shipments is reliant on new infrastructure here in the Northwest. Build it, and they will come. Don't build it, and they may still come, but with much lower volumes and posing less risk. It used to be that if a community rejected trains or pipelines, they'd just be shifted elsewhere. But along the West Coast, Big Oil is now hounded wherever it goes. We are tying the well-being of our public port to the very volatile, unstable, and risky boom-and-bust oil economy of North Dakota. The Bakken man camps have created a hellhole in North Dakota, with enormous growing social problems, such as a huge spike in sexual assault, an astronomical increase in highway accident deaths with all the water and chemical trucks on the roads, not enough jail space to deal with a quadrupling in the crime rate. We have become complicit not only in environmental destruction, but in evil and suffering of human beings.

I'm glad that Ecology is preparing for oil spills from shipments already coming through our state, but that's different from using a new clean-up plan to rationalize a huge increase in shipments through the new terminals. Bakken oil doesn't just spill, it explodes, so the damage would be done long before crews could arrive. Here's an analogy to show the absurdity of the clean-up fix. A cigarette company wants to distribute lighters to kids in a local grade school to promote its product. The local government acknowledges that all the lighters might increase the risk of the kids accidentally setting fires, so to offset that risk it funds a new burn unit in the local hospital. What parents would be reassured by the promised response of medical treatment, knowing that a great danger could be easily prevented by simply not distributing the lighters? And that's what's going on here: building new oil terminals is literally playing with fire, and the role of government is to protect our kids.

On the first day of any Environmental Studies class, we talk about the Precautionary Principle that it is more cost-effective and ethical to prevent disaster in the first place than to only to tinker with technical fixes or plan an after-the-fact response. Build it, and they will come, and we're saying the simplest way to prevent the risks is: Don't build new oil infrastructure.

Response GP307-2

Comment acknowledged.

GP308, **Grundbaum, Arthur**

Comment GP308-1

My name is Arthur Grundbaum, Aberdeen, Grays Harbor County. I'm fortunate to live on the shores of the Grays Harbor estuary and utilize the bounty which it supplies on a daily basis.

I've attempted to digest the 3,649 pages of the Draft EIS, but documents are dense with argument and overwhelming with jargon and esoteric tables, instead of a clear, precise analysis of what is proposed and what will be the effects.

I'm sure that I am not alone, and I request that more time is allowed for comment so that the general public can more adequately engage in the discussion of these projects that will have a transformative effect on our entire state.

Response GP308-1

Pursuant to WAC 197-11-455, the lead agency for a SEPA proceeding shall provide 30 days for review of and comment on a Draft EIS. This may be extended by 15 days upon request. The co-lead agencies issued an extended 60-day comment period that was then extended to 90 days based on public requests to provide additional time for review and comment.

Comment GP308-2

The problematic impacts of these projects cannot be mitigated and the permits must be denied. As we stand in the shadows of the whoops nuclear towers, I would also like to make a comment about the choice of this venue to hold a public hearing on such an important subject.

Whoops is a symbol of bad judgment by business and regulatory agencies. We can only hope that this insensitive choice of location owned by unwavering project cheerleaders, a part of Grays

Harbor, will be profit that this public hearing is held at the feet of such an icon of foolishness. Thank you.

Response GP308-2

Comment acknowledged.

GP309, **Grundbaum, Arthur**

Comment GP309-1

Thank you. Arthur Grundbaum again, speaking about the length of time that we have to comment and the density of the DEIS. I want to remind you that when you guys gave the mitigated determination of nonsignificance, it was an 11-page -- a 12-page document, and you took 30 -- I'm sorry, you took 90 days to review those documents and to release that MDNS.

So, given that the DEIS is 3,649 pages, not including the fact sheets, it would seem that the public should be allowed to have more than 60 days to review those very dense, complicated, lengthy Draft Environmental Statements. Thank you.

Response GP309-1

Pursuant to WAC 197-11-455, the lead agency for a SEPA proceeding shall provide 30 days for review of and comment on a Draft EIS. This may be extended by 15 days upon request. The co-lead agencies issued an extended 60-day comment period that was then extended to 90 days based on public requests to provide additional time for review and comment.

GP310, **Grundbaum, Arthur**

Comment GP310-1

My name is Arthur Grunbaum. In my reading of the DEIS, there seems to be a serious significant adverse effect. It cannot fully mitigate this offer made 151 times in Volume I of Imperium, and 148 times in Westway's Volume 1.

For example, 4.7.1 environmental impacts of a spill. Quote, No mitigation measures can be implemented that will completely eliminate the possibility of a large spill, nor are there any mitigation measures that will completely eliminate the adverse consequences of a large spill.

4.7.2, environmental impact of fire or explosion essentially says the same as does 6.5.3.4, Tribal Resources, unavoidable, significant and adverse impacts. Again, the same statement would also apply to nontribal and recreation fishing as well.

6.5.7.5, significant hazard, environmental impact states no mitigation measures would be -- completely eliminate the possibility. And it goes on.

In truth, the only mitigation possible is avoidance. You must deny the permits to Westway and Imperium and not allow these projects to go forward. These projects are asking the entire state of Washington to absorb the risks and costs while they feast on the profits.

Thank you.

Response GP310-1

Refer to the Master Response for Mitigation Framework for more information about the development, implementation, and enforcement of mitigation measures.

GP311, **Hale, Dave**

Comment GP311-1

The decision to limit this EIS to the Chehalis River up to the Chehalis/Centralia area and three miles out to sea is too restrictive. These projects are going to affect the health and safety, and the environments all along the rail transport routes, and ultimately the air and water quality of our region not to mention the global effect on climate change. You must assess the cumulative impacts of these projects from the oil fields and the sources of the proposed feed stocks, through the communities along the rail routes as well as the overall additions to GHGs.

There is also the cumulative impacts of the various fossil fuel projects proposed for the Pacific Northwest throughout the lower Columbia River Basin as well as the Puget Sound Region. Health and Safety will be adversely impacted with the large number of unit trains passing through numerous small towns and communities ill equipped to handle a spill or a fire resulting from some of the fuels being transported (Bakken crude). Please add these concerns to your investigations and assessments. Thank you for the opportunity to comment Dave Hale

Response GP311-1

Final EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, have been updated to include emission estimates from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for more information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP312, **Hamilton, Tim**

Comment GP312-1

Thank you. For the record, my name is Tim Hamilton. I live up on McClary. I have two passions in life. One of them is fish. I’ve spent 30 years in the hatchery, enhancement volunteer projects and things with my family. The last four years studying the fisheries in Grays Harbor and so on, at the request of the Director of Fish and Wildlife.

I have another passion. If you hit Google you’ll see I’m a petroleum industry consultant as advisory to DOE, EPA, the Department of Energy, the United States Congress. Primarily I’m controlling issues

(inaudible). But I know it, I know it very well. It's been my whole life. It's been my whole life. I know people, I have family and friends who brought in the Calgary fields.

Now, the report you put out, because I do a lot of analysis, is willfully inadequate. In fact if you want to know the truth, the fisheries so totally doesn't recognize the risk to all of us.

From the petroleum side, I'm going to show you how bad it is. I had an opportunity this weekend -- or this summer, to go to a nice little barbecue. All of us get together, you know. Two Canadian engineers, petroleum engineers help bring those fuels in there. We were talking about them bringing in the pipelines. Because you've got to (inaudible) where the pipelines would be, because we couldn't bring them above ground because it was too dangerous.

So we had (inaudible.) And they said, you can't get it across to Vancouver, B.C., so you're going to bring the price of oil up in North America because the B.C people don't want it because there's no gain to them financially, only environmental risk.

Yeah. Well, would you think of bringing it down by rail through the Frasier River Canyon or Chehalem? They looked at me and their eyes got really big, and they said, Are you kidding me? The train goes right beside the river and through all those trucks. And answer was this: My God, Tim, they wouldn't do this, would they? You couldn't sell this to petroleum people. It sucks.

Response GP312-1

Comment acknowledged.

GP313, **Hancock, Ray**

Comment GP313-1

As long as the initiators and heirs of these projects are proposing a default bond, significant enough to cover any eventuality upon failure or abandon of these sites; and all environmental requirements are in compliance, I support these projects. Bringing jobs and economy to WA should be foremost to all. Environmental impacts are a fact of life and everyone should be a good steward to their environment even big business. It is a huge problem in WA State especially that the tax payers are on the hook for the environmental failings of big business. All that can be done should be done to assure the project owners are wholly responsible for cleanup due to failure or abandon of these types of sights in perpetuity.

Response GP313-1

Comment acknowledged.

GP314, **Hansen, Elizabeth**

Comment GP314-1

Name: Elizabeth M. Hansen
Organization Name (if applicable): St. Patrick's
Church, Seattle City/State/Zip: Seattle, WA 98136

My comments relate to both the Westway and Imperium Draft EISs.

It is a matter of conscience that I am addressing you, especially in light of Pope Francis' letter to the world on the environment. Crude oil terminals proposed in Grays Harbor is a tremendous danger on many levels. I want to address the issue that a major oil spill, which is a real possibility in light of the recent train explosions, is a threat to the narrow waterways at Grays Harbor and the fishing industry including the Quinault Indian nation. An economic study found that a major oil spill could put more than 150 tribal commercial fishermen out of a job, resulting in a direct loss of as much as $20 million in wages and up to $70 million in revenue for affected businesses. This far offsets the paltry amount of jobs that the terminals would generate. Plus please consider the damage an oil spill would do to the ocean and seabirds. In 1988, the Nestucca barge holed off Grays Harbor spilled 231,000 gallons of marine banker oil, killing or injuring an estimated 56,000 seabirds. The oil sheen was seen from Oregon to the strait of Juan De Fuca.

Response GP314-1

Comment acknowledged.

GP315, **Hardesty, Alice**

Comment GP315-1

I am writing as an Oregonian and a citizen of the world as well as a member of a faith community.We in Portland love the Gorge too and we do not want millions of gallons of Bakken Crude going through our Gorge every day. There have been too many accidents -- just two in Wisconsin recently. We at St. Michael's are in the process of reducing our carbon footprint in many different ways.

We believe that sending crude oil through our Gorge to ports on the West Coast destined for Asia and other far away places does nothing but harm to our own economy and environment. Please do not allow this to happen. Thank you for your consideration

Response GP315-1

Comment acknowledged.

GP316, **Hargrove, Bourtai**

Comment GP316-1

Name: Bourtai Hargrove
City/State/Zip: Olympia, WA 98512

Westway and Imperium Terminal Services Expansion Projects EISs
c/o ICF International,
710 Second Street, Suite 550,
Seattle, Washington 98104

Re: Comment on the DEISs for the Westway and Imperium oil terminal proposals

To the Washington Department of Ecology and the City of Hoquim:

There is one glaring omission in the draft EISs for the Westway and Imperium oil terminals. No mention is made, and no analysis is done on the most significant, far-reaching and disastrous impact

that the terminals, if built, would have on Washington State and on the world. There is no evaluation of the impact that burning the oil transported by the 100+ tanker trains and the huge tank vessels would have on global warming. For Hoquim alone, Westway Terminals is expected to transport 48,918 barrels of crude oil per day, Grays Harbor Rail Terminal is expected to transport 45,000 barrels of crude oil per day, and Imperium Terminals is expected to transport 73,500 barrels of crude oil per day for a total of 167,418 barrels of crude oil per day. If the Tesoro-Savage Vancouver oil terminal, is built, it is expected to transport a staggering 360,000 barrels of crude oil per day, making it the largest oil terminal in the nation. Taken together, the Northwest oil-by-rail projects would have a much larger capacity than the controversial Keystone XL Pipeline. Describing the Keystone XL Pipeline several years ago, NASA climate scientist James Hansen said it was "the fuse to the biggest carbon bomb on the planet" and, if built, the pipeline would be "game over for the climate." If the Grays Harbor and Vancouver oil terminals are permitted and constructed, Washington State port will succeed the Keystone XL pipeline as the biggest carbon bomb on the planet. Our beautiful green state has become a crucial battleground in the fight to halt climate change. The decisions we make about fossil fuel infrastructure today, may well determine whether our children and grandchildren inherit the temperate climate that has enabled humans to thrive throughout history, or are condemned to struggle in a nightmare world of unprecedented heat waves, droughts, and storms.

As you know, the news on climate change is increasingly dire. Despite alarming evidence that the Antarctic and Greenland ice sheets are melting rapidly, the Siberian permafrost is belching methane, and ocean acidification threatens to eliminate coral reefs and shellfish, our greenhouse gas emissions have recently surged and are now at an all-time high, as the World Meteorological Association reports. CO2 levels are now above 400 parts per million and fast approaching the point where the world will not be able to restrict global warming to the 2 degrees Celsius that scientists warn is the threshold above which we face catastrophic consequences. We must keep 80% of known fossil fuel resources in the ground if we are to keep global temperature from soaring beyond the 2 degree C threshold. When the oil transported by the Westway and Imperium projects is burned, wherever it is burned, it will add to the cumulative level of CO2 already in the atmosphere bringing us closer each year to catastrophe. Our current trajectory is leading us toward 4 or 6 degrees C warming by the end of the century, a level we know to be a potentially civilization-threatening disaster. As Kevin Anderson, a leading scientist with the Tyndall Centre for Climate Change Research has warned, "For humanity, it's a matter of life or death."

In any assessment of the environmental impacts of the proposed oil terminals in Grays Harbor, we must address the looming danger of climate change. To ignore the greatest threat that humanity has ever faced, is insane. In my comments during the scoping hearings for these projects, I asked the Department of Ecology to determine the amount of additional CO2 that burning the oil transported by the Westway and Imperial projects would add to the cumulative CO2 already in the atmosphere for each year during the expected life of the projects and, using the best available science, evaluate the long term impact on the climate. This is not someone else's jurisdiction, and someone else's responsibility. It is our responsibility, all of us. The Department of Ecology decided to review the impacts of climate change in the EIS for the proposed Gateway Pacific coal terminal at Cherry Point. It is no less crucial here. The draft EISs for the Westway and Imperial oil terminals must be revised to include a comprehensive analysis of their potential effect on climate change. And the only reasonable conclusion is that the permits must be denied. No mitigation is possible.

With hope for a livable climate,
Bourtai Hargrove
Bourtai31@gmail.com

Response GP316-1

Draft EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, *Climate Change*, acknowledges that greenhouse gas emissions contribute to climate change and describes the projected impacts of climate change in the Pacific Northwest.

Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively. The Final EIS has been updated to include estimated emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

GP317, **Hargrove, Bourtai**

Comment GP317-1

My name is Bourtai Hargrove, and I live in Olympia. There is one glaring omission in the Draft EIS for the Westway and Imperium oil terminals. No mention is made and no analysis is done on the most significant far reaching and disastrous impacts that the terminals, if built, would have on Washington state and around the world.

There is no evaluation of the impact of burning oil transported by the trains and vessels would have on global warming. The news of climate change is disregarded despite alarming evidence that the Greenland sheets of ice are melting rapidly, the Siberian permafrost is belching methane, and the ocean acidification threatens to eliminate our shellfish.

Our greenhouse gas emissions continue to surge. CO2 levels are up 400 parts per million and fast approaching the point where the world will not be able to restrict global warming to the two degrees Celsius that science warn is the threshold above which we face catastrophic consequences.

The three terminals planned for Grays Harbor area are expected to transport a total 167,480 barrels of crude oil per day. When the oil is burned, wherever it is burned, it will add to the cumulative CO2 already in the atmosphere bringing us even closer each year to catastrophe.

The decision we make about fossil fuel today may well determine whether our children and grandchildren inherit the temperate climate that has enabled humans to thrive throughout history or condemned to struggle unprecedented heat waves throughout the world. No mitigation is possible. The permits must be denied.

Response GP317-1

Refer to Response to Comment GP316-1.

GP318, **Hargrove, Bourtai (Confronting the Climate Crisis)**

Comment GP318-1

It makes no sense to build infrastructure for the transport of oil when we need to keep 80% of known oil reserves in the ground if we are to halt global warming at 2 degrees Celsius above pre-industrial levels—the internationally accepted threshold beyond which lies catastrophe. Yes, there is a risk of the derailment and explosion of one or more of the huge oil trains. In fact, over the life of the Westway and Imperium projects, such an explosion is inevitable and would wipe out nearby communities, pollute our rivers, and destroy the fishing industry in Grays Harbor. But the pollution of the Columbia and Chehalis Rivers, the destruction of our precious wildlife preserves, and the inevitable loss of life wherever the explosion occurs pales in significance to the horrendous consequences of burning the oil and adding additional CO2 to the cumulative CO2 already in the atmosphere. Unless we transition from fossil fuels to renewable energy within the next two decades, we may pass tipping points that take climate change beyond our power to control. Human lives are already endangered by climate change, and human beings may be at risk of extinction if we do not recognize the danger in time and act now! We cannot permit the big oil companies to destroy civilization! No mitigation is possible—we must oppose big oil in every way we can.

Response GP318-1

Refer to Response to Comment GP316-1.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP319, **Harlan**

Comment GP319-1

My name is Harlan. I came from Portland to speak with you today. I grew up not far from the refinery areas in New Jersey. And that was really ugly, 15, 16 years ago. If you turn this harbor into a stinking sewer of oil, no one will forgive you. You will have no place to run and no place to hide.

The bigger picture is global. If we invest any more in fossil fuels, it delays the transition to sustainables. If you let this go forward, my children will have no place to run and no place to hide.

Response GP319-1

Comment acknowledged.

GP320, **Harlan**

Comment GP320-1

So my name is Harlan. I'm from Portland, and I came here to speak against these proposals.

On a local level, the environmental impact statement or the DEIS fails to address a number of points.

Unmitigatable is the local traffic problem with the long trains and the degradation of the marine environment, which is largely the basis of our economy now.

Response GP320-1

Comment acknowledged.

Comment GP320-2

On a regional level, the Department of Ecology has failed to look beyond the 59-mile track of local trunk line. These trains come from -- they come through a whole lot of Washington State, Spokane, I believe, in my area, Washougal, Camas, and Vancouver and on up to here, and the hazard of rail transport of oil are pretty well known. So, until all of that is accounted for, the EIS is incomplete.

Response GP320-2

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP320-3

And, on a global level, this will affect us all. We have got to change course, and this large of an investment will have huge forces trying to keep it in use for many decades. So we can't just use this fuel for a short time while we figure out renewables.

We need to stop putting resources into the old fossil fuel technology and put the efforts into the renewables. We're as good as there in how to do it. We just need the investment to turn it around. Thank you.

Response GP320-3

Comment acknowledged.

GP321, **Harris, Clairmonde**

Comment GP321-1

Three oil-by-rail export terminal proposals are under consideration in Grays Harbor and two in Vancouver, including one which would be the largest oil terminal in the nation. If these terminals are approved, about 25 million gallons of volatile Bakken crude oil would be transported in unsafe rail cars every day through the Gorge. That's 55 fully loaded, mile-long trains every week! The most important negative in these transports is the risk of environmental damage to the Columbia Gorge National Scenic Area-Risks of oil spills, train accidents, increased train and oil tanker traffic, air pollution, noise, harmful impacts on tribal culture and resources, vehicle delay at railroad crossings. This special are which is visited by people from all over the world deserves better!!! A better solution to move away from fossil fuels and towards clean, renewable sources to meet our electricity needs and respond to global warming. Building more, large infrastructure for yesterday's energy is the wrong path to meet today's energy needs and a big economic gamble for Grays Harbor. Washington state should continue to lead on safe, renewable, clean energy solutions.

Response GP321-1

Comment acknowledged.

GP322, **Harris, Maury**

Comment GP322-1

The only place I have ever known as home are the Willamette Valley and Southwest Washington. I've fished the Columbia River and its tributaries for 25 years and have hiked thousands of miles throughout Oregon and Washington. I value the scenic beauty, but more importantly I understand the vital role our region's natural spaces play in the overall health of the environment and sustainability of our Earth. Projects, such as the Westway and Imperium terminal expansions take none of this into account. Their concern is the bottom line, and our economy is slow to value the cost of sustainable energy and takes little account for environmental degradation.

The direct impact of these terminals is bad enough, with the threat of oil spills and rail car fires.

But the larger issue is the ancillary effects that increasing fossil fuel consumption will have on a global scale. Increased coal burning in China has brought an increase in acid rain to US shores, and the melting of polar ice caps and global climate change has largely been attributed to the burning of fossil fuels. It's time for our state to be a leader. It's time to fund companies looking to pave the way for a new energy future and to use projects such as these as the start of a global conversation and shift. It's our responsibility as Washingtonians and global citizens to show that we didn't sell ourselves down the river and that we defined the new status quo of energy independence. Please consider saving the places and recreational activities that have come to define me and my family. Please show that Washington hasn't forgotten its pioneering spirit. Deny these shareholder-led projects of their shortsighted goals.

Response GP322-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP323, **Hartwell, Beth**

Comment GP323-1

Dear Washington Department of Ecology and City of Hoquiam: I write as a woman that has lived along the Columbia, in both Washington State, and Oregon since 1977, so am no stranger to river traffic, or to unemployment / industrial change through the decades. Our families and communities have been assaulted by irresponsibility for the quick fix, the magic pill, that will somehow bring the illusion of prosperity, rather than investing in the community in a deep and self sustaining way. This is another of those non-solutions, where we give up our resources and safety for a few to prosper. There is simply too much risk and too little reward from these proposals: Grays Harbor and rail-line communities would take on the risk and oil companies would reap the profits, while Grays Harbor and the Columbia River Gorge would become a through-way for oil going elsewhere. There are better ways to meet our energy demands. Washington State is rapidly moving away from fossil fuels and towards clean, renewable sources to meet our electricity needs and respond to global warming.

Building more, large infrastructure for yesterday's energy is the wrong path to meet today's energy needs and a big economic gamble for Grays Harbor. Washington state should continue to lead on safe, renewable, clean energy solutions and say no to more oil and coal. I urge you to do everything in your power to stop these dirty and dangerous projects. I beg you to protect Grays Harbor, the Columbia River Gorge and its communities by rejecting the proposed Westway and Imperium oil terminals. This is not a solution for our local communities. Sincerely, Beth Hartwell

Response GP323-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP324, **Harty, Florence**

Comment GP324-1

Living in the beautiful Gorge, I do not want coal trains going through constantly. Please do not allow this.

Response GP324-1

Comment acknowledged.

GP325, **Hatley, Dave**

Comment GP325-1

Name: Dave Hatley
City/State/Zip: Aberdeen, WA 95201

I live in the blast zone in Central Park. I fear for my life & my neighbors when an oil tank car explods. The citizens of Wa. state & Grays Harbor need to be protected from Bakken Crude oil in transport as well as storage, the air, water and soil will be contaminated when oil is brought into Grays Harbor.

Carbon emissions will be extreme.

When a spill occurs nothing can clean it up.

No one can mitigate wind, tides & rain when crossing the bar to unload oil to tankers there is extreme danger. Winds have regularly exceeded 50 M.P.H. (winter) some reaching and surpassing 100 M.P.H. How can one say there will be no accidents (oil spills) when over 2.3 billion gal. of oil passes through Grays Harbor. Has anyone taken responsibility for the oil once exported to foreign nations? This will pollute the earth. Say no to oil export & oil trains passing through Grays Harbor. It is pure folly to suggest anything will benefit the landscape-rivers or the economy. Except for oil-the Port of Grays Harbor & the R.R. no one wins. Especially not the citizens of Grays Harbor. Even the

firemen state they have no means to extinguish a fire over a oil tank car explodes. They must just watch it burn.

DOES THIS MAKE SENSE? This idea is pure folly aimed at destroying our beautiful Harbor-rivers and beaches. Please examine the consequences of such a fairy tale.

Response GP325-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP326, **Hauck, Robert**

Comment GP326-1

The transport of Canadian and North Dakota oils through our sensitive coastal environment is a set-up for an environmental disaster. Train traffic through our WA cities will severely affect quality of life for local residents. Regulation by WA and Federal is a necessity to protect our WA residents and our PaCIFIC NW environment. Robert Hauck, MD, pediatrician.

Response GP326-1

Comment acknowledged.

GP327, **Havrilak, George**

Comment GP327-1

Attached is a Word document containing my proposed changes to the Westway DEIS Executive Summary in line-in/line-out format with rationale. Line-in (blue font, underscored)/line-out (red font, strikethrough).

The following are line-in (blue font, underscored)/line-out (red font, strikethrough) comments relevant to the Imperium DEIS, Executive Summary document.

P. S-8. Water: Rail and Vessel Transport. Add an example of an oil spill that significantly contaminated a municipal water supply for days. For example, amend paragraph to read: "Increased rail traffic could affect the quality of surface waters and groundwater along the PS&P rail line as the result of leaks and spills. Sensitive areas that could be affected by such releases include the Chehalis River Surge Plain Natural Area Preserve and the designated Critical Aquifer Recharge Area in the Black River and Scatter Creek sub-watersheds in Thurston County. Most of these releases would likely be limited to minor drips and leaks. The potential for such leaks can be reduced by regularly inspecting and maintaining locomotives and rail cars and by implementing best management practices. The impacts of larger spills, fires, or explosions during rail and vessel transport are discussed separately below; [blue: <u>though a medium size oil spill (50,000 gallons) had significant impact on the municipal water supply of Glendive, MT, as a consequence of the Yellowstone River oil spill on 17 January 2015. The municipal water supply was contaminated for a week</u>]." RATIONALE: As Fig S-2 indicates, even a small rail oil spill may affect water supplies and have a moderate environmental impact. A medium size oil spill such as the Yellowstone River incident

(https://en.wikipedia.org/wiki/List_of_oil_spills) indicates a certain likelihood of contaminating water supply and having a severe environmental impact.

Response GP327-1

Recommendations for revisions to the Draft EIS as noted in the attached document are acknowledged; however, the approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. Final EIS Sections 4.4.3, 4.5.3, and 4.6.3 have also been revised to include additional mitigation measures to address risk related to spills, fires, and explosions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant. Revisions to the Final EIS have been made to clarify the potential for unavoidable significant impacts.

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

Comment GP327-2

P. S-20, section entitled, What are the environmental health and safety risks …, para 2, change to read: "A large oil spill, fire, or explosion would likely cause unavoidable and significant adverse environmental impacts. The likelihood … and weather conditions. [blue: Implementation of mitigation (Table S-1) would reduce but not completely eliminate significant adverse impacts on noise, tribal resources, vehicle traffic, and environmental health and safety. Only by denying permits, plans and or approvals for construction and operations] [red: ~~No mitigation measures~~] would completely elminate the possibility of an a major incident, nor would they completely eliminate the adverse consequences of [red: ~~an~~] [blue: a major] incident." RATIONALE: The new fourth sentence is derived from a clear statement found on page S-34. Use of phrase "no mitigation measures" in the last sentence is awkward and confusing. The sentence is about eliminating the possibility of a major incident; it is not about how to lessen the severity (mitigation). Therefore, the only logical way to "completely eliminate the possibility" is to prevent it from happening. The executive summary should clearly state that only by denying permits, plans and approvals will a serious incident be prevented.

Response GP327-2

Comment acknowledged.

Comment GP327-3

P. S-21, section entitled, Risks of Oil Spills, Terminal (Onsite) Operations, para 2, change third sentence to read: "Spill prevention … at the project site. [blue: According to at least three of the five spill scenarios seen in Figure S-1 below], [red: ~~Although~~] the overall risks would be [blue: likely and

severe] [red: ~~low~~], if a spill occurred, [blue: particularly the risks of reaching the water and] the potential environmental damage would be significant. These risks would remain ….” RATIONALE: Paragraph is misleading or incorrect. Fig S-1 on p. S-21 indicates the risks are likely and severe across all three categories in at least three of the five scenarios.

Response GP327-3

For the reasons discussed in the Master Response for Risk Assessment Methods, the figures depicting risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, have been removed from the Final EIS.

Comment GP327-4

P. S-21, Rail Transport, para 2, change third sentence to read: “Spill prevention … reduce the risks. [blue: According to at least three of the five spill scenarios seen in Figure S-2 below], [red: ~~Although~~] the overall risks would be [blue: likely and severe] [red: ~~low~~], if a spill occurred, [blue: particularly the risks of reaching the water and] the potential environmental damage would be significant. These risks would remain ….” RATIONALE: Paragraph is misleading or incorrect. Fig S-2 on p. S-22 indicates the risks are likely and severe across all three categories in at least three of the five scenarios.

Response GP327-4

For the reasons discussed in the Master Response for Risk Assessment Methods, the figures depicting risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, have been removed in the Final EIS.

Chapter 4 presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 to reduce the likelihood of a spill reaching the environment and the potential impacts if an incident occurs at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion.

Refer to the Master Response for Risk Assessment Methods for more information about the data, assumptions, and approach used in the risk analysis. Refer to the Master Response for Oil Spill Modeling Methods.

Comment GP327-5

P. S-22, Vessel Transport, para 2, change second and third sentences to read: “Spill prevention…. Implementation of mitigation (Table S-1) would further reduce the risks; [blue: however, as Fig S-3 reveals,] [red: ~~Although~~] the overall risks would be [blue: likely and severe] [red: ~~low~~], if a spill occurred, [blue: particularly the risks of reaching the water and] the potential environmental damage would be significant. These risks would remain….” RATIONALE: Paragraph is misleading or incorrect. Fig S-3 on p. S-22 indicates the risks are likely and severe across all three categories of risk for all three scenarios.

Response GP327-5

For the reasons discussed in the Master Response for Risk Assessment Methods, the figures depicting risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, have been removed from the Final EIS.

Comment GP327-6

P. S-23, Risk of Fire or Explosion, para 1, change third sentence to read: "For each of the spill scenarios, Figure S-4 (onsite), Figure S-5 (rail transport), and Figure S-6 (vessel transport) depict the likelihood of the spill occurring, the likelihood of such a spill resulting in [blue: a fire and/or explosion] [red: ~~exposure to the environment~~], and the resulting extent of environmental damage that could occur. [blue: In 38 percent of the spill scenarios (5 of 13) the risk of fire/explosion is at least 50/50 or greater; whereas, the risk of spills is at least 50/50 or greater in 69 percent of the spill scenarios (9 of 13)."] RATIONALE: Stricken text is incorrect. The second risk category is "fire/explosion". A fourth sentence is added to clarify the first sentence of the paragraph to show the risk of fire and explosion is greater than implied.

P. S-23, Risk of Fire or Explosion, para 2, change third sentence to read: "Spill prevention…. Implementation of mitigation (Table S-1) would further reduce the risks. Although the [red: ~~overall risks~~] [blue: likelihood of spill and fire/explosion are at least 50/50 or greater in 69% and 38% of the spill scenarios, respectively,] [red: ~~would be low, if a spill occurred~~,] the potential environmental damage would be significant. These risks would remain even with implementation of mitigation." RATIONALE: Clarity and accuracy. Refer to Fig S-4, S-5, and S-6.

Response GP327-6

For the reasons discussed in the Master Response for Risk Assessment Methods, the figures depicting risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, have been removed from the Final EIS.

Comment GP327-7

P. S-27. Air. Refer to second and third paragraphs. Since this section finds greenhouse gas emissions resulting from this proposal would be substantial (103,753 million metric tons/yr.), and clearly states greenhouse gas emissions contribute to climate change and increases risks of wildfires, floods and drought in WA State, already prone to these critical effects, permits, plans and approvals should be denied. Furthermore, it says climate change effects from the cumulative projects could contribute to sea level rise. As beaches, businesses and homeowners of Ocean Shores, WA would be severely impacted by rising sea level, including but not limited to increases in annual flood insurance premiums, lost business revenue and lower property resale values, the permits, plans and approvals for this proposal should be denied.

Response GP327-7

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP327-8

P. S-30, Environmental Health and Safety, para 1, change third and fifth sentences to read: "As described above, potential impacts of a spill, fire, or explosion vary based on the incident. A large oil spill… impacts. The likelihood of a large spill or related fire or explosion is [blue: scenario dependent] [red: ~~relatively low~~]; however, the potential for significant consequences to the environment and human health if such an incident were to occur is high. The specific impacts would vary based on the location, amount spilled, type of liquid, and weather conditions. [blue: Implementation of mitigation (Table S-1) would reduce but not completely eliminate significant adverse impacts on noise, tribal resources, vehicle traffic, and environmental health and safety. Only by denying permits, plans and or approvals for construction and operations] [red: ~~No mitigation measures~~] would completely eliminate the possibility of [red: ~~an~~] [blue: a major] incident [red:, ~~nor would they completely eliminate the adverse consequences of an incident~~]." RATIONALE: The third sentence is misleading and potentially incorrect. For example, Fig. S-5 clearly shows that for rail large oil spills the risk of fires and explosion is very likely. The new third sentence is derived from a clear statement found on page S-34. Use of term "mitigation measures" in the last sentence is inappropriate. The sentence is about eliminating the possibility of a major incident; it is not about how to lessen the severity. Therefore, the only logical way to "completely eliminate the possibility" is to prevent it from happening. The executive summary should clearly state that only by denying permits, plans and approvals will a serious incident be prevented.

Response GP327-8

The Final EIS has been revised to clarify the characterization of significant unavoidable adverse impacts. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant.

Comment GP327-9

P. S-30, Environmental Health and Safety, para 4, delete last sentence: "In general, fires or explosions occur as the result of some but not all oil spills. An incident is most likely to occur during transport when higher speeds provide enough energy to generate a spark. [red: ~~Because allowable train speeds along the PS&P rail line and vessel speeds in the harbor are low, the likelihood of a fire or explosion during transport is reduced, although the potential for environmental harm if a fire occurred with or without an explosion could be quite severe."~~] RATIONALE: The content of the stricken last sentence is unsubstantiated by Fig S-5. Fig S-5 clearly shows that for rail large oil spills there is at least a 50/50 chance or greater for a fire or explosion. It makes no distinction that speed is a factor in its depiction. Also, refer to page S-35. Speed is not listed as a factor regarding specific impacts. Number of rail cars (e.g., "amount spilled") involved is the determining factor in Fig S-5 and is one of the four factors listed on p. S-35

Response GP327-9

For the reasons discussed in the Master Response for Risk Assessment Methods, the figures depicting risks presented in Draft EIS Chapter 4, *Environmental Health and Safety,* have been removed from the Final EIS.

Comment GP327-10

P. S-35, Environmental Health and Safety, para 1, revise accordingly: "A large… impacts. The likelihood of a large spill or related explosion is [blue: scenario dependent] [red: ~~low~~]; however, the potential for significant consequences to the environment and human health in the case of a large spill, fire, or explosion is high. The specific impacts would vary based on the location, amount spilled, type of liquid, and weather conditions. While regulatory requirements for the prevention of, preparedness for, and response to a large spill or explosion and mitigation measures exist, [red: ~~no~~] mitigation measures would [blue: only lessen the impact of] [red: ~~completely eliminate the possibility of a large spill or related fire or explosion, nor would they completely eliminate~~] the adverse consequences of such incidents." RATIONALE: Consistent with earlier related remarks and for additional clarity.

Response GP327-10

Refer to Response to Comment GP327-4.

Comment GP327-11

P. S-35: **Cumulative Impacts**, delete the last clause, as follows: "[red: ~~Because~~] [blue: The cumulative projects, including the proposed action, would have unavoidable and significant adverse environmental impacts on noise, tribal resource, vehicle traffic, and environmental health and safety [red:, ~~the proposed action would contribute to unavoidable and significant adverse environmental cumulative impacts on these resources~~]." RATIONALE: Stricken text is awkward and redundant.

Response GP327-11

The referenced sentence clarifies that the proposed action has unavoidable and significant adverse impacts when considered in isolation and contributes to unavoidable and significant adverse cumulative impacts. The sentence has been retained in the Final EIS.

Comment GP327-12

P. S-52/S-53, Table S-1, Environmental Resource 4.5, Potential Impact, delete last clause: "Increased rail transport related to the proposed action would increase the likelihood of an incident involving a spill, fire, or explosion of crude oil along the PS&P rail line compared to the no-action alternative [red: ~~although the overall risks of large spills would remain relatively low~~]." RATIONALE: The stricken statement is irrelevant, as it does not describe a potential impact; it is potentially incorrect, as Fig S-5 indicates that a large rail oil spill that may involve up to three tank cars has a 50/50 chance of occurring and approximately a 60% chance of fire or explosion. Refer to the large oil train collision and derailment at Casselton, ND, 30 Dec 13, involving 18 ruptured oil tank cars, 400,000 gallons of crude, and 10 oil tank cars may have caught fire and exploded, leading to the evacuation of some residents of Casselton.

Response GP327-12

Refer to Response to Comment GP327-4.

Comment GP327-13

P. S-53, Table S-1, Environmental Resource 4.5, Potential Impact, delete last clause: "Increased rail traffic related to the proposed action would result in increased potential for environmental damage from an incident involving the spill of crude oil compared to the no-action alternative [red: ~~although the overall risks of large spills would remain relatively low~~]." RATIONALE: Irrelevant and potentially misleading. It does not describe a potential impact.

Response GP327-13

Refer to Response to Comment GP327-4.

Comment GP327-14

P. S-58, Table S-1, Environmental Resource 4.6, Potential Impact, delete last clause: "Increased vessel transport related to the proposed action would increase the likelihood of an incident involving the spill of crude oil within Grays Harbor compared to the no-action alternative [red: ~~although the overall risks of large spills would remain relatively low~~]." RATIONALE: Irrelevant and potentially misleading. Stricken text does not describe a potential impact.

Response GP327-14

Final EIS *Summary* has been revised to clarify the relative risks of the proposed action, including revisions to Table S-1.

Comment GP327-15

P. S-60, Table S-1, Environmental Resource 4.6, Potential Impact, delete last clause: "Increased vessel traffic related to the proposed action would result in increased potential for environmental damage from an incident involving the spill of crude oil compared to the no-action alternative [red: ~~although the overall risks of large spills would remain relatively low~~]." RATIONALE: Irrelevant and potentially misleading. Stricken text does not describe a potential impact.

Response GP327-15

Final EIS *Summary* has been revised to clarify the relative risks of the proposed action, including revisions to Table S-1.

Comment GP327-16

P. S-66, Table S-1, Environmental Resource 6.5.7, Potential Impact, amend last sentence: "Under cumulative conditions, there could be an increase in the likelihood of incidents involving a spill, fire, or explosion of crude oil compared to the no-action alternative. [red: ~~Although the overall risks would remain relatively low~~], [blue: <u>The</u>] potential environmental damage would be significant." RATIONALE: Stricken text is irrelevant.

Response GP327-16

Final EIS *Summary* has been revised to clarify the relative risks of the proposed action, including revisions to Table S-1.

GP328, **Hayes, Glenna**

Comment GP328-1

Name: Glenna Hayes
Organization: 350.org PDX
City/ State/ Zip: Portland, OR 97219

The draft environmental impact statement does not address the impacts to the greater Washington and OR area that will be directly impacted by the enormous risk due to increased numbers of oil trains coming through our region.

Response GP328-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP328-2

The DEIS conclusion regarding the impact to tribal fishing opportunities is dismissive and totally unacceptable. The Quinault Indian Nation has tribal fishing rights. These rights are vital to the well being and survival of the Quinault Nation.

I urge you to reject the project based on the failure of the DEIS to include the impact on the region as a whole and for failing to adequately address impacts on tribal resources. There is no way to mitigate these damages.

I am a resident of Portland, OR and I consider the Pacific Northwest my home. This project has a negative impact far beyond the Aberdeen community. I stand in support of the hundreds of community members who have called for the rejection of these projects.

Glenna Hayes.

Response GP328-2

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP328-3

Spills due to derailment and subsequent fires from derailment have not been adequately addressed. There have been 16 derailments in the region in the last year and 14 of these resulted in fire. If those trains had been oil trains the result would be catastrophic.

Response GP328-3

Refer to the Master Response for Environmental Health and Safety Analysis.

GP329, **Haywood, Susan**

Comment GP329-1

Name: Susan Haywood
Organization: 350.org PDX
City/ State/ Zip: Portland, OR 97219

There are many issues that cannot be mitigated that will arise from this project. There is a tsunami risk to terminals, but tank pilings will be in bedrock. Vehicles traffic will be delayed at rail crossings, including emergency vehicles.

Response GP329-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP329-2

Just as Gray's Harbor does not stand alone, Washington is not the only area to be affected by these dangerous trains. The whole Pacific Northwest and the sensitive Columbia Gorge will [illegible]

Response GP329-2

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

GP330, **Haywood, Susan**

Comment GP330-1

Well, my name is Susan Haywood. And I've been reading over materials on the Westway and Imperium expansion projects. There are many issues that cannot be mitigated that will arise from these projects.

There's a tsunami risk to the terminals. Oh. Tank pilings will be dug to 250 feet. Unfortunately, bedrock is at 200 feet, so tank pilings that are more shallow than that won't do any good.

Response GP330-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP330-2

Vehicular traffic will be delayed at rail crossings due to this project, and that will include emergency vehicles. So when we are restricting emergency vehicles, we are causing loss of life.

Response GP330-2

Comment acknowledged.

Comment GP330-3

Just as Grays Harbor does not stand alone, Washington is not the only area to be affected by these dangerous trains. The whole Pacific Northwest and the sensitive Columbia Gorge will also be victims.

Response GP330-3

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP330-4

Health risks are very important when we're looking at this. We're looking at the health of industries in the communities along the rail corridor and in the ocean off the terminals. The crab fishing could easily be disrupted to the point where there is no more crab fishing here. Seafood could also be rendered inedible by the pollution.

Response GP330-4

Final EIS Chapter 4, Section 4.7, *Impacts on Resources*, has been revised to more fully describe the potential human health impacts, including those from consumption of contaminated seafood. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant.

Final EIS Chapter 5, *Extended Rail and Vessel Transport*, reflects the addition of information about why the analysis of transportation impacts in the extended study area was addressed more qualitatively and to further describe the potential risks associated with rail and vessel transport in this area. Refer to the Master Response for Geographic Scope of the EIS for more information about the analysis of impacts associated with rail and vessel transport in the extended study area.

Comment GP330-5

Now, air pollution with increased rail traffic, and at the oil terminals, and the train engines, are all huge issues. And these pollutants that will be released, DPM, which is diesel particulate matter, benzene, formaldehyde, and toluene are all serious risks for cancer and are associated with lower birth weight and respiratory death.

Now, in addition to problems with pulmonary function and asthma, they're now looking at autism as being correlated to pollution. And this is the type of pollution that also they are now looking at as a contributing factor to Alzheimer's.

So we're talking about creating a very unhealthy climate for all the people in the Pacific Northwest, because these trains are not just coming on the last 59 miles of track to get here.

Response GP330-5

As described in Draft EIS Chapter 3, Section 3.2, *Air*, based on air quality modeling for conducted by the applicant, onsite emissions of toxic air pollutants under the proposed action would be below the state thresholds identified in WAC 173-460-150. These emissions are subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping for onsite stationary sources. Refer to the Draft EIS for a list of permit conditions and applicant mitigation that would reduce potential impacts on air quality.

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present analyses of cancer risk from emissions of diesel particulate matter related to the proposed action and cumulative projects, respectively. Final EIS Section 3.2 and Section 6.5.1.2 have been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analyses predict lower emissions; the level of increased risk is not considered significant. The proposed mitigation measure for air quality monitoring near the project site is no longer warranted.

Comment GP330-6

Another question is train derailments. And there are arguments that trail derailments are not always -- do not always end in fire, but of the last 16 train derailments for which we have a history, 14 out of 16 did end up in fire. And both the crude and the Bakken oil are very volatile.

So we're talking about not only those initial problems with air pollution, but we're also talking about the health risks from fires and toxic exposure to crude oils and burns.

The risks of an oil spill are understated because 30 percent of the last 1,193 spills have been blamed on human error. So when they're citing one tank spill in 1,100 years, they're not living on this planet. We all know that there have been many tank spills and train spills within the last several years.

Response GP330-6

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP330-7

The oil spills in land and water increase the risk of neurotoxicity, autism again, Alzheimer's again, cancer, lung disease, lost cognitive function and endocrine disruption in humans.

Response GP330-7

Refer to Response to Comment GP330-4.

Comment GP330-8

Now, we're talking about the contamination of water and we've talked about seafood. Oil spilled during a train derailment also threatens drinking water sources near the rail lines, so it threatens wells. The rail lines run adjacent to and upstream from Olympia's drinking water source. In Spokane, the sole source aquifer is at risk.

Response GP330-8

Refer to Response to Comment GP330-4.

Comment GP330-9

And again, these trains are going to be passing through and located within population centers, so you're putting a lot of people at risk. The health effects also of noise and vibrations, which cannot be mitigated, increase people's risk for stress.

And longer term injuries from climate change are the ultimate problem. We need to be fostering sustainable energy. And with climate change, we are having heat-related illness and death, allergies, higher healthcare costs, and the extreme weather events that are life-threatening and expensive.

And, of course, this is a racist policy because low-income and communities of color will be disproportionately impacted.

Response GP330-9

Comment acknowledged.

GP331, **Helen**

Comment GP331-1

My name is Helen, and I want to speak specifically on the impact of state parks economically in this county. There is a new study out done by Earth Economics entitled Economic Analysis of Outdoor Recreation at Washington State Parks. Page 24 of 45, table five, lists county by county the analysis of state park lands' incomes and jobs.

Grays Harbor County -- this is a fairly recent survey. Grays Harbor County provides state and local taxes of over five million dollars, and jobs credited to side effects and state parks of almost 845. Total economic contribution, in other words, money spent in the county generated by state parks, is nearly $68 million.

I think this is an important consideration when deciding whether to put in something as risky as oil terminals and having the crude oil which could seriously wipe out 845 jobs with one oops. Thank you.

Response GP331-1

Draft EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, addresses economic considerations, social policy implications, and the costs and benefits associated with the proposed

action. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7.

GP332, **Hepp, Helen**

Comment GP332-1

My name is Helen Hepp, for the record. I live in Montesano. I'm involved with Friends Groups Supporting State Parks. I just came from the conference of Friends of State Parks, and they just handed out this new information. It is accessible from Washington State parks under the subheading of news.

It is an economic analysis of outdoor recreation at Washington State parks, and it is broken out by county.

In Grays Harbor County, the amount of money that is brought in because of parks and recreation, specifically State parks land, is over 67 million. The number of jobs brought in to Grays Harbor is nearly 845. The number of -- amount of State and local taxes is over $5 million.

I spent my life as a teacher and didn't pay much attention to the importance of fishing and hunting, but my students would always come in saying -- oh, is it time?

It's a very big concern to me. Thank you.

Response GP332-1

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*. All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP333, **Hepp, Helen**

Comment GP333-1

Regarding the Recreation section: there is a new Economic Analysis of Outdoor Recreation at Washington's States Parks available online from the Washington State Parks website under "News". On page 24 of 45 is a table showing an analysis of benefits by county. According to that table, state & local taxes brought in are over $5 million, economic contributions to our county are nearly $67 million and nearly 845 jobs are created.

Response GP333-1

Comment acknowledged.

GP334, **Herbert, Emily**

Comment GP334-1

The narrow, shallow shipping channel and strong currents put Grays Harbor at high risk of an oil spill. Such would devastate the area economy. Not worth the risk

Response GP334-1

Comment acknowledged.

GP335, **Hesse, Ilsa**

Comment GP335-1

I would very much like to leave a better Pacific North West for our children than we have right now. I visit the Olympic Penn every couple of years, ever since I was a child. The Pacific North West is a beautiful area that we can not risk just to send oil to China.

Response GP335-1

Comment acknowledged.

GP336, **Heverly, Craig**

Comment GP336-1

Pope Francis nailed it: Everything is interconnected and related. So what happens in Aberdeen and Hoquiam doesn't necessarily stay in Aberdeen and Hoquiam. A spill will impact, not only the fragile preserved lands that neighbor the terminals but, ultimately, the Salish Sea -- Washington and British Columbia. I live in Portland and a spill along the Columbia tracks would decimate our iconic river. A derailing and explosion anywhere along the routes of the trains could be catastrophic ecologically and in terms of human life. Consider all the possible catastrophes from the well head to the ports in Asia, not just Aberdeen and Hoquiam. And, most importantly, once the dirty stuff gets to its final destination it will be burned and its CO2 will become part of the thermal shield which threatens to cripple civilization as we have known if for ten thousand years. With the leaders of the world's nations gathering in Paris in a few months to try to put the brakes on this oncoming tsunami of disruption, why are we even thinking of adding to the problem? It might be good for the oil giants; it's not good for the planet.

Response GP336-1

Comment acknowledged.

GP337, **Hightower, Michael**

Comment GP337-1

Name: Michael Hightower
Organization: Public citizen
City/ State/ Zip: Camas, WA 98607

Oil has had its day. The future, a future worth living in, must leave oil behind. I have solar panels on my home. They produce more than we use in "sunny" Washington.

My small town of Camas has schools & papermills next to the train tracks. There is no mitigation that will replace the tragic failure of this plan.

I moved here from Texas and have seen fracking increase pollution, taps for water catching fire & the increase in earthquakes. This terminal would help keep this fracking supporting.

This is not needed. This is oil company greed.

Response GP337-1

Comment acknowledged.

GP338, **Hightower, Mike**

Comment GP338-1

My name is Mike Hightower. And I live in Camas. One of the things that I heard mentioned was in favor of the terminals was some people said that, you know, we were alarmists. But what I'm hearing is testimony from doctors, scientists, and educated people that say this is not right, this is not the way to go.

Jobs. We need jobs. Stimulate the jobs in Camas by putting in solar panels. And that has generated more interest. There's an alternative to oil. I've lived 50 years in Texas before we moved here. Don't trust the oil company. I've seen them fracking where they have -- this was on a line to a person's tap. And the gas is on fire on tap in an earthquake area. It happened. You know, just don't trust the oil company. They're out for greed. We don't need that kind of greed.

The train in Washougal goes by the elementary school. From the parking lot, you can walk 50 feet and touch the railroad track. With these trains, that school is gone. How do you mitigate something like that?

The other one is the Camas paper mill. The train goes by the paper mill. If one of these disasters happens in Camas, that mill is gone. There's a lot more to this than the terminal here.

Thank you.

Response GP338-1

Comment acknowledged.

GP339, **Hildreth, Joan**

Comment GP339-1

I want to thank the Ecology department for attending the Public Hearing at the D and S theatre in Aberdeen this week. It was an enlightening experience for me. I did not have any idea about this problem when I first came to see the area. I fell in love with Gray's Harbor, the shoreline and the wildlife. I went fishing and crabbing and walked on the g here for a very long time. This proposed project is unsafe and unhealthy. I do not want it in my new town. It's unbelievable that this idea has gotten to this stage. The more I learn the more I just shake my head that anyone would even consider this for one minute. re each one of us lives impacts our lives every day. Don't ruin this place with the rolling bombs. Please deny this proposal

Response GP339-1

Comment acknowledged.

GP340, **Hilke, Deborah**

Comment GP340-1

Reading the EISs for the Westway and Imperium Expansion Projects strikes me as equivalent to looking at a medical text that describes the illnesses associated with smoking – it serves as a poignant reminder of how fragile our lives really are, and that there is something we can do to protect ourselves and our loved ones. In the case of the medical text, it is the fragility of a human body. In the case of EIS, it is the fragility our communities and the earth's ecology. After reading a medical text, it is difficult to envision how an individual would willingly take on the risks associated with smoking. After reading the EIS documents, I find it difficult to envision Washington State willingly taking on the risks spelled out in such a stark, clear fashion in the EIS documents. The EIS documents for the two projects tell of disturbing and even truly horrific scenarios. Furthermore, the probability charts point out that several of these scenarios are not low-probability events. These scenarios include cataclysmic explosions, massive oil spills, snarled traffic and yet another nail in the coffin of living up to our treaty obligations as a state and nation with native peoples. It is hard to envision any rationale for inflicting these risks on our state and its citizens, as well as further undermining efforts in the rest of world to address climate change responsibly. In the immediate situation, the communities of Hoquiam and Grays Harbor will be subjected to these excessive risks, so that Canadian oil companies can export these risks to Washington State. These proposals are effectively Canadian exports of risks to humans and the ecology in Washington State that we should not accept. Similarly, if U.S. oil suppliers are intent on exporting oil to China to undercut world environmental efforts, I see no reason why Washington State or its citizens should take on these risks. If for some unfathomable reason, Washington State is obligated to accept such projects, the parties should be required to fully insure against all of the risks over the entire duration of these risks. To me, it seems difficult to believe that the proposers of these projects could profitably proceed if they had to take all of these risks. Anything short of this means the proposal is asking the State of Washington and its citizens to bear the risks for free. That does not make sense to me and I hope it does not make sense to you either. Consider that back in the early 1800s, the DuPont Family certified to its employees the effectiveness of its safety measures by literally living next door to their gunpowder factory. What we have here, are proposals to place Washington State interests at great

risk without any demonstration of good faith by the proposing parties. The proposers are not going to live on the site or drink the water and fish for their dinner in the affected water, but they are perfectly willing to recommend that Washington State citizens and First Nations peoples near these site do so, gratis.

Response GP340-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP341, **Hoeft, Bruce**

Comment GP341-1

10/1/15 testimony at the Satsop Development Park My name is Bruce Hoeft, and I live in Tacoma. I come here a lot, for the landscape, the wildlife, the seafood, and community of friends I have here. Here we are at the Satsop Development Park. Outside agencies who promise big employment and big tax revenues don't always deliver. Reactors 3 and 5 here were going to help repay the two and a quarter billion dollars WPPSS borrowed to fund their nuclear program. But the program went bankrupt. The promise wasn't kept, bond-holders got pennies on the dollar for their investment, which the public, which received nothing, had to pay. I know that's old news. But I'm afraid the public is going to have to pay again. Now we have new promises from the energy sector: a few hundred construction jobs for a year or so. A hundred, maybe more, permanent jobs. But our experience with the construction of the 405 pontoons suggests that those jobs will go to out-of-county workers, not the folks who live here now. And the terminals promise to provide tax revenues. Promise, just like the Satsop nuclear plants... But here's a revenue stream that already exists. It's not a promise: thousands of jobs in hotels, restaurants, gas stations, and tourist shops, all dependent on recreational income that would be destroyed with a large oil spill. Add that to the fishery and shellfishery businesses, and the hundreds of millions of dollars these two sectors provide to the Grays Harbor economy. This existing revenue is put at huge risk for the promise of a hundred of so jobs. I don't see adequate analysis of cost/benefit. The DEIS estimates there's a 0.8% per year chance of a vessel collision spilling 105,000 gallons of crude into the harbor. That low number is kind of meaningless unless you compare it to another number I don't see in the DEIS: how many jobs would be lost, how much income and tax revenue would disappear, and for how long, if

that spill does happen? To provide a meaningful analysis of impact, those numbers need to addressed, and compared with the risk. Bruce Hoeft 508 N 11th St. Tacoma WA 98403

Response GP341-1

Final EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* reflects additional information on the economic and social costs of oil spills. This includes information on derailments and other accidents involving trains carrying crude oil and information on a crude oil spill during marine transport. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP342, **Hoeft, Bruce**

Comment GP342-1

I'd like to thank members of the panel, Mr. Shay. My name is Bruce Hoeft. I live in Tacoma. I come here a lot. I come for the landscape, the wildlife, the seafood, and for the lovely community of friends I have here.

It's been referenced before. Outside agencies who promise big employment, bit tax revenue, I've been here before, and they don't always deliver.

It's old news, but it's still happening today. I'm afraid the public is going to have to pay again as they did for the two and a quarter million dollars -- sorry, billion dollars for the Whoops plant.

Response GP342-1

Comment acknowledged.

Comment GP342-2

We have got new promises from the energy sector here. Two hundred construction jobs for a year or so? A hundred or a couple hundred permanent jobs? But here's a revenue stream that already exists, it's not a promise. There are thousands of jobs in hotels and restaurants, gas stations, tourist shops, all dependent on recreational income will be destroyed in a large oil spill.

Add that to the fishery and shell fishery businesses, and hundreds of millions of dollars these two sectors provide to the Grays Harbor economy. I don't see an adequate analysis of cost benefit.

The DEIS means there's a 0.8 percent chance of a vessel collision, spilling 105,000 gallons of crude into the harbor.

The number is kind of meaningless unless you compare it to another number I don't see in the document. How many jobs would be lost? How much income and tax revenue would disappear? And for how long if the spill does happen?

To provide a meaningful analysis of impact, those numbers need to be addressed and compared with the risks. Thank you.

Response GP342-2

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP343, **Holcomb, Peter**

Comment GP343-1

The Department of Ecology Is a trustee in this case for everyone in Washington, including future generations. As our trustee you have a fiduciary obligation to protect the value of the entire trust property, including the life support system. The life support system of the people for whom you are trustee includes the living systems which provide our food, our air and our enjoyment of the land and water. It includes protection of our climate from killing us and all the minute organism which provide us with food from the sea and land. The living systems which keep us alive must be protected for all future people too, to keep them alive. I conjure you to use the most stringent precautionary principle.

Response GP343-1

Comment acknowledged.

GP344, **Holden, Madronna**

Comment GP344-1

Currently retired, I taught courses on the intersection of cultural and environmental issues at Pacific Northwestern universities for several decades and did grant-funded research on the traditions of the Lower Chehalis (the Su'alemish or Harbor people) beginning in 1976. I want to register my support for the Quinault and Chehalis comments in their objections to oil terminal construction. I strongly object to the statement in the EIS that the construction of this oil terminal on Grays Harbor has no cultural significance. The slated terminal site is one that was intensively utilized by the Su'alemish for harvesting along traditional "fish trails" in various Harbor channels, as well as for the cultural practice of undertaking spirit quests nearby. The name Hoquiam itself is a corruption of the indigenous term Hokiam, meaning "lots of (drift)wood", a descriptive designation of the marshland along the mouth of the Hoquiam River. It was near here that the mother of an elder I worked with in 1976 found her spirit power. As Western scholars are learning, indigenous peoples sustained their peoples' well-being and the ecological abundance of their homeland by linking ecological knowledge with spiritual practice. In particular, sacred sites for power questing in Western Washington are often sited in key and sensitive environmental areas. We would be wise to protect such areas while

we can, not only to uphold our responsibility to local indigenous peoples, but to preserve our ability to learn more about the ecological significance of such sites. The Su'alemish lived in the Hoquiam area for thousands of years, as the recent archeological find of a fish trap at Hoquiam indicates. They did so successfully by assessing their actions for their long term consequences. We would be wise to do likewise. It would certainly run contrary to such wisdom to allow the currently inadequate safety precautions with respect to the possibility of oil spills in the rail transportation corridor of oil incoming to the Harbor terminal. Further, the proposed terminal site is on relatively unstable soils in an earthquake/tsunami prone zone. We should not risk a serious spill based on hoped-for short term economic benefits outweighed by inevitable long term hazards. I use the term "we" in making these comments, since I think of this area as my home in a special way. My parents moved our family here in 1960. My father still lives here, though my mother is deceased. My research in Upper Chehalis and Lower Chehalis territory, in which indigenous peoples shared their traditions with me so generously, gave me a lifelong sense of belonging to the Chehalis River and Grays Harbor area. I urge that we protect this traditional territory of ecologically wise peoples by following their example and caring for our own future generations. Our children will thank us for our wise decision in this respect. Cordially, (Dr.) Madronna Holden

Response GP344-1

Draft EIS Chapter 3, Section 3.11, *Historic and Cultural Preservation*, addresses potential impacts of construction and routine operation of the proposed action on cultural resources. Section 3.12, *Tribal Resources*, addresses potential impacts of construction and routine operation of the proposed action on tribal resources. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including impacts on cultural and tribal resources. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP345, **Holder, Lehman**

Comment GP345-1

I oppose the proposed projects by Imperium and Westway and I believe both draft Environmental Impact Statements should identify ALL existing environmental conditions, likely impacts and mitigation measures.

Response GP345-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP346, **Holder, Mary**

Comment GP346-1

As we expressed to you in our scoping comment, although we live in Mount Vernon, WA, several days each spring we and our friends visit the Grays Harbor National Wildlife Refuge, Bottle Beach, Westport, Tokeland, Hoquiam, and Aberdeen to view the thousands of migrating shorebirds on their strenuous northward journeys as well as non-migratory shorebirds, peregrine falcons, eagles, osprey and songbirds. We and our friends spend our "eco" tourist dollars in the communities along

the way, including in Hoquiam and Aberdeen. With each passing year, we have come to love, study and appreciate the National Wildlife Refuges in Washington State and their migratory and non-migratory fish and wildlife. These Refuges enrich our lives and provide important monetary and quality of life values for the local economies and Washington State.

Response GP346-1

Comment acknowledged.

Comment GP346-2

Holder comment on Westway and Imperium DEISs

November 27, 2015

Sent as pdf attachment to online form at
https://public.commentworks.com/cwx/westwayimperiumcommentform/

Re: Comment on Westway and Imperium Expansion Projects Draft Environmental Impact Statements (DEISs)

To: Mr. Brian Shay, City Administrator, City of Hoquiam and Ms. Sally Toteff, Director Southwest Region Office, Washington Department of Ecology

Please accept our comment on the DEISs for the proposed Westway Terminal Company and Imperium Renewables expansion projects.

General Deficiencies in the DEISs

We and many others have detailed the risks of oil spills, explosions, fires, toxic fumes, noise, and other significant adverse impacts that would occur on the way to, from and at these proposed facilities in prior (scoping) comments. The significant risks and consequences from derailment events and impacts of oil spills are undeniable based upon similar incidents occurring across the United States, even as we write this comment on the DEISs. The alarming safety record of crude oil transportation and the volatile nature of the crude oil product that would be received, handled and shipped by the proposed projects ensure that it is not a matter of "if," it is a matter of when such events would occur along the rail route from the oil wells to the projects, at Grays Harbor or in the ocean as a result of the proposed projects if permitted.

The findings in the DEISs for Westway and Imperium oil terminal proposals confirm that the direct, indirect and cumulative risks and consequences of fires, explosions, oil spills, train and vessel accidents, increased train and oil tanker traffic, air pollution, noise, and more would have probable significant adverse impacts on tribal culture and fish and wildlife resources and cannot be fully mitigated. The DEISs already present grounds for denial of the permits for the two projects. Jan Hasselman The Power to Say "No": SEPA's Substantive Authority and Controversial Fossil Fuel Projects, Washington St. L.J., Environmental and Land Use Law Section (August 2015). http://www.wsba.org/~/media/Files/Legal%20Community/Sections/ELUL/Newsletters/August%202015.ashx.

Response GP346-2

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP346-3

Nevertheless, there are also probable significant adverse impacts on public safety, the built environment and fish and wildlife resources and especially the public property interest in those natural resources some of which the DEISs failed to properly characterize, analyze and disclose. The DEISs fail to adequately consider the uniquely high combustibility of Bakken crude oil; the causes of derailment including the impact of heavy oil trains as contributing to rail failures; the potential of even low-speed train car derailments, punctures, spills, fires and explosions; the inadequate preparedness of local and state first responders; the inadequacy of oil spill cleanup preparedness and equipment in Washington State; the inadequacy of Applicants' and railways' insurance to cover derailment and oil spill incidents; rail inspection failures; risks of fire spreading beyond one train car or oil storage tank in the event of a leak, fire, or explosion; contribution of the proposed projects to carbon pollution and climate change; the impacts on fish and wildlife resources, tribal culture and economies; and many more significant issues.

Although the Final EISs are normally considered the "next step" in this process, the deficiencies in the DEISs are so significant that we request that the DEISs be revised. It seems patently unfair to proceed to Final EISs when the DEISs have withheld full disclosure, study and analysis of significant impacts from the public, thus preventing the public from commenting on them. Nevertheless, in order to ensure your consideration of our comment, any requests herein calling for "revised DEISs" are also intended to apply to "Final EISs" if the Co-Leads fail to revise the DEISs.

Response GP346-3

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods. Refer to the Master Response for Emergency Response and Planning Gaps for information about the analysis of emergency planning and response capabilities. Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS.

Comment GP346-4

Law Applicable to the Public's Interest in Natural Resources

Revised DEISs for Westway and Imperium oil terminal proposals must be written to fully disclose all direct, indirect and cumulative significant adverse impacts (including in the extended area) upon public safety, the built and natural environments and including upon all National Wildlife Refuges and the natural resources protected by them and upon all fish and wildlife that could be affected by these projects in light of the laws that apply to these resources. These laws include the Public Trust Doctrine and its historic and state and federal Constitutional underpinnings. Wash. Const. art. I, § 30, and art XVII, § 1. See also RCW 43.21A.010, Legislative declaration of state policy on environment and utilization of natural resources.

In this permitting matter, among other things, harm to the State's tidelands and shorelines from oil spills is recognized by the Co-Leads as a probable significant adverse impact of the two proposed projects. These tidelands and shorelines include Grays Harbor and its estuary, all along the Washington coast and along the Columbia River. The Public Trust Doctrine is applicable to this matter and to those tidelines and shorelines, but its applicability does not end there. Fish and wildlife have long been recognized as protected elements of the Public Trust Doctrine in our country's jurisprudence. William Blackstone, II Commentaries on the Laws of England ch. 1, 222 (1769) (Blackstone confirmed that within the English legal system that certain elements remain in common ownership, unsusceptible to full privatization: "[S]uch are the elements of light, air and water . . . also animals ferae naturae, or of untamable nature . . . "). This ancient common law doctrine means that the permitting authorities must not allow the "privatization" of these publically owned natural resources by, for example, issuing the permits in this matter without fully (100%) mitigating any and all probable significant adverse impacts to all natural resources from either or both of these projects. Illinois Central R.R. Co. v. Illinois, 146 U.S. 387 (1892). (Any grant by the state of control over navigable waters and soils under them "is necessarily revocable, and the exercise of the trust by which the property was held by the state can be resumed at any time. . . . The trust with which they are held, therefore, is governmental, and cannot be alienated . . . . ."). Environmental standards based upon this Doctrine cannot be treated merely as a set of minimum or advisory requirements by the Co-Leads. Because the Public Trust Doctrine is a common law doctrine, it cannot be obliquely repudiated by regulation, permit or statute.

Additionally, the fish and wildlife resources protected by National Wildlife Refuges are considered "trust resources;" that is, they are held in trust in the public interest. These Refuges are specifically created for the conservation of trust species dependent upon them. The trustees of the Public Trust interests in this case have a fiduciary obligation to perform their duties to safeguard fish and wildlife resources, including those protected by the National Wildlife Refuges, for the benefit of all, including succeeding generations. Any probable adverse impacts to the Refuges and their resources must be regarded by the Co-Leads as significant. Moreover, the public trust in fish and wildlife and the legal status of the National Wildlife Refuges and their resources demand that agencies read other statutory laws, for example the Migratory Treaty Act of 1918 and Washington State's laws including SEPA, consistent with the Public Trust Doctrine, rather than just looking for "exceptions" to the laws that they feel support the issuance of permits. Those exceptions where they occur must yield to the public's common law property interest in the natural resources including the fish and wildlife resources where, as here, the natural resources are threatened from probable impacts of private projects. The Public Trust Doctrine and the various Federal and Washington State Constitutional provisions that support it, including the laws that created the National Wildlife Refuges, must be

applied without exception to protect the Grays Harbor National Wildlife Refuge, the Willapa National Wildlife Refuge Complex, the Ridgefield National Wildlife Refuge Complex, the Washington Maritime National Wildlife Refuge, all other National Wildlife Refuges along the rail and vessel route and their associated natural resources all along the rail and shipping routes to and from these proposed facilities. The DEIS discusses only the Grays Harbor National Wildlife Refuge. The other named Refuges, also in harm's way from these projects, share species and/or contribute to overall populations of types of fish and wildlife in the State. Revised DEISs must fully disclose all probable direct, indirect and cumulative adverse impacts of these planned facilities on all Refuges and their fish and wildlife species that could suffer impacts from the projects. Those impacts must be fully mitigated.

Harm to National Wildlife Refuges, Fish and Wildlife

The Westway and Imperium projects place the fish and wildlife dependent upon the National Wildlife Refuges we have identified above at significant risk both from construction and routine operations and from oil train and/or vessel accidents, explosions, fires and oil spills (even in the "extended area"). The DEISs totally ignore the Refuges other than the Grays Harbor National Wildlife Refuge and fail to fully consider and provide adequate mitigation for the short and long-term direct, indirect and cumulative impacts of the projects even on this Refuge. All probable significant impacts from routine operations as well as from accidents and from rail, vessel, or storage tanks on all of the affected Refuges and on other areas such as the Grays Harbor estuary that provide important habitat for fish and wildlife protected by the Public Trust Doctrine must be studied and the impacts expressly disclosed in detail.

While expressly reserving the argument that all Refuges along the rail and vessel routes and all species within them must be addressed in revised DEISs, we discuss here the Grays Harbor Refuge and estuary, with particular focus on shorebirds and their habitat about which we are deeply concerned. The entire Grays Harbor supports the fish and wildlife in the National Wildlife Refuge. The Grays Harbor estuary is designated by the Western Hemisphere Shorebird Reserve Network as a hemispheric reserve of international significance because it is visited by over 500,000 shorebirds annually during spring and fall migrations. Sites in the Western Hemisphere Shorebird Network. http://www.whsrn.org/sites/map-sites/sites-western-hemisphere-shorebird-reserve-network. Accessed May 15, 2014. Grays Harbor's estuary also supports six state-level Important Bird Areas (IBAs) – a fact the DEISs ignored. The Grays Harbor National Wildlife Refuge was established by Congress to protect this critical shorebird habitat and the species that depend on it in trust for present and future generations. Hundreds of thousands of shorebirds use prey species in the Grays Harbor estuary to fuel their migrations. Migrating shorebirds visiting the Grays Harbor area gain up to 30% of their body weight in fat before resuming their long journeys northward. Shorebird species in particular have experienced dramatic population declines over the last decades. A revised DEISs analyses must provide independent studies of the potential impacts on shorebirds dependent upon the health of the Grays Harbor estuary for their survival and the revised DEISs must disclose these impacts.

A number of the migratory shorebirds that stop over at the Grays Harbor estuary are considered species of highest conservation concern. U.S. Fish and Wildlife Service. Birds of Conservation Concern 2008. P. 24. https://www.fws.gov/migratorybirds/NewReportsPublications/SpecialTopics/BCC2008/BCC2008.pdf. Accessed May 15, 2014. Of particular concern to us are the probable impacts of these projects upon migratory and non-migratory shorebirds that depend on the Grays Harbor Refuge and estuary.

The DEISs ignore and fail to disclose impacts on declining shorebird species. As an example of one declining species in particular that must be studied closely in a revised DEIS is the Red Knot, Calidris canutus roselaari. The Red Knot is one of the rarest of the long-distance migrant shorebirds that use the Pacific Flyway. Red Knots undertake long flights during their migration that can span thousands of miles and breed on Wrangel Island, Russia and on tundra in far Northern and Northwest Alaska. They overwinter in Mexico or possibly further south. Buchanan, J.B. and L.J. Salzer, Washington Department of Fish and Wildlife. Red Knot (Calidris canutus) migration on the Pacific coast of the Americas. http://wdfw.wa.gov/publications/01547/wdfw01547.pdf. Accessed May 15, 2014. Grays Harbor is a vital migration stopover point for these birds that feed on bivalves and other benthic invertebrates in the Grays Harbor estuary [Bowerman Basin, Ocosta (Bottle Beach) and Grass Creek] to fuel their return trip to Arctic breeding grounds (Bowerman Basin, Ocosta, Grass Creek). The Willapa National Wildlife Refuge Complex is also a vital stopover area. Carmona, R., N. Arce, V. Ayala-Perez, et al. 2013. Red Knot Calidris canutus roselaari migration connectivity, abundance and non-breeding distribution along the Pacific coast of the Americas. Wader Study Group Bull. 120(3): 168–180. http://www.researchgate.net/publication/264495809_Red_Knot_Calidris_canutus_roselaari_migration_connectivity_abundance_and_non-breeding_distribution_along_the_Pacific_coast_of_the_Americas. Accessed Nov. 23, 2015. This species has the smallest of all Knot populations. Hernández-Alvarez, A., Carmona, R. & Arce, N. 2013. Feeding ecology of Red Knots Calidris canutus roselaari at Golfo de Santa Clara, Sonora, Mexico. Wader Study Group Bull. 120(3): 194–201. http://www.researchgate.net/publication/274868585_Feeding_ecology_of_Red_Knots_Calidris_canutus_roselaari_at_Golfo_de_Santa_Clara_Sonora_Mexico. Accessed November 23. 2015. The Red Knots migrate at the population level – that means an oil spill, whether before or during fall or spring migration, affecting the Red Knots could destroy the entire species. The DEISs shouldb e revised to recognize and analyze that information. Although the U.S. Fish and Wildlife Service declined to list this species that was petitioned for listing along with the eastern migratory rufa Red Knot (recently listed as threatened) based upon lack of information about its wintering location(s), it is well known to be a sensitive and declining shorebird species and its migration occurrence in the Grays Harbor estuary is being intensively monitored by biologists as the above referenced studies illustrate.

Other declining shorebirds in addition to the Red Knot that must be studied more closely by the revised DEISs include, but are not limited to: Black-bellied Plover, Semi-palmated Plover, Whimbrel, Ruddy Turnstone, Sanderling, Semi-palmated Sandpiper, Least Sandpiper, and Short-billed Dowitcher. Like the Red Knot, some of these species saw significant population losses in the late 19th and early 20th centuries due to hunting and, more recently, from habitat loss. These species are especially vulnerable to disastrous decline from oil spills and these impacts should have been disclosed in the DEISs. The revised DEISs must include these as “sensitive species” even if they are not currently federally listed in light of their current status, the severe threats to them from these projects and the Public Trust interest in their preservation for current and future generations. Impacts upon their essential migration habitat in both the Grays Harbor estuary and Willapa National Wildlife Refuge Complex must be disclosed.

The DEISs apparently arbitrarily limited the study areas for animals affected by construction and routine operation to the areas “on and near the project site that could be affected by construction and routine operations at the project site” and “animals that could be affected during routine rail transport along the Puget Sound & Pacific Railroad (PS&P) rail line and vessel transport through

Grays Harbor out to 3 nautical miles from the mouth of the harbor." (Section 3.5.1, Emphasis added.) Significantly, the Co-Leads completely failed to consider the cumulative impacts on the National Wildlife Refuges and their wildlife of routine operations in either Chapter 3 or 6 of the DEISs - important because the routine operation of the rail line, terminals and vessel route described by the Co-Leads would involve small, medium or large releases of oil and other contaminants that may singly harm fish and wildlife species or build up over time to cause harm, degrade species' food supply and destroy viable habitat. The DEISs conclude incorrectly that the likelihood of a spill occurrence is only moderately likely to likely, and the potential environmental impact is moderate to severe within the study area. As we noted earlier, it is not a matter of if a spill occurs, it is a matter of when and even how (that is, would it be accompanied by an explosion or fire caused by transporting and handling volatile Bakken crude). The DEISs then proceed to defy the logic of their own findings by determining that there would be no "unavoidable and significant adverse impacts" of the projects. Those determinations must be revised in the DEISs to reflect the full impacts of these projects.

The "mitigation measures" of Chapter 3 (repeated in Chapter 4.7 on p. 9) offered by Applicants for the proposed actions to reduce impacts on shorebirds are worthy of Johnathon Swift at his most ironic. They are preposterous.

3.5.7.1 Voluntary Measures and Design Features. The following voluntary measures and design features would reduce impacts on animals. To reduce the risk of spills affecting migratory birds during peak spring migration (typically 2 weeks), the applicant will coordinate with the City of Hoquiam to receive advance notice of the date for the annual Grays Harbor Shorebird Festival and will halt crude oil vessel-loading operations for a period of 2 weeks each year overlapping with the event.

That does not even attempt to protect the shorebirds; it may or may not protect the City of Hoquiam's financial interest in the Shorebird Festival. Birds such as the highly sensitive Red Knot do not even typically migrate through the area during the days of this Festival. Nor does this protect non-migratory shorebirds. The two weeks around the Festival do not include the fall migration period, also a "key" migration period (despite the implication to the contrary in section 4.7, p. 9). An oil spill may occur months, even years before the Festival and contaminate the estuary to the detriment and destruction of the many species of migratory and non-migratory shorebirds and the organisms upon which they feed. The Department of Ecology must and protect the wildlife, not the sensibilities of Festival goers or the City of Hoquiam's tourist economy for only two weeks of each year.

The DEISs are also inadequate because the Co-leads relied upon a paper review of limited information sources to determine the occurrence of state and federal species of conservation concern and the location of state and federal protected areas. Additional credible scientific literature should have been considered by the Co-leads and detailed baseline studies performed by independent biologists should have been performed concerning fish and wildlife species and impacts upon them. The studies should have included status determinations for fish and wildlife in Grays Harbor and in nearshore Pacific Ocean waters. The revised DEISs must include detailed, fine-scale spatial information including the delineation and GIS mapping of landuse, landcover, shoreline use, existing habitats, sensitive areas, species (marine and terrestrial plants, seaweeds, marine macroinvertebrates, marine and freshwater fish, and all wildlife) including species concentration areas and seasonal concentrations. A comprehensive scientific baseline study which includes field data collection over a minimum of a twelve month period must be included to document all species

presence, seasonal occurrence, habitat use, concentration areas, biological communities, and areas, species or communities of ecological significance. The ecological function and values of this area must be fully identified and described. Based upon such studies the Co-Leads must fully evaluate all impacts of construction and operation of the project on fish and wildlife including cumulative impacts of noise, lighting, loss of habitat, spills, release of harmful aquatic species and all other impacts.

Response GP346-4

The impacts of the proposed action have been addressed under the requirements of SEPA and associated regulations. Federal, state, and local statutes and regulations that may apply to the proposed action are summarized in each Draft EIS resource section. Refer to the Master Response for Purpose and Focus of the EIS and the Master Response for Geographic Scope of the EIS for additional information about the scope of the EIS.

The Important Bird Area program carries no regulatory authority and imposes no legal restrictions or management requirements on any property (public or private). However, the six Important Bird Areas have been added to Final EIS Section, 3.5 *Animals*, to note their significance in addition to the other important areas of Grays Harbor that are currently listed and described in the Draft EIS.

The commenter does not elaborate on what is meant by the "DEISs analyses must provide independent studies of the potential impacts on shorebirds dependent upon the health of the Grays Harbor estuary for their survival and the revised DEISs must disclose these impacts." The purpose of the Draft EIS is not to provide an extensive or exhaustive list of all species that could be affected by the proposed action. SEPA regulations for EIS content specifically state that "inventories of species should be avoided, although rare, threatened, or endangered species should be indicated" (WAC 197-11-440(6)(c)(i)). As such, there is an emphasis in the Draft EIS on identifying and focusing more on rare, threatened, or endangered species, which are listed in Draft EIS Appendix F, *Special-Status Species*, and described throughout Draft EIS Section 3.5, *Animals*. However, the Draft EIS still mentions many other non-special-status species and groups of species in Section 3.5, *Animals,* such as the red knot. Birds of Conservation Concern have been added to Final EIS Section 3.5 and Appendix F to address the commenter's concern with these species.

Chapter 3, *Affected Environment, Impacts, and Mitigation*, addresses potential impacts from construction and routine operation of the proposed action. Increased risk of incidents (e.g., storage tank failure, train derailments, vessel collisions) and potential consequences (e.g., release of crude oil) are addressed in Chapter 4, *Environmental Health and Safety.*

The analysis in Chapter 4 considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant.

Although ceasing vessel-loading operations for 2 weeks during the Grays Harbor Shorebird Festival would reduce risks related to oil spills that could affect migratory birds during this migratory season as well as other species in the area, the Final EIS clarifies that the applicant's primary intent in committing to this voluntary measure is to recognize the importance of the annual Grays Harbor

Shorebird Festival to the community and those attending the festival and to eliminate the chance of a spill from vessel-loading operations during this time. The measure has been moved to Final EIS Chapter 3, Section 3.10, *Recreation*, to reflect this clarification.

Conducting detailed baseline studies and status determinations in the study area would not change the conclusions of the Draft EIS because existing information sufficiently describes the affected environment for an EIS-level analysis.

Comment GP346-5

Chapter 3's statement of the No Action Alternative for animals is flawed. Section 3.5.5.1 makes the astounding statement that no analysis is needed of a No Action alternative because although the proposed action would not occur "it is assumed that increased growth in the region would continue under the no-action alternative, which could lead to development of another industrial use at the project site within the 20-year analysis period (2017-2037). Such development could result in impacts similar to those described for the proposed action." The Department of Ecology has long maintained that it is not required to consider future actions or events that are "speculative." How is it then that the DEIS can found its No Action Alternative upon fuzzy mere speculation, and an "if the applicant doesn't do it, someone else will" argument? It is unreasonable for the Co-Leads to assume that another industrial project at the site would result in the handling of volatile Bakken or other crude oil that could lead to oil spills, fires explosions etc. What information/evidence supports this conclusion? Is there a plan, report, application? And why would that plan not be subject to the same legal requirements that the DEISs assume away today? This problem is perpetuated in Chapter 5, concerning the "extended area". 5.5.1.1: "Under the no-action alternative potential impacts from increased rail traffic could occur."

Response GP346-5

The analysis of the no-action alternative does not assume that a future development similar to the proposed action would occur at the project site. Refer to the Master Response for Baseline and No-Action Alternative.

Comment GP346-6

Additionally, the DEISs analyses considered impacts over a 20-year period (2017 to 2037) to account for future growth and development." The Co-Leads must consider impacts of the projects over the life of the projects, not over an arbitrary time period. A legitimate "No Action Alternative" must be prepared for the revised DEISs that would be simply that the projects are not constructed and Applicants would continue to operate their existing facilities.

Response GP346-6

As noted in Final EIS Chapter 3, Section 3.0, *Introduction*, the EIS analyzes the impacts that could occur over the lifetime of the proposed facilities. Potential impacts were quantitatively evaluated in 2017—the anticipated first year of operation—and 2037 to account for future growth and development. This approach provides context to decision-makers about how the impacts of operations would evolve over a reasonably foreseeable period. This is particularly relevant for transportation- and risk-related impacts that can evolve over time because of reasonably foreseeable growth, planned infrastructure changes, and phased regulatory requirements for

improved transportation efficiency and safety. Refer to the Master Response for Baseline and No-Action Alternative.

Comment GP346-7

Chapter 4 of the DEISs concerns the impacts of small, medium and large oil spills as well as fires and explosions in the arbitrarily limited study area. Chapter 4 of the DEISs determines rail transportation of oil could result in "[a] large oil spill or explosion [that] would likely cause unavoidable and significant adverse environmental impacts having large consequences to the environment." Also with regard to a vessel accident: "[a] large oil spill or explosion would likely cause unavoidable and significant adverse environmental impacts. … the likelihood of a large spill or related explosion is low; however, the potential for significant consequences to the environment and human health in the case of a large spill or explosion is high." Section 4.6.4. As described in Chapter 4.7, the impacts of explosions and oil spills on resources within the DEISs limited "study area," including shorebirds and other wildlife and the ecosystems upon which they depend would be devastating and cannot be mitigated. The section fails to discuss impacts of repeated small and medium spills on the components of the natural environment, and Chapter 6 fails to discuss the cumulative impacts of these. The revised DEISs must include a full independent analysis of impacts of small and medium spills. It is likely these could be devastating and could be fully mitigated especially given the characteristics of the crude oil products.

Gambling with Public Safety and the Environment

Chapter 4.7 of the DEISs suggests a willingness to gamble with oil by rail and vessel disasters. The chapter repeats with respect to each component of Environmental Health and Safety discussed: "However, no mitigation measures can be implemented that will completely eliminate the possibility of a large spill, fire, or explosion, nor are there any mitigation measures that will completely eliminate the adverse consequences of a large spill, fire, or explosion (Emphasis added). " Yet significantly they go no further to recommend the no action alternative and denial of the permits. Are the Co-Leads suggesting that the permits can still be issued in this circumstance and that a roll of the dice is acceptable when people's lives, the natural environment and economies are at stake? Is there an unwritten percentage of mitigation, that is less than full or complete mitigation, that the Co-Leads find acceptable but are presently keeping from the public? The public cannot evaluate or comment on an unwritten plan. The failure to disclose information results in a fundamentally unfair public process. It only takes one oil spill to cause long-term or permanent impairment of sensitive environments, one explosion to kill people and one fire to destroy property. Any one of these events can destroy local economies and in turn, create havoc for the state's economy. Well documented oil by rail accidents have had these impacts. It is well known that vessel accidents would also devastate the environment: in 1988, one year before the Exxon Valdez, the Nestucca barge 231,000-gallon spill of heavy oil off Grays Harbor fouled beaches from Oregon to Vancouver Island and killed 56,000 sea birds. In light of the dire consequences of a rail or vessel accident the revised DEISs must recommend a no action alternative and denial of the permits.

Artificial Division of Areas Discussed in DEISs

We are troubled by the artificial and inexplicable division in the DEISs between the "study area"(some 59 miles along the rail route to the project and vessel route from the project) and the "extended area." By treating these separately, the Co-Leads have failed to disclose and analyze in adequate detail the unique risks and consequences of rail accidents for communities, waterways and

landscapes along the "extended area" rail and vessel routes. Also significantly as a result of this artificial division on areas impacted, the DEISs fail to recognize and disclose significant adverse impacts to National Wildlife Refuges and other important fish and wildlife areas for the extended area. Chapter 5 of the DEISs concludes that the impacts along the BNSF rail line would be "similar" to that along the PS&P rail line and "roughly proportional to the incremental increase in traffic under the proposed action." Similar reasoning is applied to vessel traffic impacts in an extended vessel area. It is unreasonable to assume that, for example, the impacts of a train derailment and explosion on a small community along the Columbia Gorge that is right beside the railroad line would be the same as impacts on an area near the PS&P rail line and that impacts from such an event that involved an oil spill into the Columbia River and its fish and wildlife species would be the same as an oil spill in Grays Harbor. The Columbia Gorge area in particular is very unique and even wind conditions there vis a vis the impact of emissions from trains on air quality and water quality should have been specifically analyzed in the DEISs. Chapter 5 is also apparently based primarily upon a review of state-created studies and a reprise of information contained in them. This is insufficient. Real studies of probable significant adverse impacts on real communities and natural resources must be conducted upon which to base EISs.

Response GP346-7

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion. The Final EIS has been revised to further clarify the relative risks related to the proposed action in the study area and the extended study area. For more information about the analysis of risks in the extended study area, refer to the Master Response for Geographic Scope of the EIS.

Comment GP346-8

Cumulative:" the Opposite of "Incremental"

Section 5.6 of the DEISs apparently abolishes the cumulative impacts analysis requirement from SEPA for the Extended Area. It provides: "The increase in rail and vessel traffic in the extended study area from the proposed action is small relative to the existing and anticipated future traffic that will occur without the projects." … "Therefore, no mitigation is proposed in the extended study area." Jaws drop to behold cumulative impact equated to its diametrical opposite, incremental impact.

Moreover, it is difficult to reconcile the meaning and intent of this section with the one that follows, section 5.7, which correctly states that the consequences of rail and vessel accidents cannot be mitigated. SEPA does not allow the Co-Leads to consider a project's size and effect in relation to other projects. A cumulative impacts analysis demands that the increase in rail and vessel traffic be considered in conjunction with all existing and reasonably foreseeable future rail and vessel traffic

(the latter must include all planned future crude oil and coal transportation projects in the extended area). Chapter 6 of the DEISs compounds the problem and creates an additional one: it writes consideration of fish and wildlife impacts and impacts on the National Wildlife Refuges along the rail route out of SEPA (see list in section 6.5.8.1). Section 6.5.8.2 ignores vessel cumulative impacts in the Extended Area and fails to consider vessel traffic impacts on National Wildlife Refuges. The revised DEISs must correctly apply SEPA's indirect and cumulative impacts provisions in the Extended Area and to the Refuges. While the approach taken by the Co-Leads may have eased the burden of writing about these impacts, SEPA does not allow conclusions to be based upon analogies and ill-defined proportionalities.

Additionally, the DEISs fail to consider the projects' cumulative effects on climate change. These new fossil fuel projects would have significant cumulative impacts on greenhouse gases in the atmosphere that would result in rising sea levels (this would particularly impact shorebirds) and ocean acidification (this would particularly affect shellfish and other fisheries in Washington State). The revised DEISs must evaluate the cumulative emissions of greenhouse gases into the atmosphere not only from rail and vessel transportation and at the terminal sites but from the oil extraction sites both in the U.S. and Canada to the final refining and use end-point over the life of each project.

Response GP346-8

For the reasons discussed in the Master Response for Geographic Scope of the EIS, the impacts in the extended study area are addressed qualitatively. Chapter 5, *Extended Rail and Vessel Transport*, and Chapter 6, *Cumulative Impacts*, acknowledge that the proposed action could increase the likelihood of rail and vessel incidents involving an oil spill, fire, or explosion, both individually and cumulatively, in the extended study area. However, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions or the no-action alternative, and as described in Final EIS Chapter 4, Section 4.7, *Impacts on Resources*.

Final EIS Section 4.7 has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Final EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, have been updated to include estimated emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

Comment GP346-9

DEISs Ignore Significant Economic Impacts

The National Wildlife Refuges provide significant support for local economies. Large numbers of tourists visit the San Juan Islands, the Columbia River, and the coast of Washington State each year because of their natural beauty and abundance of wildlife. In 2014 alone, Washington residents took

an estimated 4.1 million trips to their state's coast, making an estimated $481 million in direct trip expenditures. 35.6% of these 4.1 million trips were taken to Grays Harbor County as this area is a major hub of coastal and ocean recreation. Each spring, the Grays Harbor Shorebird Festival attracts visitors, including ourselves, from around the world to view and photograph the astounding numbers of migrating shorebirds at the Grays Harbor National Wildlife Refuge and around the estuary. Grays Harbor is well-known as one of the top destinations nationwide to view birds. In addition to wildlife observation and fishing, the Refuges provide other recreational opportunities such as hunting, boating, and hiking. Local businesses depend on the income from the many visitors to these areas. Economic Division of the U.S. Department of Interior entitled Banking on Nature: The Economic Benefits to Local Communities of National Wildlife Refuge Visitation. October 2013. http://www.doi.gov/news/loader.cfm?csModule=security/getfile&pageid=380921. These economic benefits would be lost, likely permanently, if an oil spill or other disaster occurred on the way to, at or from the Westway or Imperium terminals. The revised DEISs must recognize and analyze the probable significant adverse indirect and cumulative impacts on local economies from an accident that would harm one or more of the National Wildlife Refuges along the rail or shipping route.

Conclusion

The impacts we have raised in these comments cannot or would not be mitigated, or mitigation would be ineffective to prevent or remediate significant environmental harm. The DEISs themselves acknowledge repeatedly that a number of significant adverse impacts cannot be fully mitigated. The permitting agencies must fulfill their fiduciary obligations under the common law Public Trust Doctrine to protect the environment against substantial impairment that would result from these projects. Particularly in light of that Doctrine, unless these direct, indirect and cumulative impacts, singly and in combination, would be fully mitigated, the revised DEISs must recommend, as we do, selection of a no action alternative and denial of permits for the proposed Westway and Imperium oil terminals.

Finally, we agree with many others who are submitting comments on the DEISs that there are better, safer and more reliable ways to meet our future energy needs than these two highly risky and unquestionably dangerous projects. Washington State is rapidly moving away from fossil fuels and towards clean, renewable sources to meet our energy needs and respond to global warming. Building more large infrastructure for yesterday's energy is the wrong path to meet today's energy needs. Approval of these projects would be a significant economic and environmental gamble for Grays Harbor. We strongly urge you not to gamble with the safety, health, and environmental and economic well-being of our state's citizens and its unique natural resources. Instead, we ask that you fulfill your duties as trustees of the Public Trust and protect our state and its natural resources, including the atmosphere, for the present and future generations, by denying these permits.

Sincerely,

Phillip and Mary Ruth Holder
201 S. 7th St.
Mount Vernon, WA 98274

Response GP346-9

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 to reduce

the likelihood of a spill reaching the environment and the potential impacts if an incident occurs at the terminal, along the PS&P rail line, or within Grays Harbor, respectively. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion.

Final EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* reflects additional information on the economic and social costs of oil spills. This includes information on accidents and spills, and information on crude oil spill during marine transport. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP347, **Holm, Patricia (Confronting the Climate Crisis)**

Comment GP347-1

These terminals should not be expanded. The risk will mostly be born by the public and current businesses associated with the environment, like fishing, shell fish industries, recreation.

The draft statement does not say any of the risks can be fully remediated. The draft does not address the fact that there are no insurance companies that will insure the impacts created by a spill to Washington State waters or lands. An oil spill from a train could kill (incinerate many people, as one has in Canada has). Spills can only be retrieved at low percentages of the oil spilled. The costs of explosions and spills are huge, in the billions of dollars. Our State cannot pay for this, we can't even pay the proper costs of education of our children at this time. The profits will be going to the oil companies not the people. A few jobs may be offered, but the many jobs lost do not make up the difference.

Response GP347-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that

would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP347-2

The draft addresses trying to slow down trains near towns. What about the people living in rural areas? Should their lives be counted as less? No, we do not want these trains slowing down emergency vehicles, wherever they are. We do not want the risks to any people living near the tracks.

Response GP347-2

As stated in Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, rail traffic is subject to various regulatory requirements including allowable speed limits. The PS&P tracks are registered as Class 2 tracks with an overall maximum speed of 25 miles per hour for freight trains; however, the speed limit is lower in many portions of the track. Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport*, presents the analysis of risk of oil spills, fires, and explosions during rail transport related to the proposed action. Draft EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, considers impacts on emergency vehicle access.

Comment GP347-3

We live in an earthquake/tusami zone. We already have many risks in our lives. We do not need more. The draft states the risks are small, even a small risk is too much.

Response GP347-3

Comment acknowledged.

Comment GP347-4

We cannot mitigate the costs of the climate being filled with even more carbon. Wherever it is burned, it will affect us here in Washington. We share one breathable climate, one earth. Let's protect it by investing more in wind and solar power. These terminals that are planned to be built will be there for many years, we do not have many years to transition to other fuels. Already we are experiencing historic droughts, numerous forest fires, flooding. This is costing our State a lot of money. Its our taxes that are paying for these 'natural disasters' caused by climate change and our poor agricultural practices and the continued burning of fossil fuels. We do not need to add more carbon to our world by allowing these terminals to be built. There is no mitigation for all of these concerns. Stop the terminals from being built. The risks are too great for all of us.

Response GP347-4

Comment acknowledged.

GP348, **Holz, Thomas**

Comment GP348-1

Enabling the continued burning of fossil fuel has no trivial consequences. If we do not end this practice of supporting human development, we are destroying earth's capacity to sustain us. Please do not allow these projects.

Response GP348-1

Comment acknowledged.

GP349, **Howe, David**

Comment GP349-1

Increasing the capacity to store and transport oil is not in the best interests of the planet. The planet will be more hospitable to humans and other creatures if we emphasize sequestering more fossil fuel rather than storing and transporting more fossil fuel to expedite the burning of fossil fuel.

Response GP349-1

Comment acknowledged.

GP350, **Hughes, Nelson**

Comment GP350-1

My name is Nelson Hughes. Me and my friend, Brian, we came here from Portland, Oregon. I don't know much about Aberdeen. I do know simple things. A large portion of your economy is based on fisheries, over 50 percent of you I believe. And these people are hard working people.

The amount of jobs that are going to be created for this project, I really don't think is that substantial. And I think most of you agree with me deep down in your hearts. And like the harbor people who work in the fishing industry, it's going to take tough solutions to come up to the right solution. So I encourage you to think and work together and come up with the right solution.

Thank you.

Response GP350-1

Comment acknowledged.

GP351, **Humphrey, John**

Comment GP351-1

Just stop. Stop ravaging the natural environment for corporate gain. At least find a location that has already be decimated for the same purpose. Make a stand and say no more. Be a part of the solution. You must find this continued destruction of our delicate and beautiful eco-system a little repulsive,

right? Pay no mind to the wildlife, pay no mind to the loss of wilderness, pay no mind to our children and grandchildren. Really? Just say no. Become part of a better solution.

Response GP351-1

Comment acknowledged.

GP352, **Hunter, Rhonda**

Comment GP352-1

My Comments are attached along with 2 photos. Please deny the permits for Westway and Imperium Expansion Projects, at least in part based on my attached comments.

WESTWAY & IMPERIUM EXPANSION PROJECTS – DEIS COMMENTS: Rhonda Hunter

Today, Nov. 30, as I write this, Heads of State from about 120 countries are gathered in Paris to forge a global agreement to slow climate change and our fossil fuel emissions causing it. 100's of 1,000's of people around the world in 175 countries are marching to demand action to slow climate change, including leaving fossil fuels in the ground. Current fossil fuel reserves amount to more than 5 TIMES the amount we can safely burn and still keep a livable climate.

These 2 proposals (Westway & Imperium) will clearly lead to more greenhouse gas emissions when the resulting oil is burned and SEPA requires those emissions to be taken into account in the EIS. Exporting and burning more fossil fuels / oil is the exact opposite of the direction we need to move, which is toward clean renewable energy.

In the green Pacific Northwest, we cannot allow massive fossil fuel export rail and shipping terminals to hasten climate disaster, just so a few extremely rich corporations can make even more obscene profits, while the deep risks are borne by the rest of us. (You know they are lobbying Congress to clear the path for oil exports, and allowing Westway & Imperium will only encourage Big Oil to try harder to export oil.)

[Photos reviewed but not reproduced.]

Response GP352-1

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively.

Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources and the likely destinations of crude oil shipped through the proposed facilities.

Comment GP352-2

But we/you are in luck!! Because the Westway & Imperium DEIS's clearly lay out grounds for refusal of these projects!

I will not even try to outline all the additional reasons why these proposals should be denied, but here are a few key points:

Risk of Spills & Explosions

On the RISK 'slide-bar' graphic of small to large Spills, the likelihood of incidents or Fire/Explosion ranges from '*somewhat likely*' to '*highly likely*'. But whatever the likelihood, the Potential Environmental Impacts range almost exclusively in the ***Extremely Severe*** category. This risk is too great. Say No.

These mile-long oil trains rumble down river valleys and alongside major congested freeways, through communities, residential neighborhoods, past schools, shopping centers and business districts. There is no protection from risk of spill or explosion and we have already seen those happen across the US & Canada, even with the new double-shell oil tanker cars (apparntly when it gets colder). Our railroad tracks are not in stable shape to safely take this additional heavy rail traffic. Please say No.

Even the DEIS offers only this totally inadequate response to reducing the impacts of spills, fires or explosions at the terminals themselves in Grays Harbor: "Study" how to …., "Identify"…financial responsibility for spill contingency plans, "contact the tribes" in case of spills, "Train" responders in a ONE DAY workshop, every year. For the trains themselves, the response is equally inadequate…it's all after the fact. Not prevention, only 'training' for spills which are assumed to happen.

And how do they propose to reduce risks or impacts of fire & explosion? With pitifully inadequate responses that have never fully prevented these incidents before. And they can't be serious that a 'foam truck' in Elma is the answer for fighting a full explosion on oil trains….Even advanced fire fighters can't get close enough to manage that disaster. They can only stand at a distance and watch it burn (after people have died). First Responders personally told me this last winter during testimony at the Legislature on the proposed oil train safety rules.

SO IF THEY CAN'T SIGNIFICANTLY REDUCE OR MITIGATE THIS RISK, THE PROPOSALS SHOULD BE DENIED.

Oil Spills Cannot be Cleaned Up

I was a young marine biology student at the Santa Barbara Oil Spill in 1969 and saw disaster first-hand. Cleanup after inevitable spills historically looks like this:

Exxon Valdez: This tanker spilled 25 years ago in Alaska and Prince William Sound has still not fully recovered. Despite the extensive cleanup attempts, less than ten percent of the oil was recovered and a study conducted by NOAA determined that as of early 2007 more than 26 thousand U.S. gallons (98 m3) of oil remain in the sandy soil of the contaminated shoreline, declining at a rate of less than 4% per year. In 2003, fifteen years after the spill, a team from the University of North Carolina found that the remaining oil was lasting far longer than anticipated, declaring that tidal shoreline habitats will take an estimated 30 more years to recover. Some of the oil does not appear to have biodegraded at all. A USGS scientist who analyses the remaining oil along the coastline states that it remains among rocks and between tide marks. "The oil mixes with seawater and forms an emulsion...Left out, the surface crusts over but the inside still has the consistency of mayonnaise".

Deep Water Horizon: This well blew out in 2010 and BP couldn't clean up that disaster. Now Gulf Coast estuaries and fisheries are still polluted. In 2013, researchers found that oil on the bottom of the seafloor did not seem to be degrading, and observed a phenomenon called a "dirty blizzard": oil in the water column began clumping around suspended sediments, and falling to the ocean floor in an "underwater rain of oily particles." The result could have long-term effects because oil could

remain in the food chain for generations. A 2015 study by the National Oceanic and Atmospheric Administration, published in PLOS ONE, links the sharp increase in dolphin deaths to the Deepwater Horizon oil spill. Or course, there is much more damage all along the Gulf Coast than I can relate here. We do not want a disaster like this along our own valuable Northwest shores and marine environments.

Response GP352-2

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur result from an oil spill, fire, or explosion.

Comment GP352-3

SO SINCE OIL SPILLS CANNOT BE CLEANED UP & ARE LONG-LASTING AND DEVASTATING TO MARINE (AND RIVER) ECOSYSTEMS (AND THE LOCAL ECONOMIES DEPENDANT ON THEM), THESE 2 PROPOSALS FOR HIGH VOLUME OIL TRAFFIC SHOULD BE DENIED.

Response GP352-3

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP352-4

Local Economy at Risk

Local folks in Grays Harbor (and along the Columbia River and Chehalis River) rely on fish, shellfish, Bowerman Basin Shorebirds and the draw of eco-tourism for their economy. All of that is put at high risk if these 2 proposals are permitted. This DEIS should be extended to cover ALL the communities at risk from mile-long oil trains entering our state in Spokane and traveling down our river valleys and through our communities. Because the risks are not limited to Grays Harbor, but borne by people and ecosystems all along the route to Grays Harbor.

And who benefits? Basically just wealthy oil companies which will quickly spin off shell companies to go bankrupt before paying full amounts for cleanup, which cannot be fully accomplished anyway. There is no insurance to cover this level of risk. WE taxpayers assume the financial risk, not the oil companies.

THERE IS NO INSURANCE OR MITIGATION AGAINST THIS RISK. SO THE PROPOSALS SHOULD BE DENIED.

Response GP352-4

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, and Chapter 6, *Cumulative Impacts*, address potential impacts in the extended study area, including the potential for increased risks, individually and cumulatively, respectively. The analysis of impacts in the extended study area is qualitative for the reasons discussed in the Master Response for Geographic Scope of the EIS. Final EIS Chapters 5 and 6, *Cumulative Impacts*, have been revised to clarify the potential impacts in the extended study area. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP352-5

Greater Volume = Greater Risk

If these projects were to be approved, there are no restraints on the volume of oil moved by rail or stored for marine tanker export. So as the volume inevitably rises, so does the risk. That is not addressed in this DEIS, so the risks (while dire) are actually under-represented in the DEIS. Historically, once corporations have a foot in the door, they expand oil facilities, (which is what our own Port of Vancouver found out in a leaked corporate memo stating that exact intention.)

SINCE THE RISKS ARE LIKELY TO BE EVEN GREATER THAN THIS DEIS STATES, WITH MORE OIL MOVED THROUGH THESE FACILITIES, THE PROJECTS SHOULD BE DENIED.

Response GP352-5

As noted in the Master Response for Project Objectives and Alternatives, the proposed action is a private project and the objectives and proposal are defined by the applicant. Draft EIS Chapter 2, *Proposed Action and Alternatives*, describes the type of material and approximate volumes to be transported based on this information. The City of Hoquiam will specify maximum throughput in the conditions of a shoreline development permit. In addition, other permit approvals could identify the maximum allowable (permitted) throughput of the facility. Any increase in annual throughput capacity would require revised or new permits or plans.

Comment GP352-6

Oil Train Threats to My Own Home and Life

Lastly, on a much more personal note, my home is on 3+ acres bordering a railroad track that I thought was outside the zone for these oil trains. After all, the direct routes don't include my tracks. So imagine my horror when I found these oil train cars sidetracked near my home, after traveling down my own track. Because I AM in the ½ mile blast / kill zone, should one of these derail and explode. I have personally heard fatal derailments at the crossing right behind my own home.

I am attaching photos so you can see that in addition to our homes, there is the I-5 overpass (a key state economic arterial) at one end of the oil cars, and a propane tank farm at the other. This sidetrack is at Exit 95, on I-5.

So, overall, to the decision-makers in City of Hoquiam, Department of Ecology, and hopefully ultimately Governor Jay Inslee, PLEASE DENY THE PERMITS FOR THESE ILL-CONSIDERED AND EXTREMELY HIGH RISK PROPOSALS OF WESTWAY & IMPERIUM EXPANSION PROJECTS.

Thank you for taking these comments seriously and acting on them.

Rhonda Hunter
4425 140th Ave SW
Rochester, WA 985779 current

See original attachments for photos [Photos reviewed but not reproduced.]

Response GP352-6

Comment acknowledged.

GP353, **Hunter, Rhonda**

Comment GP353-1

PLEASE REJECT BOTH IMPERIUM AND WESTWAY PROPOSALS, BASED ON THE UNMITIGATED RISKS THEY POSE TO OUR PEOPLE AND ENVIRONMENT, WHICH YOUR MISSION REQUIRES YOU TO PROTECT. AS A WOMAN OF FAITH, I URGE YOU TO FOLLOW THE MORAL COMPASS THAT POINTS THE WAY TO PROTECTING, NOT DESTROYING LIFE ALONG OUR WATERWAYS AND RAILWAYS, ESPECIALLY FROM INEVITABLE SPILLS & EXPLOSIONS. EVEN THE NEW DOUBLE-SHELLED TANKER RAIL CARS HAVE REPEATEDLY EXPLODED WHEN DERAILED ACROSS THE U.S. & CANADA,…SOMETIMES IN POPULATED AREAS – RESULTING IN DEATH OF INNOCENT PEOPLE. WHERE ARE WE WILLING TO PUT INNOCENT PEOPLE AT RISK? ON RAILWAYS RUNNING NEAR SCHOOLS, FREEWAYS, NEIGHBORHOODS? PLEASE DO NOT ALLOW BIG OIL $$ TO DICTATE OUR FUTURE. PLEASE STAND ON THE COURAGE OF YOUR CONVICTIONS AND REJECT THE PROPOSALS FOR IMPERIUM AND WESTWAY.

Response GP353-1

Comment acknowledged.

GP354, **Hunter, Rhonda**

Comment GP354-1

Hello, my name is Rhonda Hunter. I'm a ecosystems biologist. My own property borders the railroad tracks within a blast zone, kill zone. I was in Santa Barbara in 1969 when an offshore oil rig blew out and covered the beaches deep in raw crude oil. All the marine life I was studying was killed with thick, stinky crude.

Later I helped conduct research on Grays Harbor shorebirds here, which Bowerman Basin is a major shorebird feeding area. They fly from Central and South America, stop in San Francisco, and then

here, on their way to Alaska breeding areas. The Shorebird Festival is now an economic benefit for this area.

Spills will happen if these two projects are allowed to move forward. A spill will destroy shorebird habitat, and shellfish, and other life. Please deny both these permits. Beyond the environment and wildlife, people are susceptible to the direct danger of exploding oil trains running along through these neighborhoods like mine, past homes, schools, shopping centers.

These uninsurable risks fall on us, the citizens, while profits go into corporations far away. Oil explosions and fires are preventible disasters only if you deny these permits.

Lastly we don't want to be polluted like Texas and Louisiana-type oil export terminals. We need to make the change to clean energy, with wind or solar. We need to move away from climate destroying oil and move to clean energy. Please deny these two permits. They're too dangerous.

Response GP354-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP355, **Inskeep, Terry**

Comment GP355-1

My comments relate to both the Westway and Imperium Draft EISs.

Bad, no make that terrible, idea to have a terminal in Washington State at all, but especially in Grays Harbor which would be at high risk for an oil spill. Grays Harbor sits in a major earthquake and tsunami zone. Not only would an oil spill have an impact on marine resource jobs which support more than 30% of Gray Harbors workforce. Do not destroy yet another beautiful place.

Response GP355-1

Comment acknowledged.

GP356, **Isaacson, Tom**

Comment GP356-1

if the railroad system passes the all the safety requirements & the piping & tank farms also pass the requirements...than oil by rail is okay.

Response GP356-1

Comment acknowledged.

GP357, **Jackson, Aria**

Comment GP357-1

I oppose oil-by-rail because of the danger it poses to the environment and public health. The potentially explosive Bakken crude-oil trains serviced by these terminals would travel through, and directly threaten, the Columbia River Gorge National Scenic Area, a place I hold dear and which is very near my home in Portland.

Response GP357-1

Comment acknowledged.

GP358, **Jacobson, Don**

Comment GP358-1

There is no safe way to transport the highly explosive Bakken crude-oil through the Columbia River Gorge. An accident would be catastrophic to the Gorge ecosystem. The oil trains must not travel through the Columbia River Gorge.

Response GP358-1

Comment acknowledged.

GP359, **Jaeger, Michael**

Comment GP359-1

Please be sure to consider and quantify the potential risks and costs of recovery/remuneration should a train accident occur between the oil source and these Grays Harbor destinations.

Response GP359-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP360, **Jamison, Robert**

Comment GP360-1

Leave the resources alone. Do not use the world's diminishing resources for a few people to profit. They have all the money that they could ever need and only want more. They care not one bit for the World they live in. Profit and power is all they want.

Response GP360-1

Comment acknowledged.

GP361, **Johnson, Ali**

Comment GP361-1

My name is Ali Johnson. I am from Olympia, Washington, and I strongly oppose Westway and Imperium terminal. Section 5.7 in Westway DEIS states the impact of oil spills cannot be fully mitigated and that potential significant adverse impacts on environmental and human health in case of an incident happening.

I believe those impacts are not valid enough in the DEIS and that there can be much more exploration to this. This could mean the loss of jobs and even life. And are these risks that these companies are willing to take?

A spill here on the coast would really devastate the fishing industry, commercial, tribal, recreational, and fisheries. And this is unfair for everyone. My father is a fourth generation fisherman in Westport. This is my family heritage with many other people that live in this county.

Because of these abundant and natural resources, my family can support itself. I can go to college, and I can further my education, and now I can give back to my state and my community. It's a chain reaction. One gives people chances and opportunities. I urge you to think of your children and grandchildren's future.

What quality of life do you want to leave them with? Do you want to leave them with water full of life and opportunity? Or leave them with water that is dead and contaminated. Because the impacts

cannot be fully mitigated. I urge you to deny these permits to Westway and Imperium in the name of our environment.

Thank you.

Response GP361-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion. Final EIS Seciton 4.7 has been revised to more fully describe potential impacts on fishing industries.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP362, **Johnson, Marjorie**

Comment GP362-1

Can you imagine what an oil spill (which is inevitable in time) will do to our dams that make our electricity for the Pacific Northwest!? This is just one of my concerns. Others are polluting the river in such a way it might be years before the fish could be used. The birds and other wildlife in the Gorge are crucial in keeping the Scenic Gorge intact for future generations.

Lots of people depend upon the river and it would be a huge economic risk and loss when an accident needless to say the noise, and time frames for the tains to pass through our small towns. The delays would cause stress on the residents and business establishments. Please do not proceed with this dangerous venture. It does not belong in our Oreon/Washington Scenic Gorge. Public Citizen from Hillsboro, Oregon

Response GP362-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

GP363, **Johnson, Mary K.**

Comment GP363-1

Name: Mary K. Johnson
Organization: Corona Communications
City/ State/ Zip: Olympia, WA 98502

From an area of research I was able to do in one hour about oil spills and emergency planning, I have learned that the planning involves preparing first responders by training them to deal with the toxic cargo being transported by rail.

But what about the cost of the on-going damage? Already an emergency has happened, what [illegible] to WA people [illegible] when an a spill or an explosion? How many Dr's, nurses, burn specialists, lab technicians, therapists, or oncologists would it take to treat & heal any victims? How much insurance coverage would they involve? There is so much more to turn, this is one piece. This permit must be denied.

Response GP363-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP364, **Johnston, Robert**

Comment GP364-1

Johnston & Oulman, Re. DEISs for Westway and Imperium Expansion Projects 11/29/15

To: Westway and Imperium Terminal Services Expansion Projects EISs
c/o ICF International
710 Second Ave., Suite 550
Seattle, WA 98104

From: Robert M. Johnston & Lynne Oulman
816 14th Street
Bellingham, WA 98225

Re: DEISs for Westway and Imperium Oil Terminal Proposals

Dear Washington Department of Ecology and City of Hoquiam:

The DEISs for Westway and Imperium oil terminal proposals must be substantially revised to fully disclose the risks of oil spills, train accidents, increased train and oil tanker traffic, air pollution, noise, harmful impacts on tribal culture and resources, vehicle delay at railroad crossings, and negative impacts on the Columbia River Gorge National Scenic Area. In reality, it is highly likely that the indirect and cumulative environmental impacts would be significant and impossible to mitigate.

Response GP364-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

Comment GP364-2

The DEISs should be expanded to comprise a full and comprehensive environmental impact statement. They should also be evaluated in light of the Magnuson Amendment, which restricts shipment of crude oil along Washington's shores. This federal law was ignored by the US Army Corps of Engineers in the case of the BP North Wing Pier at Cherry Point, WA. We should not let this happen again.

Response GP364-2

The proposed action would not require federal permits; therefore, it is not subject to the Magnuson Amendment.

Comment GP364-3

The impact of increased rail and ship transport of crude oil through the State of Washington, must be considered in the context of the potential cumulative effect of the multiple, similar projects through out the region. Responsible decision-making requires putting all the evidence on the table, so as to be able to understand the consequences a single action may have when combined with other, similar actions under consideration. To decide on initiatives such as Westway and Imperium in isolation, separate from other, similar initiatives in the region, is just plain bad decision making.

Response GP364-3

Refer to the Master Response for Connected or Similar Actions.

Comment GP364-4

There are so many factors that point toward the potential for major, significant impacts from transporting dramatically increasing amounts of crude oil through the state by rail and ship. Even the most casual observer of national, regional and local news media can point to many of them. Railway tank cars in use today are obsolete and unsafe, especially when it comes to transporting Bakkan crude oil. The emergency response capability of both industry and public entities along rail routes is seriously below what it needs to be to assure public safety. This combined with an as-yet-undermined, but arguably dramatic, increase in rail transport of crude oil statewide, points toward significant increased risk of a major disaster.

Response GP364-4

Refer to Response to Comment GP364-1.

Comment GP364-5

A comprehensive evaluation of environmental impacts statewide should also be included. An increase in rail and marine vessel transport of crude oil will increase the risk of oil spills. Train routes follow along waterways, and oil tankers travel though already busy coastal waterways. Both the state's rivers and its marine areas are home to dozens of state and federally designated endangered and threatened species. Crude oil contains many substances known to be toxic to living organisms. Without calculating the risk of potential harm from oil spills due to increased rail and vessel traffic, both to humans and to other living creatures, no responsible decision can be made as to the environmental impact of proposals like these. And such decisions must be made in the context of the potential, comprehensive impact of all such projects in the foreseeable future.

In addition, the DEISs have failed to substantively address the concerns raised by many environmental groups and individuals, in particular the specific concerns related to the Columbia River Gorge National Scenic Area. This is inconsistent with the scenic area act, and it is illegal under the State Environmental Policy Act to ignore these impacts.

Some specific examples of this include:

- The DEISs fail to analyze the indirect project impacts to grade crossings in the Gorge, the extent that the increase in oil trains would impact the level of service for local traffic, and any necessary mitigation measures, such as new overpasses.

Response GP364-5

Refer to Response to Comment GP364-1.

Comment GP364-6

- The DEISs fail to analyze the cumulative impacts to grade crossings from the proposal and other oil and coal export proposals, the likely need to construct additional sidings, overpasses, and second tracks, and the need for additional emergency response capacity along the entire rail route.

Response GP364-6

Draft EIS Chapter 6, Section 6.5.5.2, *Cumulative Impacts*, describes cumulative vehicle delay impacts at grade crossings in the study area. Regarding rail capacity, as described in Section 6.5.4.2, *Cumulative Impacts*, the addition of approximately 4.25 cumulative rail trips per day between Centralia and the project site can be accommodated without capacity improvements to the existing rail line. Regarding emergency response, refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment GP364-7

- The DEISs fail to list the Columbia River Gorge National Scenic Area Act and Management Plan as an applicable regulation, despite the fact that the cumulative impact of additional oil train traffic would require new construction in the National Scenic Area.

Response GP364-7

The proposed action does not involve construction in the Columbia River Gorge National Scenic Area.

Comment GP364-8

- The DEISs fail to disclose the actual risk of an oil spill or explosive accident in the Gorge. The DEISs provided analysis of the risk of a spill or explosion near the facility where maximum speeds are limited to 25 mph. The DEISs completely fail to disclose the risk of spills and explosions in the Gorge, where the maximum speed is 50 mph for unit trains of oil and 60 mph for mixed-commodity trains with up to 34 oil tank cars dispersed throughout the entire train.
- The DEISs fail to analyze the likelihood of a spill in the Columbia River along hundreds of miles of the BNSF rail line.
- Along with failing to analyze the likelihood of a spill, the DEISs fail to analyze safety impacts to local communities, environmental impacts to threatened and endangered salmon species in the Columbia River, and operational impacts on Columbia River Dams.

An increase in rail and marine vessel transport of crude oil will unquestionably increase the risk of oil spills. Train routes follow along waterways, and oil tankers travel though already busy waterways along Washington's coast. Both the state's rivers and its marine areas are home to dozens of state and federally designated endangered and threatened species. Crude oil contains many substances known to be toxic to living organisms. Without calculating the risk of potential harm from oil spills due to increased rail and vessel traffic, both to humans and to other living creatures, no responsible decision can be made as to the environmental impact of proposals like these. And such a decision must be made in the context of the potential, comprehensive impact of all such projects in the foreseeable future.

There's a reason for the state and federal laws that lay out the process for responsible and comprehensive consideration of environmental impacts. Far too often folks have sought the shortest, quickest solution to the problems before them. If you're a corporation seeking to maximize your profits, it's much better if you can keep the focus narrow and avoid having to explain the consequences of your project in combination with other, similar projects in the area. If you're a

government entity, it's easier if you can avoid the additional work of a more comprehensive study. But there are times when the easiest, quickest path isn't the best way to go. Shortcuts and easy fixes are absolutely the wrong approach to the potentially huge increase in the transport and export of fossil fuels through our state. The health and safety of our citizens and the quality of our environment truly are in the balance. This is why we are urging you to do the following:

- Revise the DEISs so that they comprise a full, comprehensive environmental review of these projects and their direct, indirect and cumulative impacts on communities and waterways in Washington State. This EIS must review and assess the potential impacts statewide on rail traffic, health, public safety, and oil spill risks. These effects must be assessed in the context of all other proposals for transporting and refining petroleum in the state.

Response GP364-8

Refer to Response to Comment GP364-1.

Comment GP364-9

- The EIS must assess the risk of oil spills presented by new feedstocks arriving by rail, not just in the vicinity of the proposed facilities, but also on all routes and waterways along which the oil would be transported. Transporting Bakken crude oil and tar sands bitumen presents new risks that have neither been adequately assessed nor prepared for. Current spill response plans and facilities are simply not adequate to address these new risks. The EIS must honestly and thoroughly assess what must be done to protect citizens, our communities and our environment.

Response GP364-9

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Modeling*, refer to the Master Response for Oil Spill Modeling Methods.

Comment GP364-10

- The EIS must engage in a robust analysis of potential impacts on all endangered and threatened species. It must assesses the potential risk, especially of oil spills and vessel traffic, to Chinook salmon, the southern resident orcas, and all other state and federal threatened and endangered species that may be affected. This assessment must take into account, among other things, the chemistry and the characteristics of polycyclic aromatic hydrocarbons (PAHs), which oil spills deliver into the environment. In marine environments, for example, PAHs can remain in sediments indefinitely and affect organisms at all trophic levels. Organisms that do not metabolize PAHs may bioaccumulate them and pass them along to their predators. Organisms that do metabolize them, larger marine species especially, suffer the effects of the carcinogenic by products of metabolizing PAHs.

Current levels of PAH accumulation in land and marine environments potentially affected by the Westside and Imperium projects must be determined, and the effects of the potential increases in this contamination that might be caused by the proposed rail facilities must be assessed.

Response GP364-10

Draft EIS Chapter 3, Section 3.5, *Animals*, focuses on rare, threatened, or endangered species (listed in Draft EIS Appendix F, *Special-Status Species*) and conservatively assumes that these species are or could be present in the study area at any given time. The Draft EIS refers to other species in general terms. Draft EIS Chapter 4, Section 4.7, *Impacts on Resources*, identifies potential impacts on plants and animals from oil spills from rail transport and vessel traffic. Refer to Response to Comment GP364-1 regarding the extended study area.

Comment GP364-11

- The EIS must also evaluate the proposed facilities in light of the Magnuson Amendment and all other federal laws that address transport of oil in, through, and from Washington State.

Response GP364-11

The proposed action would not require federal permits; therefore, it is not subject to the Magnuson Amendment.

Comment GP364-12

There is simply too much risk and too little reward from these proposals: Grays Harbor and railline communities would take on the risk and oil companies would reap the profits, while Grays Harbor and the Columbia River Gorge would become a through-way for oil going elsewhere. Much of what makes these regions special would be put at risk. A single major oil spill could devastate the area's maritime economy, productive fisheries, tribal cultures and economies, spectacular coastal waters, sensitive habitats and protected lands and waters in the Columbia River Gorge.

Response GP364-12

Refer to Response to Comment GP364-1.

Comment GP364-13

The alarming safety record of oil trains means an explosive oil train derailment is a question of when, not if. Less dramatic but equally concerning is the air pollution, spill risks, and traffic delays oil trains would bring to communities along the rail line from Aberdeen to Chehalis, through the Columbia River Gorge, and all the way to the source of the oil in North Dakota and elsewhere.

Response GP364-13

Refer to Response to Comment GP364-1 regarding the extended study area.

Comment GP364-14

There are better ways to meet our energy demands. Washington State is rapidly moving away from fossil fuels and towards clean, renewable sources to meet our electricity needs and respond to global warming. Building more, large infrastructure for yesterday's energy is the wrong path to meet today's energy needs and a big economic gamble for Grays Harbor. Washington State should continue to lead on safe, renewable, clean energy solutions and say no to more oil and coal.

We believe that the cumulative environmental impacts of the proposed oil facilities in Gray's Harbor and elsewhere in our state will be too great to mitigate. We urge you to protect Grays Harbor, the Columbia River Gorge, and our communities by getting all the relevant information on the table and in the light of day. We believe this will show that the only reasonable course will be to reject the proposed Westway and Imperium oil terminals.

Sincerely,

Robert M. Johnston
Lynne Oulman

Response GP364-14

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP365, **Jordan, Janet**

Comment GP365-1

Exploding oil trains are a problem that can't be solved by better equipment or better laws. Starting last April, laws went into effect telling oil companies in North Dakota they had to remove volatile gases from the oil tankers before they shipped them out. But even after the new regulations went into effect there was a large explosion in Heimdal North Dakota, involving six cars. Other new regulations included heavier shells and stronger valves for oil tankers. These will have to be phased in over time, since there isn't enough industrial capacity to replace them all immediately. Oil and train representatives are both protesting the new regulations, saying they are too expensive. So it isn't for certain that the new regulations will be phased in at all; they could be weakened by the continual lobbying. And critics say that no amount of jacketing for oil tankers will totally protect them from catching fire if they derail.

Response GP365-1

Draft EIS Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* acknowledges the voluntary applicant measure for all new rail cars to meet or exceed the U.S. Department of Transportation Specification 117 design or performance criteria and the retrofitting of all existing tank cars in accordance with the U.S. Department of Transportation-prescribed retrofit design or performance standard (80 *Federal Register* 26643). However, as noted in Section 4.5.4, *Would the proposed action result in unavoidable and significant adverse environmental impacts related to rail transport*? the risks cannot be eliminated.

GP366, **Jordan, Janet**

Comment GP366-1

Congress is considering an end to the ban on the export of crude oil. Ending the ban would bring about a boom in oil production (low prices are limiting production right now) and ensure that oil trains run ceaselessly through Washington. Any comments on inconvenience to cities along the way should be doubled or tripled with this increase in mind. Thank you for the chance to comment.

Response GP366-1

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

GP367, **Jordan, Janet**

Comment GP367-1

We desperately need to deny both these permits. Oil trains across the state would turn huge swaths of Washington State into a sacrifice zone. The state would not benefit, only the oil companies. The oil trains are dangerous; DOT-111 cars would be used for the foreseeable future and they allow flammable vapors to collect. They also are vulnerable to punctures, at which point the vapors ignite. Oil itself ignites, fast enough to produce a "bomb" effect. Towns across the state are unprepared for the danger and preparing would place a heavy burden on them.

Response GP367-1

Draft EIS Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* acknowledges the voluntary applicant measure for all new rail cars to meet or exceed the U.S. Department of Transportation Specification 117 design or performance criteria and the retrofitting of all existing tank cars in accordance with the U.S. Department of Transportation-prescribed retrofit design or performance standard (80 *Federal Register* 26643). However, as noted in Section 4.5.4, *Would the proposed action result in unavoidable and significant adverse environmental impacts related to rail transport*? the risks cannot be eliminated.

Comment GP367-2

The oil trains would slow down traffic in the cities and towns they cross and again, creating overpasses would place a heavy burden on them. Quality of life would be degraded even with overpasses.

Response GP367-2

Comment acknowledged.

Comment GP367-3

And even all this is not the worst. The worst is that the oil that would be burned every year, added to what we are already burning, contributes to climate change when we should be working with all deliberate speed to transition to clean energy. We can't afford the economic burdens of rebuilding cities after floods/hurricanes, finding a new area to create farms when our existing farms go belly up in the new rain-free climate, and finding new firewood after all our forests are lost to forest fires. Instead of working on these problems, we should decrease our use of oil and move to a better source of energy. Thanks for accepting my comments.

Response GP367-3

Comment acknowledged.

GP368, **Jordan, Yvonne**

Comment GP368-1

I have lived at one end of the gorge or the other for a lifetime. A few years ago as I was coming back from The Dalles I was approaching Portland and saw a train with hot wheels and a lot of smoke coming off of them. I exited the freeway, called 911 and tried to report it on a Sunday afternoon. I finally got the emergency person to give me the phone for UP's police and I made contact with them telling them that the train headed to the gorge. The train was stopped, corrections made and continued on. I was called back and told that it would have been a derailment. The thought of what could have happened still bothers me.

The thought of what is being proposed for transport is incomprehensible to the future of The Columbia river and the health and well being of Oregon and Washington. Yours for a healthy world Yvonne Jordan

Response GP368-1

Comment acknowledged.

GP369, **Julius, Theressa**

Comment GP369-1

My home is within a half mile of the rail line. With increased rail traffic and an increase in combustable materials being transported, my residential property value will go down. This will be a financial burden to me in the short term and long term. I assume loss of property value will be compensated as part of the project mitigation. Who will reimburse me for the loss of value on my property? Will I be receiving a check refund annually or quarterly?

Response GP369-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section

7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values.

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP370, **Justis, Bill**

Comment GP370-1

Comments on the Westway and lmperium Expansion Projects

Bill Justis 6345 Cedar Flats Road SW Olympia WA 98512-9410

Dear Ladies and Gentlemen

Thank You for the opportunity to comment on this significant proposal. I am a retired Forester with 11yrs with the WA State Department of Natural Resources and 19 years with the WA State Department of Revenue. I retired in 2002 as a Revenue Forester 4. I was born in Puyallup in 1946 have lived in Western Washington my entire life excepting 2 1/2 years while attaining a BA in Forest Management at WSU in Pullman.

I am interested in this proposal because I have roots in Grays Harbor County. My Mother was raised in Elma. I have a long history of Razor clam digging starting when I was about 5 yrs old and continues to this day. My Uncles dug clams for food and money when they were in High School. The clam season was the focal point of many family gatherings at the beach mostly at Ouyhut before Ocean Shores was thought of. I have numerous relatives in the Chehalis Valley area and this proposal concerns me a great deal.

My comments are based on the DOE/City of Hoquiam fact sheets, my familiarity with the region and my natural resources background. They are not listed in priority order but I hope you consider them all seriously.

Rail Transport Impacts

The fact that the Federal government restricts oil trains to 25 mph says to me that the PS&P line is in poor repair. Doubling the number of trains is likely to expose failures.

Traveling at slow speeds is unlikely to reduce ignition of spilled oil in case of crash. Bakken crude oil is noted for being very volatile. These trains with 3.6 million gallons of volatile oil will travel right through several towns a couple times a day. A collision or derailment with a spill and fire would be a major catastrophe destroying life and property.

Response GP370-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures that would reduce the likelihood of a spill

reaching the environment and the potential impacts of an incident. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP370-2

There are many places along the PS&P that are not accessible by road. The foam firefighting truck stationed in Elma may be useless for fighting an oil fire in these locations.

Response GP370-2

Refer to the Master Response for Emergency Response and Planning Gaps for information about the analysis of emergency planning and response capabilities.

Comment GP370-3

The increased train volumes will approximately double the particulate pollution from diesel exhaust in the air on the land and in the water. Grazing livestock (dairy cattle) will be breathing the particulate and eating pollution settling on the fields. oil spills from accidents will very likely enter streams or rivers. The PS&P fine follows the Chehalis River and crosses many side streams along the route. The main line tracks also follow the Columbia, Cowlitz and Newaukum rivers.

Response GP370-3

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present analyses of cancer risk from emissions of diesel particulate matter from rail transport related to the proposed action and cumulative projects, respectively. The highest concentrations would be along the line between the project sites and Poynor Yard related to rail switching operations. Final EIS Section 3.2 and Section 6.5.1.2 have been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analyses predict lower emissions; the level of increased risk is not considered significant. Concentrations along the remainder of the line would be substantially lower.

Comment GP370-4

Increased rail traffic will disrupt vehicle traffic in Rochester, Elma, Montesano, and particularly in Aberdeen. The Olympic Gateway Plaza will become a major bottleneck disrupting commerce in the area a great deal. This is a major deal breaker especially during razor clam season when thousands of cars travel to and from the beaches. The EIS estimates the wait time at Olympic Gateway Plaza to be between 3 1 /3 and 4 1 /4 hours per day. Fire and medical emergency vehicles will be blocked. This is totally unacceptable.

Response GP370-4

Final EIS Chapter 3, Section 3.16.8, *Would the proposed action have unavoidable and significant adverse impacts on vehicle traffic and safety?* clarifies that while implementation of proposed mitigation could reduce impacts on vehicle traffic, average and peak hour vehicle delays at the following grade crossings in Aberdeen would remain significant.

- Average hour: East Heron Street and Newell Street (Olympic Gateway Plaza area).
- Peak hour: Washington Street (Port of Grays Harbor area).

Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

Comment GP370-5

The doubling of rail traffic will generate a great deal more noise. Trains are noisy especially the sounding of warning horns while approaching road crossing. The additional noise will be very disruptive for the communities along PS&P's line.

Response GP370-5

Draft EIS Chapter 3, Section 3.7, *Noise and Vibration*, provides a detailed analysis of noise and vibration related to the proposed action that would occur in the study area.

Comment GP370-6

Vessel Traffic Impacts
The EIS estimates the vessel traffic to increase to 1074 vessels per year. This computes to over three per day assuming that it is a perfect year and ships can come and go every day.

What happens during bad weather? Where are these vessels going to go? There is no space in Grays Harbor to tend more that a few vessels. Vessels waiting to unload will add to congestion and increase the likelihood of collisions or groundings. I have not read the full EIS (chap 4) but increased traffic will increase the likelihood of accidents.

Crossing the bar and navigating the narrow channel in Grays Harbor is tricky at best. During high river water events which are common in the winter months greatly increases the currents in this narrow channel. The increase in traffic will greatly increase the likelihood of collisions and groundings.

Response GP370-6

The proposed action would result in 0.7 additional vessel transit per day on average. State-licensed pilots work with the vessel operators to schedule vessel transits and to prevent any bottlenecks. Draft EIS Chapter 3, Section 3.17.4.4, *Vessel Traffic Management*, discusses the systems that are in place to manage vessel traffic within the port of Grays Harbor safely. Chapter 4, Section 4.6, *Environmental Health Risks—Vessel Transport*, presents an analysis of potential impacts from increased risk of vessel collisions, groundings, and allisions and related consequences (e.g., release of crude oil) under the proposed action, and proposes mitigation measures to reduce the likelihood of a vessel incident.

Comment GP370-7

The vessels that come to port empty to load from these transfer tanks will be carrying ballast. I think that most of these vessels take on ballast water from their last port of call. The amount of ballast water from foreign seas will likely increase greatly and the likelihood of introducing invasive species also increases. The EIS says that the companies will do their own monitoring. This is the fox guarding the henhouse.

Response GP370-7

Draft EIS Chapter 3, Section 3.3, *Water*, Section 3.4, *Plants*, and Section 3.5, *Animals*, describe potential ballast water impacts and the regulatory requirements to reduce these impacts. Section 3.4.7.1, *Applicant Mitigation*, and Section 3.5.7.1, *Applicant Mitigation*, identify mitigation measures to further reduce potential impacts.

Comment GP370-8

Increased Air Pollution Impacts

The EIS states that during the transferring of oil that Federal and State air pollution standards will likely be met. Westway and lmperium will do their own monitoring and notify authorities if standards are exceeded. Self monitoring is highly subject to falsifying and neglect. This rarely works satisfactorily. Even if done properly the air in the proximity of Hoquiam will get much more polluted. The sea breeze will be laden with petrochemical fumes and carbon dioxide. The greenhouse gases are estimated to be equivalent to the emissions of 20,400 cars! Hoquiam had better hope that the wind keeps blowing.

Response GP370-8

As described in Draft EIS Chapter 3, Section 3.2, *Air*, the proposed action is subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record-keeping requirements for onsite stationary sources. Refer to the Draft EIS for a list of permit conditions and proposed applicant mitigation that would reduce potential impacts on air quality.

Comment GP370-9

Increased Water Pollution Impacts

By far the most serious risk ls pollution of our water and shores with Bakken crude oil. Precautions will be taken and oil will be spilled. The chances of oil spilling into the water during transfer to vessels is likely. The ongoing process of transferring oil to vessels will accumulate oil in the harbor and water quality will diminish.

The corner stone of the Grays Harbor county economy is recreation, fishing and shell fish harvesting. A significant spill will have severe impacts on these resources. Oil spilled in the Grays Harbor estuary will be next to impossible to clean up. The vast majority of the area is mudflats with shallow water even at high tide. Cleanup up of nonfloating oil on the mud would be nearly impossible. Oil could also be pushed up numerous rivers that enter Grays Harbor. An oil spill on the coast would severely impact Razor clams and the Dungeness crab fishery. The States largest oyster industry in

Willapa Bay is nearby. A large spill may be unlikely but the potential losses could be very severe and the risk is not worth the gamble.

During vessel loading an oil boom is to be deployed. The EIS fact sheet states that the "transfer boom will be used unless it is not safe or effective". During much of the winter a stiff wind blows up the river making the water quite choppy. Oil booms are not effective in rough water. That means spilled oil during loading of vessels (small spills are deemed likely) during windy weather will not be boomed.

Response GP370-9

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. This includes measures to collect additional data to inform conditions for safe and effective prebooming, determine the number of days it is safe and effective to preboom and identify site-specific improvements, and implement alternatives to prebooming when it is either not safe or until other measures are in place. However, as noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP370-10

Employment

The fact sheets state an estimated 139 permanent jobs. The construction phase will likely employ most of the labor from out of the area and will be temporary creating a brief boom to the area and then a contraction. The oil transfer jobs may also prove to be temporary as renewables and market forces make Bakken crude too costly. For these jobs we risk environmental damage that will diminish a reliable source of income from harvesting food. Food that replenishes and grows itself for as long as we manage the resources prudently. Handling oil will damage these resources incrementally and jobs in this sector will be lost.

Recreation revenues could be reduced because of the significant traffic delays in the Olympic Gateway Plaza area. People headed to the beach for recreation will find other places to go to avoid the long delays and traffic snarls.

Response GP370-10

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP370-11

Catastrophic Events

The timing of earthquakes is hard to predict. One thing we know is they are likely to happen and based on historic events we could have the "big one" any time. A tsunami event would certainly inundate both of these tank farms if the quake does not destroy them first. Most of the harbor property sits of fill and is saturated with water. Even a moderate quake most likely will turn the site to liquefaction. A flood event coupled with a high tide could flood this site. We cannot mitigate these risks.

Response GP370-11

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP370-12

Conclusion

To put it bluntly, I see very little benefit to the region from these two projects and many negatives. The damage to the environment and property from significant spills is real and they will occur. Train derailments happen regularly. Traffic movement through Aberdeen will be severely impacted. The Imperium project has some validity by producing some refined products that could meet domestic needs. It seems Westway is merely an oil handling facility to transport oil to the highest bidder. I cannot support Bakken crude oil from North Dakota because of the huge environmental costs of extraction, the waste it leaves behind and large volumes of pollution to our atmosphere. The most powerful hurricane ever recorded in the northern hemisphere has just occurred off Mexico. Climate change is happening now and this project will only hurry it along. It is the wrong thing to do for the country and the world economy. The people of the Grays Harbor region are taking huge risks to their livelihood and to their way of life for the benefit of others. I appeal to your good conscious to do the right thing and refuse to permit these two projects.

Response GP370-12

Comment acknowledged.

GP371, **Kachman, Kati**

Comment GP371-1

Hi, my name is Kati Kachman. And the reason I came back is that -- this is my son. Okay. His name is Hudson, and he's seven months old. He will turn seven months old today at the stroke of midnight. And I'm here today speaking for Hudson as a very young -- one of the youngest residents of Aberdeen.

He doesn't get to speak his voice today about his thoughts. He also does not get to talk about the impacts, but he's going to be someone that will be impacted by this for probably 80 years. And I want to talk about risks versus rewards of this project.

First of all, the reward -- I wasn't able to come up with many of them. There's going to be some money for Westway, money for Imperium. Jobs for Aberdeen -- not very many jobs and possibly

some economic benefit, and not a whole lot we don't really know if it's going to be Aberdeen versus other areas outside of Aberdeen.

Then we talk about risks. We have lots of risks to plant life, plant life, marine life, human life, housing, and businesses are at risk, property values. Our disaster response and clean up, we don't have a great plan for that right now.

Tribal resources, recreation, tourism, water, jobs, health risks, farming, food. And, again, I say our children's future. So I ask you to please deny these permits. We owe this to Hudson and other thousands of children in Grays Harbor and Quinault.

Response GP371-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP372, **Kaiyala, Julie**

Comment GP372-1

My name is Julie Kaiyala. I live just two blocks away from the tracks and there's been more than one where the trains have tipped over right there. They just recently -- I don't remember how long ago it was, within the year, there was a bunch of trains that fell over. Those tracks are rotten.

So if they're thinking they're going to run these oil trains along there, I thought they must have rocks in their head to be thinking they're going to do that without making sure the tracks are completely safe.

And just living in my community, my concern is with the birds and environment here. Not only the people, but we live in a house that my dad built not two blocks away from it.

So I guess that's all I have to say, but I think that man is a being quite rude to the people that are speaking out there too. I don't know why.

Thank you.

Response GP372-1

Comment acknowledged.

GP373, **Kaplan, Robert B.**

Comment GP373-1

The Department of Ecology and the City of Hoquiam know that the risks from these proposals are too high. If Grays Harbor becomes a hub for crude oil, all of Washington will be threatened.

Response GP373-1

Comment acknowledged.

GP374, **Keefe, George**

Comment GP374-1

A comprehensive draft environmental impact statement must include track failure, a growing safety problem. A review by the Los Angeles Times published October 5, 2015, shows track failure problems were blamed for 55% of oil train derailments since 2013, double the rate for all types of freight train accidents. Oil trains 100 cars in length weigh 19,000 tons, which is almost 40 million pounds. Further, oil sloshing in the cars may be exacerbating the problem and causing higher than expected track failures according to rail safety experts. Investigators at Safety Transportation Board Canada suspect that oil trains cause unusual track damage. The Safety Director at the Brotherhood of Maintenance of Way Employees said that oil trains may be creating unique stresses on the tracks. "You can certainly get some rhythmic forces in …oil trains that you might not see on a mixed freight train with cars of different sizes, weights, and commodities." Even if tracks conform to Federal standards, they can separate under the force of a heavy train. Critics say that many of the safety initiatives adopted so far reflect a policy at mitigating the damage caused by derailments rather than preventing them. Brigham McCown, former chief of the Federal Pipeline and Hazardous Materials Safety Administration said, "I believe the Department of Transportation has myopically focused on incident mitigation. Prevention should be the first question they should address." Sarah Feinberg, chief of the Federal Railroad Administration said: "We have been incredibly lucky that the accidents have happened mostly in rural areas." I implore you to prevent environmental catastrophes and human tragedies throughout our state.

Response GP374-1

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

GP375, **Keefe, George**

Comment GP375-1

My comments relate to both the Westway and Imperium Draft EISs.

Please conduct comprehensive review 1. Impact on turning local seafood industry 2. Effect of combustion of such fossil fuels upon ocean acidification and climate disruption 3. Certainty of disastrous consequences of rail car explosions.

Response GP375-1

The commenter does not provide sufficient detail on missing information to allow for a response.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*. Refer to Draft EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, *Climate Change*, and Master Response for Environmental Health and Safety Analysis.

GP376, **Kempfer, Wes**

Comment GP376-1

Projects like these benefit almost no one except for those blinded enough by greed that they would doom all of humanity to who knows what kind of hellish future for their own short term gain. It is now a certainty that in the coming years millions of people will be driven from their homes as the climate shifts and sea level rises. In light of that, it amazes me that these projects are even seriously considered. I admit that I have not read the DEIS for either project. It is my opinion that in light of what we know about climate change that expansion of fossil facilities should be summarily dismissed. It is unlikely that national governments will come to an effective agreement about climate change. We cannot wait for them. It is at the local and regional level where measures to reduce greenhouse gas emissions must happen in any event. It is my hope that the state and local leaders making the decisions around these projects will recognize the tremendous responsibility that is on their shoulders, especially considering the abysmal failure in leadership at the federal level. The fate of humanity may indeed lie in the decisions like this made by city governments around the world. Please support the no build alternative. Sincerely, Wes Kempfer

Response GP376-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP377, **Kenney, Pat**

Comment GP377-1

My comments relate to both the Westway and Imperium Draft EISs.

Grays Harbor's narrow, shallow shipping channel and strong currents make it an unsuitable location for an oil terminal. For the DEIS please strongly consider the WA Dept of Fish and Wildlife's study showing "Grays Harbor is an area particularly sensitive to the adverse effects of oil spills."

A major oil spill would adversely effect, marine industries, & tourism. That would impact other businesses as well.

Response GP377-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that

would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including impacts on Grays Harbor. Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Comment GP377-2

Tribal rights to fishing must be respected!

Response GP377-2

Comment acknowledged.

Comment GP377-3

Gras Harbor [sic] is also in a major earthquake & tsunami zone. These catastrophes add to the risk of further oil spills from containers on land as well on the water.

Response GP377-3

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

GP378, **Kersting, John**

Comment GP378-1

Dear Department of Ecology and Associated Staff,

As a Parent, Journalist, Teacher and Community Leader as President of the Olympia Fraternal Organization of Eagles with over 450 members, I have been working on environmental issues for over 40 years. I remember back when our rivers were burning, Great Lakes dead and I am dead tired of corporate bullying in the name of profits for those who deserve none for poisoning our seas, air, food and lands. It is disturbingly hypocritical of our Department of Ecology, industry representatives and politicians to have access to 40 years of foundational peer-reviewed documented evidence of harm and danger with our energy sources particularly oil and coal yet to give industry a pass on the true economic, environmental and health costs of these reckless methods of energy production. These industries must be held fully accountable for their devastating impact and make room for true progress in low impact energy sources. Our government agencies must follow their foundational mandates and take the strongest actions possible to protect our planet, children and your own self.

Response GP378-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP378-2

For over 30 years I have been watching a slow train wreck in our environment, land air and water, where the use of fossil fuels has overwhelmed the incredible animal, plant, fragile environment and native peoples interests with flat out greed.

The Exxon Valdez cleanup is incomplete, funds locked in lawsuits and all efforts have been inadequate and ineffective. The Deepwater Horizon has devastated that area and will for decades. The oil train fires and spills are legion and an unacceptable risk to the incredible wealth of the Pacific Northwests treasured fisheries, landforms and water. Our government and corporations are a failure in showing responsibility with much more damage, oil spills and garbage strewn across many fragile landscapes.

OUR region is valuable beyond measure, fragile beyond belief and threatened with generations long catastrophe for a product that should have been phased out long ago and threatens our survival ironically illustrated by the diminishing arctic ice and desertification of wide swathes of our planet including California. I am appalled as are a clear majority of Americans who seem to be regularly ignored by our representatives.

Response GP378-2

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP378-3

You have failed to account for the climate change impacts of the 4.3 billion barrels of oil being sent to a Communist Country with no environmental safeguards which also takes away American jobs. Saying the contribution to climate change would be “negligible” is disingenuous. Last fall, over 400,000 people marched in New York City to call for urgent action on our climate. You cannot ignore the impact that the burning of oil will have on the global climate and the rapidly melting Arctic from which it will be extracted.

I am extremely concerned about the changing dynamics of oil transportation and the potential for more oil traveling through our region. I urge the state to use this study to inform strong public

policy actions that will ensure the safety of our communities and address the risks to our waterways now and in the future.

John Kersting

Response GP378-3

Draft EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, *Climate Change*, describes the projected impacts of climate change in the Pacific Northwest. Final EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport from likely source to furthest likely destination, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively.

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

GP379, **Kersting, John**

Comment GP379-1

Dear Department of Ecology, City of Hoquium and Associated Staff, As a Parent, Journalist, Teacher and Community Leader as President of the Olympia Fraternal Organization of Eagles with over 450 members, I have been working on environmental issues for over 40 years. I remember back when our rivers were burning, Great Lakes dead and I am dead tired of corporate bullying in the name of profits for those who deserve none for poisoning our seas, air, food and lands.

It is disturbingly hypocritical of our Department of Ecology, industry representatives and politicians to have access to 40 years of foundational peer-reviewed documented evidence of harm and danger with our energy sources particularly oil and coal yet to give industry a pass on the true economic, environmental and health costs of these reckless methods of energy production. These industries must be held fully accountable for their devastating impact and make room for true progress in low impact energy sources. Our government agencies must follow their foundational mandates and take the strongest actions possible to protect our planet, children and your own self. I have been watching heartbroken as a slow train wreck continues in our environment, land air and water, where the use of fossil fuels has overwhelmed the incredible animal, plant, fragile environment and native peoples interests with flat out greed.

Response GP379-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP379-2

The Exxon Valdez cleanup is incomplete, funds locked in lawsuits and all efforts have been inadequate and ineffective. The Deepwater Horizon has devastated that area and will for decades. The oil train fires and spills are legion and an unacceptable risk to the incredible wealth of the

Pacific Northwest's treasured fisheries, landforms and water. Our government and corporations are a failure in showing responsibility with much more damage, oil spills and garbage strewn across many fragile landscapes.

Response GP379-2

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP379-3

OUR region is valuable beyond measure, fragile beyond belief and threatened with generations long catastrophe for a product that should have been phased out long ago and threatens our survival ironically illustrated by the diminishing arctic ice and desertification of wide swathes of our planet including California. I am appalled as are a clear majority of Americans who seem to be regularly ignored by our representatives. You have failed to account for the climate change impacts of the 4.3 billion barrels of oil being sent to a Communist Country with no environmental safeguards which also takes away American jobs. Saying the contribution to climate change would be "negligible" is disingenuous. Last fall, over 400,000 people marched in New York City to call for urgent action on our climate. You cannot ignore the impact that the burning of oil will have on the global climate and the rapidly melting Arctic from which it will be extracted. I am extremely concerned about the changing dynamics of oil transportation and the potential for more oil traveling through our region. Everyone I know with any knowledge of this opposes these trains and want Ecology and the City of Hoquium to take strong public policy actions that will ensure the long term safety of our communities and address the risks to our waterways now and in the future. John Kersting

Response GP379-3

Draft EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, *Climate Change*, describes the projected impacts of climate change in the Pacific Northwest. Final EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport from likely source to furthest likely destination, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively.

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

GP380, **Kipnis, Hinda**

Comment GP380-1

RE: Grays Harbor Oil Terminal Expansion Any expansion action which furthers world dependency on fossil fuels brings us closer to the tipping point for environmental catastrophe. Unfortunately, time is running out for our children and grandchildren! Because, global warming is an EXPONENTIAL happening. An elderly concerned citizen, Hinde Kipnis

Response GP380-1

Comment acknowledged.

GP381, **Kircher, Marjorie**

Comment GP381-1

Please consider the health and safety of our children (who represent the next generations) and reject these proposals, because I don't think the damaging effects of these projects to children can be mitigated. Please see the file I am attaching, with medical journal references supporting my concerns. Thank you. Marjorie Kircher, MS OTR

Regarding the Proposed Imperium and Westway Oil Terminal Expansion Projects at the Port of Gray's Harbor

Public hearing October 8, 2015, Aberdeen, Washington (Washington State Department of Ecology, City of Hoquiam)

I am Marjorie Kircher. Thank you for this opportunity to comment on the Imperium and Westway crude oil terminals proposed for Gray's Harbor.

There are many serious health and safety concerns around this project, and you will hear those in detail from many concerned citizens today. I have a particular health concern, from greatly increasing diesel pollution throughout the region, and I urge you to reject these proposals, because I don't think the damaging effects of these projects can be mitigated.

I worked as a pediatric occupational therapist in special education in Vancouver, WA for over 25 years. We in public education have witnessed a profound increase in the number and severity of children (per capita) with neurodevelopmental disorders such as autism, attention deficit hyperactivity disorder (ADHD), learning disabilities, mood dysregulation, and cognitive delay. The Centers for Disease Control and Prevention (CDC) corroborates this increase in their recent counts of pediatric disorders on their website.

This is likely due in part to increased exposures to neurotoxic chemicals in the environment. Scientific studies published recently have correlated prenatal and early life exposure to diesel particulate exhaust with autism, ADHD, lowered IQ and cognitive function, and increased behavioral symptoms of anxiety, depression, and aggressive behavior. Diesel components can cause permanent damage to the developing nervous systems of embryonic and young children, even at low levels. If this terminal is built, an enormous increase in our regional population's exposure to neurotoxins (double in this county alone), supplied by diesel particulates from a lot more oil trains passing, will

predictably increase neurodevelopmental impairments in our children even further. (DEIS states, "Increased rail traffic would almost double emissions of criteria pollutants associated with rail transport in county.") Also, handling oil at the terminal alone would give off many other toxic air pollutants, such as cadmium, benzene, formaldehyde, and toluene. This will be at large cost to our society. It creates jobs for special education professionals and ultimately, for long term care facilities.

(I am attaching to my testimony a list of these articles--because I am interested and concerned about this matter of air pollution, I recently did a library search at Oregon Health Sciences University, where I found these articles that concern public health—besides those I've just mentioned, also asthma (one in ten children now have asthma, also linked in studies to diesel exhaust); and in adults, lung and breast cancer, heart problems, strokes, respiratory illnesses and more.

Key American medical societies and the world health organization have issued positions on reducing air pollution for the health of the population: American Heart Association, American College of Obstetricians and Gynecologists, American Academy of Pediatrics, World Health Organization's International Agency for Research on Cancer, and others.

Please consider the health and safety of our children who represent the next generations, and reject the proposals by Imperium and Westway!

Thank you,

Marjorie Kircher, MS OTR

Occupational Therapist, Registered

SPECIFIC DISEASES ASSOCIATED WITH EXPOSURE TO HIGHER LEVELS OF PARTICULATE MATTER IN AIR POLLUTION

Cancer—Studies relating cancer risk and particulate matter:

- exposure to ozone and PM correlated with development of and mortality from lung cancer (Beeson, Dockery, Pope)

- increased biological markers associated with risk of lung cancer (Demetriou)

- increased oxidative DNA damage predictive of cancer risk (Avogbe)

- increased rates of breast cancer (Crouse, Wei)

Cardiovascular—Studies have linked increased particulate matter with increased cardiac disease:

- increased cardiovascular disease mortality and morbidity in both short term and long term exposures to PM 2.5 (Brook)

- increased hospital admissions for serious cardiac arrhythmias (Peters 2000)

- increased probability of admission for acute myocardial infarction (Mustafic, Peters 2001)

- increased ischemic heart disease, arrhythmias, congestive heart failure (Dominici) and bio markers (HRV) associated with increased cardiac morbidity and mortality (Pieters)

- increased hospital admissions and death from heart failure (Shaw)

- increased risk of congenital cardiac anomalies in children (Vrijheid)

Cerebrovascular - Studies have shown links between particulate matter and adult brain effects:

- increased hospital admissions for strokes (Dominici, Lue, Wellenius 2005)

- significant increase in stroke mortality associated with increase in PM (Chen, Qian)

- increased risk of stroke associated with increased exposure to small PM, black carbon, and nitrous dioxide (Wellenius 2012)

- increased risk of stroke and death from stroke for post menopausal women (Miller)

- structural brain damage and cognitive deficits in middle-aged and older adults (Wilker)

Neurodevelopmental—Studies associating in-utero exposure to particulate matter and:

- increased incidence of autism spectrum disorder (ASD)—(Becerra, Kalkbrenner, Raz, Roberts, Volk 2013, Volk 2011)

- increased incidence of behaviors associated with attention deficit hyperactivity disorder (ADHD) (Chiu, Newman, Perera 2014, Peterson)

lowered IQ (Calderón-Garcidueñas, Perera 2009, Jedrychowski)

- increased behavioral symptoms of anxiety, depression, social problems, rule breaking, and aggression (Perera 2013)

- neurobehavioral development in children benefited from the shutdown of a coal-burning plant (Perera 2008, Tang)

Pulmonary—Studies have demonstrated the effects of particulate matter on the lungs:

- decreased lung function (WHO 3)

- inhibited lung development in children and adolescents and measurable airway inflammation (Gauderman)

- increased asthma rates and worsening of preexisting asthma and chronic obstructive pulmonary disease (COPD), resulting in increased hospitalization (Carlsten et al., Gowers, Delamater, 2012; HEI Panel, Pandya, Trasande)

General—

- increased mortality from cardiac, respiratory and kidney disease in all members of communities with coal exposure (15,16,17,18 Hendryx 2007, Hendryx 2010, Hendryx 2008, Hendryx 2009)

- long term exposure linked to decreased life expectancy from cardiopulmonary mortality (Krishnan, WHO 4)

- prenatal exposures linked to altered immune system development (Hertz-Picciotto)

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(Includes all illnesses associated with airborne particulate matter in air pollution)

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Response GP381-1

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present analyses of cancer risk from emissions of diesel particulate matter related to the proposed action and cumulative projects, respectively. Final EIS Section 3.2 and Section 6.5.1.2 have been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analyses predict lower emissions; the level of increased risk is not considered significant. The Final EIS also reflects lower onsite emissions of criteria air pollutants from mobile sources.

To provide perspective, the most recent U.S. Environmental Protection Agency (EPA) National Air Toxic Assessment based on 2011 air emissions has the statewide average air toxic cancer risk at 43 per million and Grays Harbor County at 20 per million. However, EPA excludes diesel particulate matter from cancer risk analysis because there is too much uncertainty about the cancer potency value to assign a numerical value for diesel particulate matter. If diesel particulate matter is responsible for cancer risk similar to that found in Puget Sound by the Puget Sound Clean Air Agency and contributes 78% of the additional cancer risk, then a one-in-a-million increase from the proposed action would represent about a 1% increase over current air toxic risk levels. In addition, non-cancer chronic exposures are assessed based on a reference exposure level, which for diesel particulate matter is 5.0 micrograms per cubic meter. A chronic hazard index is calculated by dividing the annual average concentration of a toxic pollutant by the chronic reference exposure level for that pollutant. The reference exposure level is a level at or below which no adverse health effects are anticipated following long-term exposure. Thus, if the chronic hazard index is less than 1.0, the pollutant is not considered to pose a significant risk or adverse non-cancer health effects. The chronic hazard index for the nearest resident is 0.0007 and therefore does not represent a substantial risk. To date, EPA and the Office of Environmental Health Hazard Assessment have not found sufficient evidence to fully understand the mechanism of exposure and clear dose-response relationships for these acute responses, and have precluded development of recommendations about levels of exposure that would be protective.

GP382, **Kircher, Marjorie**

Comment GP382-1

My name is Marjorie Kircher. Thank you for this opportunity to comment on the oil terminal proposed for Grays Harbor. There are many serious health and safety concerns around this project, and you will hear about those in detail from many concerned citizens today.

I have a particular health concern in generating -- greatly improving pollution throughout the region. And I urge you to reject these proposals because I don't think the damaging effects of these projects cannot be mitigated.

I've worked as a pediatric occupational therapist in special education in Vancouver, Washington for over 25 years.

We in the public education have witnessed profound increase in the number of children per capita with neurodevelopmental disorders such as autism, attention deficit, hyperactivity disorder, learning disabilities, and cognitive delay.

And the Center for Disease Control corroborates this increase in their recent accounts of pediatric disorders on their website. This is likely due in part to increasing exposure to neurotoxic chemicals in the environment.

Scientific studies published recently have correlated that early life exposure to diesel particulate exhaust causes autism, ADHD, lower IQ, and cognitive function, and increased bouts of anxiety, depression, and destructive behavior.

Diesel components can cause permanent damage to the developing neurosystem at low levels. If the terminal is built, an increase in our regional population exposure to neurotoxins double in this county alone. The DEIS states increased rail traffic would almost double emissions of criteria pollutants.

Response GP382-1

Refer to Response to Comment GP381-1.

GP383, **Kirk, Ruth**

Comment GP383-1

October 28, 2015

Westway and Imperium Expansion Projects EIS c/o ICF International 710 Second Avenue, Suite 550 Seattle, WA 98104

The EIS is definitely mistaken in saying there is little likelihood of a major earthquake any time soon. Please correct this to incorporate current geological and seismic expertise. The whole concept of transporting so much oil by rail is a bid for disaster as has been shown elsewhere by spillages, pollution, explosions, and fires. Let's learn from those tragedies and not set Washington up for a repeat.

Sincerely, Ruth Kirk 2231 Marina Lane S.E. Lacey, WA 98503-3186

Response GP383-1

Refer to the Master Response for Earthquake Probabilities for an explanation of how the probabilities of strong earthquakes reported in the Draft EIS relate to those identified in recent studies. Final EIS Chapter 3, Section 3.1, *Earth*, clarifies language characterizing the likelihood of events.

GP384, **Kocer, Dianne**

Comment GP384-1

The Revenue Stream to the 'Taxing Authority" for Westway is $1,217,000 Annually for 49,041 BPD x 365 = 17.90 Million Barrels The Revenue Stream to the 'Taxing Authority" for Imperium is

$1,641,400 Annually for 78,166 BPD x 365 = 28.53 Million Barrels The Revenue Stream to the 'Taxing Authority" for the Westway & Imperium is $2,858,400 Annually for 127,207 BPD x 365 = 46.43 Million Barrels The Result is the 'Taxing Authority" receives $2,858,400 divided by 46,430,000 Barrels = $0.0615 per Barrel Crude Oil on the Open Market is between $40 and $100 per Barrel or $26,400 to $66,000 per Rail Car and the Local Revenue Stream is Six Cents Per Barrel So Each of the 70,280 Full Rail Cars annually of Crude Oil carrying 660 Barrels of crude oil yields the 'Taxing Authority" $40.59 Each of the Empty Rail cars yields the "Taxing Authority" zero. Source: William Brake, retired engineer It is very obvious from the figures above that revenue to local governments is a tiny pittance compared to the profits to the oil producers. It would be more cost effective if the State of WA provided the 2.5 million for 5 years to the Grays Harbor communities to develop green industry for the people of Grays Harbor rather than risking the millions that remediation would cost the tax payers. "In 2010, the Environmental Protection Agency estimated the cost of cleanup was increasing beyond the current funding needed for Superfund sites. In the past decade, EPA allocated $243 million per year for Superfund cleanup. It estimates $335 million to $681 million per year will be needed for future cleanup. The EPA attempts to bill the company responsible for contamination. Sometimes, the company no longer exists or is bankrupt, so the EPA pays for cleanup out of the Superfund trust, previously funded by a tax on petroleum products. The tax was discontinued in 1995." The risks vs the value added to the communities just do not pencil out.

Response GP384-1

Draft EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, addresses economic considerations, social policy implications, and the costs and benefits associated with the proposed action. Draft EIS Section 7.1.4*, What are the potential impacts on economic conditions*? reports estimated tax revenues from construction and operations developed through the IMPLAN analysis (Appendix O, *Economic Impact Analysis*). Tax revenue is only one aspect of the social and economic impacts of the proposed action. Other considerations can be found in Section 7.1.4, *What are the potential impacts on economic conditions?* Section 7.3.3, *What are the benefits of the proposed action?* and Section 7.3.4, *What are the costs of the proposed action?* Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP385, **Kocer, Dianne**

Comment GP385-1

In reading the DEIS I found it interesting that the following statement was repeated a number of times: "No mitigation measures can be implemented that will completely eliminate the possibility of a large spill, nor are there any mitigation measures that will completely eliminate the adverse consequences of a large spill." Given the train derailments with the consequent dumping of toxic oil into rivers and soil logic would dictate that with the proposed traffic for these two terminals over a 100+ year old rail system, it is inevitable there will be derailments and spills. If, as stated above, there are no mitigation measures possible, then it seems very clear that this project should be denied.

Response GP385-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP386, **Kocer, Dianne**

Comment GP386-1

Highlighting inextricable relationships between navigable waters and the atmosphere, and finding that separating the two is "nonsensical," the judge found the public trust doctrine mandates that the state act through its designated agency "to protect what it holds in trust." The court confirmed what the Washington youth and youth across the nation have been arguing in courts of law, that "[t]he state has a constitutional obligation to protect the public's interest in natural resources held in trust for the common benefit of the people." The above represents the ruling of Judge Hill. Further, "This ruling means that what the Department of Ecology does going forward in its rulemaking has to protect us, the kids of Washington, and not just us, but future generations too, like my children and those to come. Now they can't decide to protect short-term economic fears and ignore us because we have constitutional and public trust rights to a stable climate!" The DEIS for the proposed Grays Harbor terminals doesn't even come close to demonstrating the breadth of commitment to the public trust over short-term economic concerns that this ruling requires. WA can do much better and we are depending upon you to do that.

Response GP386-1

Comment acknowledged.

GP387, **Kolberg, Dave**

Comment GP387-1

I'm Dave Kolberg, I'm from Vancouver, Washington. SEPA law requires that the DEIS for these two projects consider the greenhouse gas emissions to determine if they might reach a level of significance. The statements considered the emissions on-site those produced by rail traffic within the state of Washington and those produced by end users. But the statements don't include the math additions to do exploratory oil or wells in North Dakota.

Because fracking oil is worth more than the natural gas that leaks from the wells, during their process, drillers in 2012 cleared out $1 million worth of natural gas. That's the equivalent of a million cars on the road at that period.

Fracking for oil is five times more energy intensive. It also requires additional energy to transport the massive amounts of water during the fracking process adding to its greenhouse footprint.

Can DEIS consider these emissions a new and existing source? According to DEQ's own greenhouse gas guidance document, the answer is yes.

According to WAC 197-11-060-4B in assessing the significance of an impact, a lead agency shall not eliminate consideration of proposed impact within its jurisdiction including local or state boundaries.

If we consider these emissions, why wouldn't we, especially considering the unprecedented fire season we've just experienced. In May, the Olympic Forest caught fire. Wild fires have charred 300,000 acres this year in Washington state and faced fire seasons longer than 1950.

Scientists at the National Oceanic and Atmospheric Administration predict in parts of the west large fires will increase by six fold.

Let's get this right. Heaven help us.

Response GP387-1

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively, in the context of emission inventories and reduction goals. The Final EIS has been updated to include estimated emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

GP388, **Krueger, Katherine**

Comment GP388-1

As a former environmental attorney for major petrochemical companies in Texas, I am acutely aware of what can go wrong at every stage of operations: rail car, transfer, dock storage, transfer, and ship. Because of the richness of the fishery in the Grays Harbor area (and the whole WA coast) and the number of industries that depend on that fishery (commercial fisheries and satellite businesses, tourism) and the risk to drinking water, and the cost and time involved in cleanup of material that is hazardous in nature--even though oil and gas are exempted from this category as a matter of law--this location is ill advised as a major harbor for petrochemical transport. It is of concern whether a spill could be contained sufficiently to only impact the immediate area, as well. I don't believe the present protections against spill, or the present plans for cleanup, are sufficient to avoid huge safety concerns (e.g., fire) or economic loss (from contaminants) in such event, and ensuing irreparable harm to people's livelihoods. We already have harbors set up for this type of work, such as Tacoma. We should limit the areas in which such disasters can cause environmental/economic harm, rather than increase them.

Response GP388-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP389, **Lacefield, Lily**

Comment GP389-1

My name is Lily Lecefield. And the reason why I want to say something is because if the trains coming in with oil, that the people might move. And so Aberdeen will lose all its people so it will be like a big ghost town.

And there was this guy who was talking about -- in the big theater. He was talking about the birds that died in Ocean Shores and that they had to pick up more than 100 birds. And there's a fridge full of dead birds. And that they had to pick up all the birds that were running around with oil stuck to their wings. So, yeah.

And that guy was so mean to those three singing ladies.

Response GP389-1

Comment acknowledged.

GP390, **LaDuca, Kimberly**

Comment GP390-1

The most significant issue with the Draft Environmental Impact Statements is that is has an unacceptable area of study. The DEIS cannot limit its analysis of the impacts associated with the rail transport of Bakken Crude to the PS&R rail line. Thus, the DEISs are inadequate because they fail to consider the foreseeable cumulative impacts to rail traffic, human health and safety and the environmental degradation posed by oil spills along the entire rail-line transporting the Bakken Crude. The Westway and Imperium Project proposals pose unavoidable significant impacts to human health, safety and the environmental that cannot be mitigated. The SEPA EIS process must fully evaluate and discuss all impacts, including climate change impacts and the catastrophic threat to human life posed by these proposals. The DEIS analysis of the threat to human health and safety and to the environment in the event of a derailment and spill is inadequate and fails to address the actual threat of mile-long oil trains. The DEIS limited the scope of its rail traffic and human safety analysis to the PS&R line and fails to consider the impact of increased rail traffic and the safety threat of more oil trains throughout all of Washington State. Especially given the fact that BNSF has only one rail line that transports Bakken Crude from North Dakota into Washington and through Spokane, the impact to Spokane must be included in the EIS. Furthermore, the EIS must address the cumulative impacts to communities throughout our state where oil-trains pose a catastrophic adverse impact to human health and safety and the environment. Specifically, the impacts to Seattle, which acts as a hub for oil transported throughout the state and is the state's financial epicenter, must be included. The DEIS also woefully minimizes the actual threat posed by a derailment at any speed. The EIS needs to address the fact that a derailment would cause irreparable harm to the environment in which the spill occurred but also a catastrophic loss of human life. The catastrophic threat of a derailment in downtown Seattle, especially in the 100-year-old tunnel or near the stadiums which can hold up to sixty-thousand fans at a time, is an unacceptable risk that cannot be mitigated. 14 of the last 16 oil train derailment spills have caught fire. With the amount of trains rolling through our area if this project is approved, an event like that is almost certain to happen in Washington State. 6 of the 7 tanker trains that derailed and ruptured this year have caught fire. A

derailment on the main BNSF rail line could eviscerate Downtown Seattle and its economy because the financial center falls within one-mile of the potential blast radius. Importantly, the DEIS is inadequate because it fails to consider the full greenhouse gas emissions of these projects. It does not include GHG emissions associated with refining and burning the billions of gallons of Bakken crude that will be transported and stored at these facilities. The failure to consider climate change impacts violates SEPA. Importantly, the Department of Ecology's guidance on SEPA specifically states that climate change impacts from greenhouse gases are an adverse environmental impact to be considered under SEPA. (Q&A SEPA and Greenhouse Gas Emissions pg 2) It states, "There is no basis for excluding greenhouse gas emissions and climate impacts from SEPA review. SEPA requires the consideration of environmental impacts that are likely, not merely speculative. The environmental impacts resulting from greenhouse gas emissions are reasonably foreseeable." The DEIS also fails to consider the impacts to recreation if a derailment or spill occurs. The DEIS limits its analysis of recreational impacts to the impacts associated with normal operation of the facilities. The DEIS must consider Gray's Harbor importance for fishing and crabbing habitat.

ATTACHMENT 1: LaDuca Law PLLC, Kimberly LaDuca

My name is Kimberly LaDuca and I am a licensed attorney in Washington specializing in environmental law and managing attorney at LaDuca Law PLLC. I am a first-time homeowner in Downtown Seattle and live and work less than two blocks from the BNSF main rail line in Belltown. Both the Westway and Imperium Projects concern me both professionally and personally because they pose significant threats to human safety and the environment which cannot be mitigated.

The most significant issue with the Draft Environmental Impact Statements is that is has an unacceptable area of study. The DEIS cannot limit its analysis of the impacts associated with the rail transport of Bakken Crude to the PS&R rail line. Thus, the DEISs are inadequate because they fail to consider the foreseeable cumulative impacts to rail traffic, human health and safety and the environmental degradation posed by oil spills along the entire rail-line transporting the Bakken Crude. The Westway and Imperium Project proposals pose unavoidable significant impacts to human health, safety and the environmental that cannot be mitigated. The SEPA EIS process must fully evaluate and discuss all impacts, including climate change impacts and the catastrophic threat to human life posed by these proposals.

Currently there are no crude oil storage facilities in Gray's Harbor. By seeking to expand and merely retrofit their facilities, Westway and Imperium are able to avoid other permitting processes that could prevent a "new" crude oil storage facility. These two projects are not "Expansion Projects" because neither facility is expanding current crude oil operations. Since Westway and Imperium currently have no capability to process, store or transport crude oil, these projects are new crude oil storage facilities that will increase the amount of crude oil being transported into and throughout Washington. The new adverse impacts to Gray's Harbor, which cannot be mitigated, require that this new expansion of crude oil facilities be denied.

The threat to human health and safety and the environment in the event of a derailment and spill is inadequate and fails to address the actual threat of mile-long oil trains. The DEIS limited the scope of its rail traffic and human safety analysis to the PS&R line and fails to consider the impact of increased rail traffic and the safety threat of more oil trains throughout all of Washington State. Especially given the fact that BNSF has only one rail line that transports Bakken Crude from North Dakota into Washington and through Spokane, the impact to Spokane must be included in the EIS. Furthermore, the EIS must address the cumulative impacts to communities throughout our state

where oil-trains pose a catastrophic adverse impact to human health and safety and the environment. Specifically, the impacts to Seattle, which acts as a hub for oil transported throughout the state and is the state's financial epicenter, must be included.

The DEIS also woefully minimizes the actual threat posed by a derailment at any speed. The EIS needs to address the fact that a derailment would cause irreparable harm to the environment in which the spill occurred but also a catastrophic loss of human life. The catastrophic threat of a derailment in downtown Seattle, especially in the 100-yearold tunnel or near the stadiums which can hold up to sixty-thousand fans at a time, is an unacceptable risk that cannot be mitigated. 14 of the last 16 oil train derailment spills have caught fire. With the amount of trains rolling through our area if this project is approved, an event like that is almost certain to happen in Washington State. 6 of the 7 tanker trains that derailed and ruptured this year have caught fire. A derailment on the main BNSF rail line could eviscerate Downtown Seattle and its economy because the financial center falls within one-mile of the potential blast radius.

Response GP390-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

Comment GP390-2

Importantly, the DEIS is inadequate because it fails to consider the full greenhouse gas emissions of these projects. It does not include GHG emissions associated with refining and burning the billions of gallons of Bakken crude that will be transported and stored at these facilities. The failure to consider climate change impacts violates SEPA. Importantly, the Department of Ecology's guidance on SEPA specifically states that climate change impacts from greenhouse gases are an adverse environmental impact to be considered under SEPA. (Q&A SEPA and Greenhouse Gas Emissions pg 2) It states, "There is no basis for excluding greenhouse gas emissions and climate impacts from SEPA review. SEPA requires the consideration of environmental impacts that are likely, not merely speculative. The environmental impacts resulting from greenhouse gas emissions are reasonably foreseeable."

Response GP390-2

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively, in the context of emission inventories and reduction goals. The Final EIS has been updated to include estimated emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

Comment GP390-3

The DEIS also fails to consider the impacts to recreation if a derailment or spill occurs. The DEIS limits its analysis of recreational impacts to the impacts associated with normal operation of the facilities. Most importantly, the DEIS must consider Gray's Harbor importance for fishing and crabbing habitat. It is noteworthy that this ignores the concerns of both the Quinault Indian Nation and the Commercial Fisheries Coalition, which are united on opposing these projects due to the threat to fisheries.

Response GP390-3

Final EIS Chapter 4, Section 4.7, *Impacts on Resources*, has been revised to more fully describe potential impacts on recreation, fishing, aquatic habitat, and tribal resources in the event of an oil spill, fire, or explosion. Section 4.7 has also been revised to clarify that in the event of a spill, fire, or explosion, there is the potential to affect all the resources in the study area, which, as described in Chapter 3, *Affected Environment, Impacts, and Mitigation*, include recreational resources, tribal resources, and commercial fishing.

GP391, **LaDuca, Kimberly**

Comment GP391-1

My name is Kimberly LaDuca and I'm an environmental attorney practicing in Washington. The Westway and Imperium proposals concern me both professionally and personally.

I work two blocks away from the BNSF north/south main line in downtown Seattle. Mile-long oil trains block off the Seattle waterfront from the rest of the city at a minimum of twice a day, usually during high tourist times like sunset.

I also worked near the stadiums right next to the BNSF main railway from February to August, where I witnessed the real impact of oil trains in Seattle. I also know personally that they are running past the stadiums when Mariner games are taking place, and that there's no -- even though the City of Seattle has said that they don't want to allow having trains run when there could be casualties in tens of thousands, there's no control over it.

The draft EIS does not adequately address any of these impacts. It only focuses on the PS&R line and pays lip service to the extended rail traffic. We know that the BNSF's main line will be burning four more oil trains per day, increasing the likelihood of highly volatile explosive trains, threatening the safety of over 600,000 people in Seattle and the water quality of the Puget Sound.

However, the impacts to Seattle are not the most important. That would be to the local communities. I am raising these because the DEIS fails to consider them. The DEIS minimizes the threat of exploding oil trains, what the impact would be if one of these trains derails, and not if, but when. It does so by looking at historical data on train explosions, and writes off recent oil train tragedies by stating that these derailments were caused and -- are less likely when trains are at low speeds.

Even if oil trains go 10 miles an hour on the PS&R line, the DEIS states that trains can travel up to 45 miles per hour through downtown Seattle. And it fails to address the catastrophic impact that derailment would have. And last summer, we had a train that derailed going five miles per hour -- an oil train.

This is not an expansion proposal because you cannot expand operations that do not currently exist. The proposal is to build new facilities and expand the business of two corporations with no benefit to the public of Washington.

Thank you.

Response GP391-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP392, **Langley, Veronica**

Comment GP392-1

As a citizen of Washington I am opposed to turning the Grays Harbor Estuary into an industrial zone. Given the sad state of the U.S. rail infrastructure in general, and the 59-mile rail line from Centralia in particular, it is guaranteed that oil will end up in the estuary. The DEIS itself finds that the risks of oil spills during rail transport, at the terminal site, and during marine vessel transport cannot be fully mitigated if a spill occurred and the environmental damage would be significant. Pleas stop caving into pressures from oil companies and big business that put our natural resources and families in danger. The moral issues must begin to outweigh the monetary gains of big business or there will nothing left for our children to inherit. Stop this project now, before it is too late.

Response GP392-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident.

Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP393, **Lanz, James**

Comment GP393-1

Dear Consultants, Ecology and City of Hoquiam. I'm a resident of Washington state and live in Vancouver, WA. I'm very concerned about the increased number of oil trains that will travel alongside the Columbia River and pass through my city as a result of the Westway and Imperium Oil Terminals proposed for Grays Harbor.

I am very concerned about the potential environmental damage that would result from an oil train derailment and oil spill next to the Columbia River.

In addition, I am very concerned about the risk of an oil train explosion as trains pass through my community. I believe the people of the State of Washington have the right to decide which risks they are willing to accept and which they are not, and just because some dangerous projects were permitted, that doesn't mean we should approve of more of them.

I urge you to reject the oil terminals proposed in Grays Harbor because they will create the following significant and adverse impacts which cannot be avoided or mitigated and are unacceptable.

• The tank cars cannot be made crashworthy. Non-yard oil train derailment spills are guaranteed to happen in the extended area several times per decade. An oil spill would have significant and adverse impacts that cannot be prevented or mitigated. At best only 14% of the oil is recovered in a spill. Crude oil contains benzene which cannot be recovered from the water.

• The oil vapor pressure cannot be lowered enough to prevent ignition. When tank cars are punctured during a derailment, gases rush out and find a spark. Non-yard derailment spills usually lead to fire. Oil train fires are likely to cause burns, deaths, and property damage. Burns, deaths, and property damage are significant adverse impacts that cannot be prevented or mitigated.

• Until all the tank cars have thermal jackets and high capacity pressure relief valves, tank cars sitting in a pool fire, are likely to explode. Firefighters cannot protect the public in those cases. Oil train explosions will be impossible to prevent for nearly a decade.

• Oil trains block traffic. They interfere with commerce, emergency response and school buses. The adverse impacts will be significant. There is no practical way to mitigate for blocked traffic.

Response GP393-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

GP394, **Lanz, James**

Comment GP394-1

Dear Consultants, Ecology and City of Hoquiam. I am a resident of Vancouver, WA and I am very concerned about the proposed oil terminals proposed in Grays Harbor. I urge you to reject them because they will create the following significant and adverse impacts which cannot be avoided or mitigated and are unacceptable.

• On some days the oil terminal will stink, particularly if the vapor combustion units fail. The city of South Portland Maine has banned the trans-loading of crude oil into marine vessels for that reason. Hydrogen sulfide first deadens the sense of smell, and then it kills you. It gets trapped in low-lying pockets.

Response GP394-1

Final EIS Chapter 3, Section 3.2, *Air*, was revised to include a discussion of potential impacts related to odor. The only compound with sufficient emissions to have the potential to have a perceptible odor is hydrogen sulfide. The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, are expected to reduce emissions of air pollutants, including hydrogen sulfide, to below the odor threshold for the most sensitive individual. As described in Section 3.2 the proposed action is subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping requirements for onsite stationary sources. Refer to the Draft EIS for a list of permit conditions and proposed applicant mitigation that would reduce potential impacts on air quality.

Comment GP394-2

False Prosperity. An oil terminal can only begin the slide toward altering the landscape, river, and quality of life here. There will be no other direction once it begins. The construction unions in Texas oil towns have been starved to death. And once they've got their foot in the door, big oil is as happy as any other corporation to break unions. The prosperity we're being offered is a poison pill. This cannot be mitigated or avoided.

Response GP394-2

Comment acknowledged.

Comment GP394-3

The proposed oil terminals will lead to a net increase of greenhouse gas emissions. If all the terminals in Washington and Oregon are approved, the net global oil production could increase 496,000 barrels per day. This is additive. This is not simply replacing one oil source for another. The increases must be mitigated.

Response GP394-3

Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources and for information on the likely destinations of crude oil shipped through the proposed facilities.

Comment GP394-4

Lost property values More than reported in the Economic Impact Analysis Planning model used by ECONorthwest. That model doesn't distinguish between unit oil trains and other types of freight. These adverse impacts are significant and cannot be mitigated or avoided.

Response GP394-4

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values.

Comment GP394-5

The Cost of Emergency Preparedness in all rail communities. NTSB says emergency response planning along the rail routes is "practically nonexistent".

Response GP394-5

Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for additional information about the analysis of emergency planning and response capabilities in the study area. For more information about the analysis of potential impacts on the BNSF main line, refer to the Master Response for the Geographic Scope of the EIS.

Comment GP394-6

Spill Cleanup delays. It took decades for the spill to be cleaned up in the town of Skykomish. Buildings had to be moved. The delays were significant and are unlikely to be avoided in the future.

Response GP394-6

Section 4.7, *Impacts on Resources*, describes the general types of impacts on resources that would be expected as a result of an oil spill. Final EIS Section 4.7 has been revised to acknowledge the potential for more lasting impacts as the result of a spill.

GP395, **Larson, Carrie**

Comment GP395-1

While the EIS addresses all manner of issues raised by the initial scoping period, the findings indicate the ludicrous nature of expanding these facilities and more than doubling train traffic—greatly increasing the odds of a derailment and spill—to this fragile area. If we look at the impact to vehicular traffic due to train crossings, we can see that waits of up to 52 minutes multiple times per week to the retail hub that is Olympic Gateway Plaza are simply unacceptable. Not only for emergency vehicle access but for other commercial enterprises—employees or delivery vehicles—and the general public. With no knowledge of when a train might come along, a parent stopping on an errand prior to picking up a child from school might not be able to reach that child for nearly an hour. All manner of seemingly "insignificant" outcomes can lead to many potentially dangerous situations. What about access to other Port businesses being blocked in similar ways? Why should one industry trump another? All this for potentially 36 direct jobs?

Response GP395-1

Final EIS Chapter 3, Section 3.16.8, *Would the proposed action have unavoidable and significant adverse impacts on vehicle traffic and safety?* clarifies that, while implementation of proposed mitigation could reduce impacts on vehicle traffic, average and peak hour vehicle delays at the following grade crossings in Aberdeen would remain significant.

- Average hour: East Heron Street and Newell Street (Olympic Gateway Plaza area).
- Peak hour: Washington Street (Port of Grays Harbor area).

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP395-2

The Westway Expansion project proposes halting vessel operation for two weeks each year during the Shorebird Festival to reduce impacts on the natural environment. This token attempt by industry to placate environmentalists is insulting to the public's intelligence. If the danger is so great that we shouldn't ship oil when shorebird stopovers are at their peak, what about other animals that make this estuary their home throughout the year?

Response GP395-2

Although ceasing vessel-loading operations for 2 weeks during the Grays Harbor Shorebird Festival would reduce risks related to oil spills that could affect migratory birds as well as other species in the area, the Final EIS clarifies that the applicant's primary intent in committing to this voluntary measure is to recognize the importance of the annual Grays Harbor Shorebird Festival to the community and those attending the festival and to eliminate the chance of a spill from vessel-loading

operations during this time. The measure has been moved to Final EIS Chapter 3, Section 3.10, *Recreation*, to reflect this clarification.

Comment GP395-3

The EIS itself describes the unique nature of many of our area's species and habitats. The EIS states "Because the cumulative projects, including the proposed action, would have unavoidable and significant adverse environmental impacts on noise, tribal resource, vehicle traffic, and environmental health and safety, the proposed action would contribute to unavoidable and significant adverse environmental cumulative impacts on these resources." The environmental risk to our community—our people, our livelihoods, our unsullied natural bounty—is too great to allow these proposals to move forward. Everything is situated too close to a waterway, where spills would flow out, increasing damage exponentially. The Westway and Imperium expansion projects must be stopped and additional oil trains should not be allowed through Grays Harbor County.

Response GP395-3

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP395-4

When a spill occurs—and it will be when, not if—who would pay or be made to pay? And how easy is it for a company to declare bankruptcy and walk away after the damage is done? Would any insurance company be willing to cover these transports at a level that could feasibly pay for the cost of cleaning up a major spill? And how could any level of compensation restore our way of life or our environment after such destruction took place? The rural poor should not be devastated so that big industry can make a buck.

Response GP395-4

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP396, **Larson, Don**

Comment GP396-1

Hi. My name is Don Larson. I'm from Seattle, King County. And I just want to make a couple short comments. I'm opposed to this project based on safety and security concerns, and also environmental concerns.

If a train derailed it would have potentially catastrophic effects on local populations and communities along the rail route. And I'm also concerned that transport of oil by rail could be potentially very damaging to the waterways that runs along.

I grew up in Vancouver, Washington, and I spent many hours in the Columbia Gorge. And if you've been through the Gorge you know that that rail line runs just within feet of the Columbia River. And anything could cause a derailment; human error, a rock slide, storm damage. And if it tipped over into the river that would be extremely damaging to the economy of the Gorge which is mostly based on recreation and tourism. So potentially a lot of jobs could be lost and those highways could be shut down east and west. And people that are in the Gorge have nowhere to go. They're pinned in by the mountains.

And then as far as costs go, it would mostly be the public that would shoulder the risk of any costs. And the oil industry usually winds up paying pennies on the dollar. It's just part of their business plan. Thank you.

Response GP396-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

Draft EIS Chapter 4, *Environmental Health and Safety*, Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP397, **Larson, Donald A. (Organized Workers for Labor Solidarity)**

Comment GP397-1

November 25, 2015 Seattle, Washington

To Westway and Imperium Expansion Projects:

The Westway and lmperium Oil Terminal Projects should not be permitted to proceed. Business as usual should be denied. Oil leaks, large and small, from ruptured tanks caused by derailments or ships and barges running aground threaten the health and security of humans and all inhabitants of our environment.

We can no longer pretend that it is normal for mile long oil trains to carry millions of gallons of explosive, toxic cargo through our towns and communities and along our waterways.

We can no longer pretend that these millions of gallons of oil, when burned, have no effect on our climate.

We, the people, are our own best scientists. We know there is something seriously wrong with our climate. Our own observations over many years tell us this is so.

Trains running along the Chehalis River and ships and barges maneuvering through a dredged channel in Grays Harbor, represent a danger to us all. Ask crab harvesters in Grays Harbor what they think about expanded oil shipments. How about tribal and recreational salmon fishermen? Don't

forget to ask the oyster farmers of Willapa Bay. We know what they would say. Their livelihoods are on the line. Tourist related jobs such as the Shorebird Festival of Grays Harbor would also suffer as would numerous job categories.

It's time to quit pretending that this is a simple economic transaction between the Port of Hoquiam and the oil industry. The repercussions of this decision go well beyond the artificial boundaries of this draft Environmental Impact Statement. Climate change happens in everyone's backyard. The backyard of planet Earth. Climate change recognizes no national boundaries. Let's not enable the fossil fuel industry by permitting these oil terminals. Instead, let's work to develop alternative fuel sources. Let's draw a line in the sand and move towards a cleaner environment and a hopeful future.

Let us join our neighbors to the south, Portland, Oregon, whose city council, in November 2015, voted to oppose the expansion of infrastructure for transporting or storing fossil fuels in Portland or nearby waterways.

The time for taking action is past due. There is no time like now to start.

Organized Workers for Labor Solidarity

Donald A. Larson 8422 41st Ave S.W. Seattle, WA 98136

Response GP397-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP398, **Larson, Erik**

Comment GP398-1

The purpose of the EIS process as created by NEPA is to quantify and compare several possible actions (and the no-action alternative) in order to advise agencies in decision making. The dEIS submitted for both the Westway and Imperium projects does not quantify significant risks associated with the projects which cannot be completely mitigated. Chapter 7 of each dEIS states, "... the cost-benefit analysis considers costs that may accrue to the City of Hoquiam related to preparing for the potential consequences rather than the costs that may be incurred related to cleanup activities and related degradation." In order for the cost-benefit analysis to accurately quantify the costs of each action, this information cannot be excluded. These costs may be estimated as an annualized risk using normalized data from oil spill responses, and the associated clean-up costs, as documented by the EPA and the return periods for each spill scenario addressed in Chapter 4. Also included should be the value of all resources at risk from each scenario, adjusted to account for probability of inclusion in the affected area. In addition to providing a more accurate cost-benefit analysis, this information would also be important in policy decisions on asset/insurance minimums required to ensure any potential financial liabilities are underwritten.

Response GP398-1

The EIS is being prepared under the Washington State Environmental Policy Act (SEPA) under RCW Chapter 43.21C, the SEPA Rules (Chapter 197-11 WAC), and HMC 11-10. Refer to the Master Response for Purpose and Focus of the EIS.

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP399, **Larson, John**

Comment GP399-1

November 30, 2015

Westway and Imperium Terminal Services Expansion Projects EISs

To whom it may concern:

I am writing to comment and express a number of concerns regarding the proposed Imperium and Westway crude oil terminal projects.

Though trains travelling over the historic Northern Pacific route into Grays Harbor have a long history of hauling all manner of cargo – even bulk hazardous liquids – nothing in the past rivals the volume of shipments being proposed in these two crude oil plans. Imperium is proposing to add two unit trains per day, Westway is seeking to add 1.25 unit trains a day. Though not under consideration here, a third company, U.S. Development Corp. is seeking to add its own bulk shipping station with at minimum a similar number of trains each day.

Considering the Puget Sound and Pacific Railroad's already busy rail business on Grays Harbor – hauling automobiles, agricultural products, other bulk liquids, lumber, etc. – does the existing rail infrastructure have the capacity to safely handle this greatly increased rail traffic? The three recent derailments on this railroad suggest that the existing single line may not be able to safely withstand even existing heavy use. Much of the railroad's route through Grays Harbor comes in close proximity to fragile aquatic lands and across numerous streams and several rivers.

Response GP399-1

Draft EIS Chapter 3, Section 3.15.5.2, *Proposed Action*, presents the rail traffic, capacity, and grade-crossing occupancy impacts from the construction and routine operation of the proposed action and Chapter 6, Section 6.5.4.2, *Cumulative Impacts*, presents the rail traffic, capacity, and grade-crossing occupancy impacts that could result from the routine operation of the cumulative projects. Operation of the cumulative projects at maximum throughput would add 1,553 unit train trips per year (4.25 trips per day on average) along the PS&P rail line to the approximately 1,100 train trips per year (three trips per day on average) under the no-action alternative (Section 3.15, *Rail Traffic*). Rail traffic from the cumulative projects at maximum throughput added to baseline rail traffic would equal approximately 7.35 trips per day on the PS&P rail line. Based on simulation modeling (Section

3.15, *Rail Traffic*), the PS&P rail line currently has the capacity to handle up to 12 trips per day, although, as with the existing traffic, delays along the rail line may occur. Current rail traffic along the PS&P rail line is approximately 3 trips per day. The addition of approximately 4.25 trips per day between Centralia and the project site can be accommodated without any improvements to the existing rail line. Section 3.15.4.7, *Current PS&P Rail Line Capacity and Operations*, provides more information on the capacity of the PS&P mainline.

Comment GP399-2

During the summer of 2011, I had the privilege of driving the PS&P rail line twice in a Suburban "high rail" vehicle with the railroad's general manager (as Director of Hoquiam's Polson Museum, I was charged with giving a presentation on the history of the rail line to guests at the Greater Grays Harbor "Showcase" tour that year). Such a firsthand look at the rail line from Hoquiam to Oakville was eye opening then but especially in light of the current proposals to bring crude oil to Grays Harbor. As detailed throughout section 3.15.4, there are a number of rail line locations that require reduced speed due to known deficiencies in the rail line. The long stretch that parallels the Chehalis River west of Montesano especially comes to mind when thinking of a poor rail subgrade in direct proximity to a fragile waterway ecosystem. Though the railroad has stated they plan to make upgrades, I am doubtful that Grays Harbor's soil and climate conditions would guarantee the 100% safe passage of crude oil tank cars day in and day out, year after year.

Response GP399-2

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP399-3

In addition to the environmental dangers posed by adding such a dramatic increase in hazardous-cargo rail traffic to Grays Harbor, the impact to personal and commercial vehicular transportation will pose ongoing problems and inflict economic hardship to nearby businesses. Though the railroad's entrance to East Aberdeen in front of the Gateway Mall is sure to be an even worse problem than it is now, crude by rail traffic will snarl vehicular traffic at rail crossings elsewhere in the county and especially along the Port Dock Road.

Response GP399-3

Refer to Draft EIS Chapter 3, Section 3.15, *Rail Traffic,* and Section 3.16, *Vehicle Traffic and Safety,* for information on impacts on rail traffic and vehicle traffic and safety.

Comment GP399-4

In thinking generally about the prospect of crude oil being transported to and shipped from Grays Harbor, I am left asking some broad yet crucial questions:

- Does adequate manpower, money, and equipment exist to handle crude oil contamination of our waterways in the event of a derailment or tanker spill?

Response GP399-4

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment GP399-5

Has any consideration been given to establishing a special tax on the rail and water shipment of crude oil to be banked as an insurance fund to cover the broad costs of damages done by a spill or explosion?

Response GP399-5

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP399-6

Is there even a way to accurately calculate what impact a crude oil catastrophe could have on Grays Harbor economically or environmentally? And if so, would the introduction of high-volume crude oil shipments have such a substantial net economic benefit to a large enough percentage of Grays Harbor's population to outweigh the ruin such a disaster could bring?

Response GP399-6

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of

associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP399-7

I am fearful that no matter what precautionary measures are taken to prevent an environmental catastrophe, any small economic gains cannot outweigh the potential losses that are sure to come. I urge those charged with oversight of these projects to reject granting their permits.

Sincerely,

John Larson
Hoquiam, Washington

Response GP399-7

Comment acknowledged.

GP400, **Larson, Ralph**

Comment GP400-1

Gentlemen, As a 74 year resident of Aberdeen, whose family came here in 1910, I am 100% in favor of crude by rail. I remember Standard oil docks at Junction City, and numerous oil tank farms at Port Dock. No spills then and there won't be any now! What do the environmentalists want us to do? Starve to death? Sincerely, Ralph and Susan Larson

Response GP400-1

Comment acknowledged.

GP401, **Leed, Mark**

Comment GP401-1

The DEIS contains a number of invalid assumptions that need to be addressed when completing the final EIS: 1)The economic summary fails to address job losses in the fishing and shellfish industries. 2) The impact to property values of a crude oil train is assumed to be equal to that of freight trains in general.

Response GP401-1

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for an explanation of the basis for the scope of the analysis of potential economic impacts in the Draft EIS.

Comment GP401-2

3) You imply that limiting speed to 25 mph reduces the risk, but it has been shown that tank car ruptures and fires can occur at much lower speeds. 4) It is repeatedly stated that the risk of a serious accident in the extended area is low. We need an actual number based on FRA statistics for BNSF. How many derailment spills can be forecast over a 30-year period? 5) You assume that empty tank car derailments don't cause fires. Fires professionals including the City of Ellensburg's fire chief state that this is inaccurate. 6) You say "Heavier oils . . . do not generate many flammable vapors", but the oil train fires and explosions in Timmens and Gogama Ontario in the late winter of 2015 involved Tar Sands Crude. 7) You assume that in the event of an accident, the responsible parties will be able to pay for damages and do so in a timely manner. Please include numbers supporting this statement.

Response GP401-2

The risk assessment does not distinguish between specific causes of an incident but acknowledges that, in general, slower speeds reduce the likelihood of an incident. Draft EIS Chapter 4, *Environmental Health and Safety,* also notes that the potential impacts would vary depending on the specific circumstances of an incident. Refer to the Master Response for Risk Assessment Methods for a discussion of the assumptions, data sources, and methods used in the analysis of risks.

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS.

GP402, **Lenigan, Rosemary**

Comment GP402-1

I back the Audubon Washington point of view. I feel we need more time to explore the dangers to our oceans & rivers & their denizens. Take time to examine other alternatives to improve the economy.

Response GP402-1

Comment acknowledged.

GP403, **Leon, Carmen**

Comment GP403-1

My comments relate to both the Westway and Imperium Draft EISs.
Since "Grays Harbor is an area particularly sensitive to the adverse effects of oil spills," I am against

the proposed oil shipping terminals, oil trains, storage tanks, tankers and barges that would be hazardous to health & safety, our ocean & coastlines, as well as the local economy.

Response GP403-1

Comment acknowledged.

GP404, **Levy, Cindy**

Comment GP404-1

My name is Cindy Levy. I live in rural Thurston County outside of Olympia. And I urge you to deny the permit because this project is insane. The threats to public, health, and livelihood and the threats to wildlife and natural resources are unmitigatable.

As so many people here have already stated in detail the risks, I stand on all of that and I reiterate it. All it takes is one spill. Just one spill over the course of this project to be a major disaster. And the odds of that happening are overwhelming, and we've already seen that.

I would like all of you here to imagine that you are living in Lac-Megantic, Quebec. Just imagine your home is there in the blast zone. Who here wants that? And do you want that on your conscience, to have a project like this to cause that kind of death to people and to devastate the area?

I urge you to take the funds that you're using in this work and invest that in the renewable resources so that we can have long-term health and sustainability for this area for us and for the next set of generations.

As the words of wisdom are, we don't inherit the earth from our ancestors, we borrow it from our children. What are we going to leave them with this? Please deny this project.

Response GP404-1

Comment acknowledged.

GP405, **Levy, Cindy**

Comment GP405-1

It only takes one spill/derailment to create a major catastrophe. We can't afford that. Would you want a rail line transporting this next to your home?

Response GP405-1

Comment acknowledged.

Comment GP405-2

Furthermore, we must focus on developing clean, renewal energy sources. We cannot wait any longer to end our dependence on fossil fuels, with all the risk that entails.

Response GP405-2

Comment acknowledged.

GP406, **Lewis, Twila**

Comment GP406-1

My name is Twila Lewis. I lived in Hoquiam most of my life. Three generations of my family, my father, my brothers, my husband, my brother-in-laws, my nephews have been or are still engaged in commercial fishing. And I think it was out of this that we began learning about keeping our environment safe long before it, I think, even became a word.

And because of this, I was drawn to join the Women League of Voters. We have held several forums and town meetings -- town hall meetings about this problem that we're facing. And we have been told that your scope and Department of Ecology can only cover our own small area.

So I want to say that whatever I say about our area is going to apply to every mile of train track between us and the oil fields. They have not addressed rail safety. They said that they were safe. The very next week there were three derailments. They have not addressed how they -- how the train or oil companies would address helping with disaster. There is no insurance company that would give them insurance to cover disaster, so they should not be able to work in our area.

Response GP406-1

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation. For more information about the analysis of potential impacts on the BNSF main line, refer to the Master Response for the Geographic Scope of the EIS.

GP407, **Liebaum, Ellen**

Comment GP407-1

My name is Ellen Liebaum. I came down here today from Portland, Oregon. Thank you for letting me speak about this Draft EIS and the impact that this project will have on my life and on the life of my four Godchildren, whom I have brought from Westport across through Grays Harbor for the sixth time this summer, since they were old enough to enjoy the drive up.

Your impact statement says that impact fire spills and explosions can be mitigated in a one-day workshop for emergency responders, a one-day hazard awareness training. This is crazy. Your risk

statements say there's a likelihood -- a great likelihood of a small spill. A great likelihood of a medium spill. A large spill versus a small. It just goes up and down, and the potential environmental impact is small for this kind, medium for this. There is no small environmental impact. Any amount of oil spill puts at risk our fisheries, our crab, our tourism, our children's future.

I urge you to look again at what possible mitigation there would be for any more danger to this beautiful river and wonderful Washington.

Thank you.

Response GP407-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

For more information about the development, implementation, and enforcement of mitigation measures, refer to the Master Response for Mitigation Framework.

GP408, **Linn, David**

Comment GP408-1

Westway and Imperium Terminal Services Expansion Projects EISs Comments
November 30, 2015

My wife and I decided to retire in Ocean Shores because of the beauty of the environment and the feeling of closeness to Nature. We oppose the development of oil terminals here because they would most certainly damage our environment and take away much of what we enjoy.

First, I would like to focus on those areas of the report that propose mitigating risks by the use of "best management practices". This mitigation strategy is mentioned frequently and implicitly assumes that "best management practices" will be well-defined and implemented.

I think that that the authors of the DEIS need to keep in mind that all of the companies involved in this process are "for-profit" and "limited liability" entities. What that means for the citizens of Grays Harbor is that these companies will derive most of the benefits from the operations, while the citizens will bear most of the liability. This risk-shifting is not a reasonable outcome. Any uncompensated negative effect is unacceptable.

Since these companies are for profit, they will have every incentive to reduce costs in order to maximize profits. So we can reasonably assume that "best management practices" will not be carried out – they will be simply too expensive. Similarly, the amount of liability insurance carried by these companies will be as little as possible – to maximize profits.

My questions to you are:

What are the Best Management Practices in each case where it the mitigating factor? What are the specific steps in detail and describe how you will ensure their compliance?

Response GP408-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP408-2

What is the Probable Maximum Loss, as defined by the insurance industry, for all affected parties in the community for each stage of the process – transportation by rail, storage in tanks and transportation by water? How does the magnitude of this loss compare to the amount of liability insurance carried by each of the companies involved in the process?

Response GP408-2

Refer to Response to Comment GP408-1.

Comment GP408-3

The DEIS considers only two scenarios: The "Proposed Action" by Westway and Imperium and the "No-Action Alternative". There are many other states of the world and the DEIS should consider the best "Non-Oil Alternative" where the expansions at the terminals would be for the best alternative use with non-hazardous commodities. What are these alternatives and how do they compare to the "Proposed Action"?

Response GP408-3

Refer to the Master Response for Project Objective and Alternatives for an explanation of the alternatives evaluated in the Draft EIS.

Comment GP408-4

Throughout the DEIS there are a number risk analysis tables (e.g. Figure S-1, page S-21, Imperium) that show various scenarios of likelihood and severity of risks. The "slider bars" range from unlikely to likely and low to severe. This is a very imprecise way of gaging risk. What are the numerical results when realistic probabilities of an incident and the expected losses caused by those incidents are calculated? While there may be a large number of possibilities, it is not that difficult to determine an expected value. What is the expected value of the costs of oil spills in all of Grays Harbor by proceeding with the proposed oil terminals?

Response GP408-4

For the reasons discussed in the Master Response for Risk Assessment Methods, the figures depicting risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, have been removed from the Final EIS.

Comment GP408-5

As a resident of Ocean Shores, I would like to know why no consideration of the negative effects for Ocean Shores was considered in the DEIS? In the event of an oil spill in the Harbor, what will be the effects on the economy, the environment, the wildlife and the property values in Ocean Shores?

Response GP408-5

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP408-6

In addition to Westway and Imperium, there is a third proposal for an oil terminal in Grays Harbor. Why does the DEIS not consider all three of these proposals together since that will be the actual impact on our communities? Are these reports (Imperium and Westway) examples of "segmentation" analysis, where you can justify each project individually but cannot justify them collectively?

Response GP408-6

Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of the incremental addition of impacts from the proposed action to impacts from past, present, and reasonably foreseeable future actions—including the REG (formerly Imperium Terminal Services) Expansion Project and the Grays Harbor Rail Terminal Project.

Comment GP408-7

While there is some discussion of "Mitigation" in the DEIS, there is no explanation of how this mitigation will be carried out. If a tanker leaks sixteen million gallons of oil into the Harbor, how will it be cleaned up? Can DOE assure us that all of the oil will be removed? What if the spill is Alberta Tar Sands and it sinks to the bottom of the Harbor, how will that be completely removed? How much will this cost and who will pay for it? How many birds and other sea life will be killed?

Response GP408-7

For more information about the development, implementation, and enforcement of mitigation measures, refer to the Master Response for Mitigation Framework. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for additional information about the analysis of emergency planning and response capabilities.

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Mod*eling, refer to the Master Response for Oil Spill Modeling Methods.

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP408-8

Section 3.1.15 contemplates a tsunami to occur once every 3,333 years. This is completely at odds with every other finding that tsunamis have occurred every 250 to 500 years in this area. Therefore, your risk assessment is far too low for this type of event. Since the last major tsunami occurred around 1700, the likelihood of one occurring in the next 50 years is quite high. Please revise your analysis to reflect the reality of the situation.

Response GP408-8

The use of the 1 in 3,333-year seismic event is intended to assess the impacts of a large Cascadia Subduction Zone seismic event. While lesser- intensity seismic events generally occur more frequently and can generate tsunamis, the tsunamis would be smaller than the event reviewed as part of this Draft EIS. Refer to the Master Response for Seismic Risk and Design Requirements for a description of the earthquake source model and hydrodynamic modeling method used in the site-specific tsunami analysis conducted for the project site and presented in Draft EIS Appendix C, *Tsunami Impact Modeling and Analysis*. Refer to Master Response for Earthquake Probabilities for an explanation of how the probabilities of strong earthquakes reported in the Draft EIS relate to those identified in recent studies.

Comment GP408-9

Please examine and discuss the conflicts of interest that may exist among various parties to this report. Specifically, who selected and paid for the authors of the reports that are major portions of the DEIS? Also, do the Port Commissioners and Hoquiam Administrator, Brian Shay have any financial relationships to the oil industry?

How much political pressure has been placed on the Department of Ecology to approve the oil terminals in Grays Harbor? Who has applied such pressure?

The Department of Ecology's mission statement is: "Protect, preserve and enhance Washington's environment for current and future generations."

I ask that you follow you mission statement and deny these permits.

Thank you for your consideration,

David Linn
Ocean Shores, WA

Response GP408-9

Refer to the Master Response for Purpose and Focus the EIS.

GP409, **Linn, David**

Comment GP409-1

Good afternoon. My name is David Linn and I've lived in Ocean Shores for the past seven years. My wife and I decided to retire out here because of the beauty of the environment and the feeling of closeness to nature.

We oppose the development of oil terminals here, because they would most certainly damage our environment and take away much of what we enjoy.

I would like to focus on those areas of the report that propose mitigating risks by the use of best management practices. This mitigation strategy is mentioned frequently and implicitly assumes that best management practices will be well-defined and implemented.

I think that the authors of the DEIS need to keep in mind that all of the companies involved in this process are for-profit and limited liability. What that means for the citizens of Grays Harbor is that these companies will derive most of the benefits from the operations while the citizens will bear most of the liability. This risk-shifting is not a reasonable outcome.

Since these companies are for-profit, they will have every incentive to reduce costs in order to maximize profits. So we can reasonably assume that the best management practices will not be carried out. They will simply be too expensive.

Similarly, the amount of liability insurance carried by these companies will be as little as possible to maximize profits.

My questions to you are: What are the best management practices in each case where it is the mitigating factor? Define the specific steps in detail and describe how you will ensure their compliance.

Response GP409-1

Refer to the Master Response for Mitigation Framework for more information about the development, implementation, and enforcement of mitigation measures.

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP409-2

Second, what is the probable maximum loss as defined by the insurance industry for all affected parties in our community for each stage of the process: Transportation by rail, storage, tanks, and transportation by water?

How does the magnitude of this loss compare with the amount of liability insurance carried by each of the companies involved in the process?

Finally, the Department of Ecology mission statement is, Protect, preserve and enhance Washington's environment for current and future generations. I ask that you follow your mission statement and deny these permits. Thank you.

Response GP409-2

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP410, **Linnell, Kathy**

Comment GP410-1

TEXT Please do NOT support this expansion. Our environment is primary and we have spill after spill proof of the ruthlessness of the Oil Companies, regardless of 'what they say' they will do. Thanks for your consideration of my comments

Response GP410-1

Comment acknowledged.

GP411, **Lish, Christopher**

Comment GP411-1

Monday, November 30, 2015

Westway and Imperium Terminal Services Expansion Projects EISs
c/o ICF International
710 Second Street, Suite 550
Seattle, WA 98104

Subject: Stop Oil Development in Coastal Habitat -- Westway and Imperium Expansion Projects Draft Environmental Impact Statements

Dear Washington Department of Ecology & City of Hoquiam:

I am writing to urge you to protect Grays Harbor and its people by rejecting the proposed Westway and Imperium oil terminals. The findings in the Draft Environmental Impact Statements for the Westway and Imperium oil terminal proposals in Grays Harbor show that the risks of oil spills cannot be fully mitigated and that the environmental damage to marine habitat, wildlife, and people could be significant. Similar findings exist for waterway contamination, train accidents, increased train and oil tanker traffic, air pollution, noise, harmful impacts on tribal culture and resources, and vehicle delay at railroad crossings. Due to these numerous and enormous risks, I ask that you reject the Westway and Imperium oil terminal proposals.

"Our duty to the whole, including to the unborn generations, bids us to restrain an unprincipled present-day minority from wasting the heritage of these unborn generations. The movement for the conservation of wildlife and the larger movement for the conservation of all our natural resources are essentially democratic in spirit, purpose and method."

-- *Theodore Roosevelt*

Much of what makes Grays Harbor special would be put at risk. A single major oil spill could devastate the area's maritime economy, productive fisheries, tribal cultures and economies, and spectacular coastal waters. Grays Harbor communities would take on the risk and oil companies would reap the profits, while Grays Harbor would become a throughway for oil headed elsewhere. There's simply too much risk and too little reward from these proposals.

"Then I say the Earth belongs to each generation during its course, fully and in its own right, no generation can contract debts greater than may be paid during the course of its own existence."

-- *Thomas Jefferson*

Grays Harbor is a site of hemispheric importance to birds. Surrounded by six Important Bird Areas, Grays Harbor is host to hundreds of thousands of resident and migrating birds that rely on this Pacific Coast estuary. Several species protected under the Endangered Species Act are likely to be harmed by these projects, including the marbled murrelet, snowy plover, and streaked horned lark.

"It is our task in our time and in our generation, to hand down undiminished to those who come after us, as was handed down to us by those who went before, the natural wealth and beauty which is ours."

-- *John F. Kennedy*

Recent research by the Washington Department of Fish and Wildlife shows that the Pacific population of the red knot uses the North Bay of Grays Harbor almost exclusively as its one refueling site during its long spring migration from Mexico to breeding grounds in Alaska and beyond. One oil spill could have devastating effects on this species' survival. Furthermore, the cumulative release of toxic chemicals and oil leaks is known to have negative effects on endangered salmon and other small fish upon which birds rely.

"As we peer into society's future, we—you and I, and our government—must avoid the impulse to live only for today, plundering for our own ease and convenience the precious resources of tomorrow. We cannot mortgage the material assets of our grandchildren without risking the loss also of their political

and spiritual heritage. We want democracy to survive for all generations to come, not to become the insolvent phantom of tomorrow."

-- *Dwight D. Eisenhower*

Response GP411-1

Final EIS Chapter 3, Section 3.2, *Air*, has been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analysis predict lower emissions; the updated level of increased risk is not considered significant. Therefore, the Final EIS concludes no potential unavoidable and significant adverse impacts on air quality.

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including impacts on birds and fish.

Comment GP411-2

The alarming safety record of oil trains means an explosive oil train derailment is not a question of if, but when. As you know in the past three years there have been 11 oil train accidents in North America, including the catastrophic derailment of an oil train in Quebec in 2013 that killed 47 people.

Less dramatic but equally concerning are the air pollution, spill risks, and traffic delays oil trains would bring to communities along the rail line, from Aberdeen to Chehalis and all the way to the source of the oil in North Dakota and Canada.

"Do not suffer your good nature, when application is made, to say 'Yes' when you should say 'No'. Remember, it is a public not a private cause that is to be injured or benefited by your choice."

-- *George Washington*

Response GP411-2

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*, which presents a detailed analysis of potential impacts on air quality in the study area related to the proposed action.

Comment GP411-3

There are better ways to meet our energy needs. The State of Washington is rapidly moving away from fossil fuels and toward clean, renewable sources. Building more big infrastructure to transport yesterday's carbon-intensive energy sources is the wrong way to meet today's energy needs, and it's a huge environmental and economic gamble for Grays Harbor. The State of Washington should continue to lead on safe, renewable clean energy solutions and say no to more oil and coal.

"Every man who appreciates the majesty and beauty of the wilderness and of wild life, should strike hands with the farsighted men who wish to preserve our material resources, in the effort to keep our forests and our game beasts, game-birds, and game-fish—indeed, all the living creatures of prairie and woodland and seashore—from wanton destruction. Above all, we should realize that the effort toward this end is essentially a democratic movement."

-- *Theodore Roosevelt*

I support the protection of Grays Harbor, its marine life, and its people, and I urge you to do everything in your power to stop these dirty and dangerous projects by rejecting the proposed Westway and Imperium oil terminals.

"A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise."

-- *Aldo Leopold*

Thank you for your consideration of my comments. Please do NOT add my name to your mailing list. I will learn about future developments on this issue from other sources.

Sincerely,

Christopher Lish
Olema, CA

Response GP411-3

Refer to the Master Response for Purpose and Need of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP412, **Livella, Therese**

Comment GP412-1

My main concern regarding oil by rail is the source of the oil. Weather it be fracked oil from the Bakken oil fields or tar sands oil from Canada, I am vehemently opposed to extracting these volatile substances. I am pretty well versed on many of the issues regarding public safety and water quality.

But when I came across the air quality statistics (or lack there of) in this DEIS, I truly could not believe what I was reading. The DEIS consistently uses low estimates on the amount of crude transported both by rail and by vessel.

Response GP412-1

The Draft EIS analysis assumes transport of the at maximum annual throughput of crude oil under proposed action.

Comment GP412-2

The impact statement downplays the health and safety risk to entire populations along the Columbia River. This is accomplished by only addressing spills, explosions and fires along the PS&P rail way. Populations along the BNSF railway all the way from Spokane to Vancouver up to Longview were not counted as affected areas. I work in both Vancouver and Longview.

Response GP412-2

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

Comment GP412-3

In addition, buried within this DEIS there are plans to build a holding space for trains in Woodland to accommodate the increased rail traffic. My assumption is that these 'trains in waiting' would be idling; causing additional air pollution that was not addressed.

Response GP412-3

The Woodland holding facility, referred to by the commenter, is a planned BNSF capacity enhancement project that is not dependent on the proposed action and would occur under the no-action alternative.

Comment GP412-4

Intentionally, Canadian oil was not included in the assessment, because it is reportedly a small percentage of oil coming through Washington now. But Canadian oil IS coming through now and will CONTINUE in the future, so what are you trying to hide? That is one heck of an omission in the face of the Trans Pacific Partnership trade deal that just received national attention this week.

Response GP412-4

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Mod*eling, refer to the Master Response for Oil Spill Modeling Methods. To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections

4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill.

Comment GP412-5

On page 6-11 table 6.4 indicates that the combined projects will cause an annual increase in rail way green house gas emissions of nearly 8%. That statistic is then minimized by comparing it to project site operation emissions, which only show an increase of less that 1%. Shamefully, the document goes on to state that this is only .00003% of world wide emissions. Do you really think that communities along the BNSF rail way care what the global average is when their exposure is going up so dramatically? Furthermore, I studied that table of numbers for quite a long time and could not recreate the math. That data is sketchy at best.

Response GP412-5

Because greenhouse gas emissions contribute to global climate change, the Draft EIS presents emissions related to operation of the proposed action and offsite transport of crude oil to and from the project site in the context of state, national, and global emissions and reduction targets.

Comment GP412-6

Page 6-8 states that per the Washington Department of Ecology, the air quality assessment in this DEIS is not taking into account the amount of diesel particulate matter because "this regulation only applies to stationary sources, not mobile sources such as rail locomotives. There are no local or state regulations for DPM emissions from mobile sources." This would have been a good place to add research from other state or global sources. Take responsibility for the health and well being of the individuals who pay your salary. We are not numbers or percentage points. We are people who live and work, play and learn near the BNSF rail lines. And we want a real, thorough, and accurate assessment of our air quality risks. Leaving BNSF rail analysis out of the DEIS reduces your air quality face sheets to mere tax payer funded propaganda. In closing, I have one more fact that should go into the public record. On Monday, October 5, I received an invitation from the Washington Environmental Council to participate in the Washington Department of Ecologies public education meeting regarding the Clean Air Rule, currently under development. Would anyone like to guess when that meeting is? It is tonight, October 8 from 6-8 PM. While I do appreciate the invitation, do you think you could coordinate your efforts a bit? Maybe be present at this event and actually LISTEN to the concerns of Washington residents.

Response GP412-6

As stated in Draft EIS Chapter 3, Section 3.2, *Air*, although regulations do not apply to mobile sources such as rail locomotives, an analysis of cancer risk from emissions of diesel particulate matter specific to rail transport related to the proposed action was completed for and presented in the Draft EIS. Draft EIS Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present analyses of cancer risk from emissions of diesel particulate matter related to the proposed action and cumulative projects, respectively. Final EIS Section 3.2 and Section 6.5.1.2 have been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analyses predict lower emissions; the level of increased risk is not considered significant.

Refer to Response to Comment GP412-2 regarding the analysis of impacts along the BNSF rail line.

Comment GP412-7

Even if the oil doesn't catch fire, there are plenty of other dangers from spills. There are air emissions of possibly toxic chemicals, and there are effects on ground water. Contaminants associated with crude oil include pyridine, picoline, and quinoline. These compounds have a very high water solubility, so they would dissolve with any water in the earth, and would move readily to wherever that water is going. Eventually they would contaminate ground water, including the region's aquifer. Damage could be severe and perhaps permanent. There is even a danger in monitoring the amount of volatile gases the cars contain. People have died from trying to monitor gases in their trucks. Some of the explosions happened when trains were going as slow as 33 mph. They could be forced to go even slower, but that is obviously going to impact the communities they go through, making their city streets unavailable for even longer periods of time. As it is, the trains planned to go through those communities will make emergency response unacceptably slow, and will drive down property values on all the affected streets. Please do not allow crude oil from the Bakken fields to pass through Washington State communities on trains. It's too dangerous in the case of a spill, and spills are too difficult to prevent.

Response GP412-7

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP413, **Livella, Therese**

Comment GP413-1

This is from the state of Indiana's web site on pollution prevention. In a previous comment I noted that Washington does not have any state regulations regarding diesel particulate matter. It's about time for that to change. Until those regulations can be made, the permits for Gray's Harbor projects should be denied. Myth: Diesel exhaust doesn't hurt anyone. - Fact: Diesel exhaust contains several chemicals and compounds that may be detrimental to human health. The health effects of diesel exhaust are both acute, from short-term exposure, and chronic, from long-term or repeated exposure. Specific health risks and their severity depend upon the amount of chemical that you are exposed to as well as the duration of the exposure. - An acute exposure to diesel exhaust could cause an irritation of the eyes, nose, throat, and lungs as well as lightheadedness. Chronic exposure to diesel exhaust can have several more severe effects on human health. Chronic exposure is likely to occur when a person works in a field where diesel fuel is used regularly or has repeated exposure to diesel fumes over a long period of time. Human health studies demonstrate a correlation between exposure to diesel exhaust and increased lung cancer rates in occupational settings. Experimental

animal inhalation studies of chronic exposure to diesel exhaust have shown that a range of doses cause varying levels of inflammation and cellular changes in the lungs. Human and laboratory studies have also provided considerable evidence that diesel exhaust is a likely carcinogen. • Please visit the IDEM DieselWise Health Effects Page for more information about the health effects of diesel exhaust. • And here is an excerpt from the IDEM Diesel Wise Health Effects Page. • Who Is At Risk? Individuals may react differently to the same type of exposure. The more sensitive portion of the population is likely to have a stronger reaction than the average healthy person. Children, the elderly, and people with cardiovascular or lung disease, such as emphysema and asthma tend to be more vulnerable to exposure. Who will pay for the increases in health care costs for these individuals? The Imperium DEIS clearly states that the populations along the BNSF rail line were not studied at all. The increase in tax payer funded health care costs needs to be considered. And you need to look each of those residents in the eye and tell them they do not matter. Is the Department of Ecology ready to do that? The more cost effective and morally responsible plan would be to deny the permits for these dirty projects. I have attached a copy of the word document so that you can access the link sited above.

Response GP413-1

As stated in Draft EIS Chapter 3, Section 3.2, *Air*, although regulations do not apply to mobile sources such as rail locomotives, an analysis of cancer risk from emissions of diesel particulate matter specific to rail transport related to the proposed action was completed for and presented in the Draft EIS. Draft EIS Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present analyses of cancer risk from emissions of diesel particulate matter related to the proposed action and cumulative projects, respectively. Final EIS Section 3.2 and Section 6.5.1.2 have been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analyses predict lower emissions; the level of increased risk is not considered significant.

GP414, **Livella, Therese**

Comment GP414-1

This comment has more to do with how the entire Gray's Harbor process has been conducted. I got involved with the Gray's Harbor project when the DEIS came out. Upon reading it, I am outraged that my communities are not included in the study when oil trains will clearly have an impact on our lives. While I may not live near the BNSF rail lines, I spend 8-12 hours a day working in areas that are near them. And I frequent many businesses along the tracks in Vancouver, Woodland and Longview. I have already stopped traveling Amtrak until this oil train nonsense is stopped. How much revenue will local businesses have to loose before they pull out and move elsewhere? I gave public testimony in Aberdeen and I was sorely disappointed in the 2 minute time limit. While I understand your intention was to allow more people the time to speak, it is customary to give 3 minutes. 2 minutes is not enough time to complete a thought. I put a lot of time into making sure my comments would fit into the usual 3 minutes. If you want to give more people the opportunity to speak, have more hearings. I drove all the way from La Center to look you in the eye and make sure that my comments were recorded. When I arrived in Aberdeen I was really excited to go to the open house. However, after seeing that it was just a bunch of slick advertising my stomach turned. Taxpayer funded propaganda is what we got out of this DEIS. It is an incomplete study that taxpayers will continue to pay for, as you read through our comments and prepare a "full" EIS. But

you better believe we the people will be back, spending thousands more volunteer hours to make sure you have done your home work. And finally, I would like to address the way in which you have organized the DEIS document. It sends the reader round and round in loops of frustration trying to get to the point of the research. After a while I realized there is no meat to this DEIS.. Statistics are from other studies but do not really have any bearing on this project. I mostly read the Imperium project because it is the larger of the two. I felt as if I was playing a shell game in Las Vegas. Two years ago I relocated to Southwest Washington from the Midwest. Upon my arrival I heard good things about the Department of Ecology. How the DOE is progressive and moving Washington in the right direction. Well, with documents and slick advertising schemes like this, public opinion may be about to change. I have often found myself wondering why the public is not more actively involved in huge projects like this. I am beginning to understand the vast amount of time it takes to unravel all the treads our government weaves. How does one stop a raging oil train? You read the full documents and you talk to your neighbors. Next time we meet I will introduce you.

Response GP414-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

The time limit for public testimony in the main room was established to allow the greatest number of people to speak given the large turnout. Numerous other opportunities to comment were also available, including the opportunities to provide oral testimony to court reporters in semiprivate areas at the open house and to provide written comments in various formats.

GP415, **Livella, Therese**

Comment GP415-1

I can only assume that the person or persons creating this DEIS ran out of time to study train movement because the document contradicts its self so many times. Here are a few examples. Page 3.0-2 states, “Although the applicant does not have control over offsite transport, implementation of the proposed action would generate rail and vessel trips that could result in environmental impacts along the transportation corridors. For example, increased rail and vessel trips could lead to congestion and related traffic delays, increased noise, and increased air emissions. The transportation corridors that would be affected by offsite transport would vary depending on the commodity being transported, the source of the commodity, and the final destination for delivery.” Based on this lack of information, it was decided only the PS&P rail line would be considered for this study. But alas, if one keeps reading it is stated on page 5-27 “BNSF will likely continue to use the Columbia River Gorge route for loaded oil trains. Empty cars could be transported east via the Stampede Pass or the Columbia River Gorge routes.” So the movement is somewhat predictable, you just elected not to study it.

Page 3.15-28 “Although rail traffic impacts are considered to be low, to further improve safety along the PS&P rail line, PS&P should consider designating a position to plan and coordinate emergency response plans and lead implementation of community awareness programs such as Operation Lifesaver and a See Something Say Something program. Chapter 4, Environmental Health and Safety,

further addresses rail safety mitigation measures". Why are these programs needed for PS&P and not for BNSF? Maybe it is because BNSF is a partner for the Washington Operation Lifesaver program already. I would be interested to know how much money they have contributed to the program. Furthermore, I am interested to know why public education programs focus on how to prevent a train derailment but do nothing to inform the public regarding the dangerous substances transported by rail. My eyes have truly been opened by following this oil by rail issue. Gradually, the public is getting the real education they deserve.

Page 3.15-28 asks, "Would the proposed action have unavoidable and significant adverse impacts on rail traffic? The answer: There would be no unavoidable and significant impacts. Mitigation to address vehicle traffic and safety delay from increased rail traffic is addressed in Section 3.16, Vehicle Traffic and Safety." Once again, this DEIS is limited in its scope. The crude oil does not magically appear on PS&P's doorstep. This document only looks at traffic delays along the PS&P line. Because I am not familiar with the area of impact studied, my comments will focus on the areas I know. Many thousands of people will be impacted in communities such as Spokane, Vancouver, Longview and Woodland. Where are the studies for those areas? Who will pay for upgrades to those crossings? I am aware of at least one major crossing in Longview that would be affected. I believe that study has already been done at taxpayer expense for a different project. It involved replacing or building a bridge. A project that would have cost millions. No wonder this DEIS is limited in scope. The public has already blown the whistle on that tax payer funded bridge. Deny any permit requests for the Westway and Imperium Expansion Projects.

Response GP415-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

GP416, **Livella, Therese**

Comment GP416-1

Hello, my name is Therese Livella, and I'm a resident of Clark County. The DEIS's consistent use of low estimate amount of crude transported by rail and by vessel, the impact statement does not list the health and safety risks of an entire population along the Columbia River. This is accomplished by only spills, explosions and fire along the PS&P Railways.

The population along the BNSF railway all the way to Vancouver, up to Longview were not counted as affected areas. I work in both Vancouver and Longview, so this does affect me.

Response GP416-1

The Draft EIS analysis assumes transport of the maximum annual throughput of crude oil under proposed action.

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

Comment GP416-2

In addition, buried within the DEIS there are plans to build a holding space for trains in Woodland to accommodate increased rail traffic. These trains simply would be idling creating air pollution which was not addressed.

Response GP416-2

The Woodland holding facility is a planned BNSF capacity enhancement project anticipated to occur under the no-action alternative.

Comment GP416-3

Intentionally Canadian oil was not included in this assessment because of reportedly a small percentage of oil coming through Washington now. But Canadian oil is coming through and will continue to in the future.

That is one heck of an omission in the face of a Transpacific Partnership Trade Agreement that received national attention this week.

Response GP416-3

Refer to Response to Comment GP412-12

Comment GP416-4

On pages 6-11, Table 6.4 indicates that the combined projects will cause an annual increase in railway greenhouse gas emission of nearly eight percent. That statistic is minimized by comparing it to project site operation emission, which only show an increase of less than one percent.

Shamefully the document goes on to say this is only .00003 percent of world wide emissions. Do you think that committees along the BNSF Railway care what global averages are? Furthermore, I studied that table for quite a long time and could not recreate the math. That data is sketchy at best.

Thank you.

Response GP416-4

Refer to Response to Comment GP412-15.

GP417, **Longley, A**

Comment GP417-1

The proposed expansions of Westway and Imperium Terminals have many potential adverse environmental effects that must be considered in this EIS. I would just like to point out that in addition to the more local environmental dangers, which are quite serious, both proposed terminal expansions would significantly increase availability and subsequent use of fossil fuels at a time when it is imperative that we all (businesses, individuals, and government agencies) do everything reasonably possible to minimize global climate change. Please consider all of the potential adverse effects of these proposals in your EIS process. Thank you, A Longley, PhD

Response GP417-1

Comment acknowledged.

GP418, **Lucas, Betty**

Comment GP418-1

My comments relate to both the Westway and Imperium Draft EISs. I urge the City of Hoquiam and the WA Dept of Ecology to address:

* The adverse effects on the environment of Grays Harbor

* The health & safety of residents, the impact on the local economy & risk to oceans & coastlines from the crude oil terminals

A major oil spill could devastate the marine life and local jobs & businesses. Oil trains are dirty, and dangerous there has been significant loss of life and devastation from explosions & derailments in recent months/years.

WA state is making progress in more clean & renewable energy sources. Let's not support these dangerous oil trains.

Response GP418-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP419, **Luck, Vickie**

Comment GP419-1

I am for both

Response GP419-1

Comment acknowledged.

GP420, **Lybarger, Lisa**

Comment GP420-1

We do not want more or any oil trains running along the Columbia river!

Response GP420-1

Comment acknowledged.

GP421, **Lyons, Mary**

Comment GP421-1

Thank you for having the hearing. My name is Mary Lyons. I'm a board member of Landowners and Citizens For a Safe Community out of Longview, Washington. As a volunteer coordinator, I work with all kinds of people who are working very hard to support this state economically and environmentally.

The exclusion of the communities along the train route between the Dakotas—North Dakota and Aberdeen, is a real short-sighted vision of what is an environment. It's the old-fashioned picture of an environment is the immediate space around which you can breathe.

Now, I know you're talking about in your study in this EIS you're studying the tracks from—or the train travel from the I-5 basically to here. And it's bizarre for me as a member of a community that's going to be really hard to pay our taxes to the state and to uphold some of the amazing leadership of this state that we're being excluded from this study. With more than 1,000 bomb trains a year going through our community that we're not being considered in this, flaws the study itself.

So if this is not the ecology of our community, what is the ecology? Whose ecology department are you, if you're not ours? What state are you, if you're not ours? And, so, as a community we are appealing and we're urging you to deny this permit based upon the study and impact of the explosive nature of these trains.

Thank you.

Response GP421-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, and Chapter 6, *Cumulative Impacts*, address potential impacts in the extended study area, including the potential for increased risks, individually and cumulatively, respectively. The analysis of impacts in the extended study area is qualitative for the reasons discussed in the Master Response for Geographic Scope of the EIS. Final EIS Chapters 5 and 6 have been revised to clarify the potential impacts in the extended study area.

GP422, **MacLeod, Paul**

Comment GP422-1

Comments submitted to the Dept. of Ecology 10/8/15
Submitted by:
Paul MacLeod
2115 Aberdeen Avenue
Hoquiam, WA 98550-4035
(360) 533-5911

Re: Port of Grays Harbor's two proposed oil projects

1) According to Draft Environmental Impact Statements in Volume 1, Chapter 4 there are **NO** mitigation measures that can be implemented that would totally eliminate the possibility of a large spill, fire or explosion. These would have a huge impact on ground and surface water, plants, animals, aesthetics, recreation, cultural resources, tribal resources, human health and the quality of life for all residents of Grays Harbor County and beyond. Why would the Dept. of Ecology even consider granting permission for these projects when these risks exist?

Response GP422-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP422-2

2) Let us view this as a scenario where a bank makes a loan to buy a house, but in this case the residents here would be making a loan of their environment to the oil companies to transport their products using railroad company facilities. It has been made public that the insurance coverage which would be in effect, should some catastrophe occur, will only cover up to a maximum of about 40% of the damage. A bank would **NOT** make a loan if their collateral was not fully insured. For the Dept. of Ecology (which is here to protect our environment) to give their approval to these projects, in my opinion, would be a gross violation of their responsibility to us, the citizens of Grays Harbor County and beyond.

I am expecting these two concerns to be fully addressed in the Final Environmental Impact Statement and to be notified when this has been done.

Response GP422-2

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP423, **MacLeod, Paul**

Comment GP423-1

My name is Paul MacLeod. I'm a retired treasurer of a local bank. I submitted a hard copy of this with my address and phone number on it. I have two items I'd like to address. According to the DEIS statement, Volume I, chapter 4, there is no mitigation measures that can be implemented that would totally eliminate the possibility of a large spill, fire, or explosion. These would have a huge impact on ground and surface water, plants, animals, aesthetics, recreation, cultural resources, tribal resources, human health, and quality of life for all residents of Grays Harbor County and beyond.

Why is the Department of Ecology considering granting permission for these projects when these risks exist? That's one question.

Response GP423-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP423-2

My second, let's view this as a scenario where a bank makes a loan to buy a house, but in this case the residents here would be making available the bulk of our environment to the oil companies to transport their products to using the oil companies' facilities.

It has been made public that insurance coverage, which would be in effect should some catastrophe, will only cover up to a maximum 40 percent of the damage. A bank would not make a loan if their collateral was not fully insured.

For the Department of Ecology, which is here to protect our environment, to give their approval to these projects in my opinion would be a gross violation of the responsibility to us, the citizens of Grays Harbor and beyond. I'm expecting these two concerns to be fully addressed in the final EIS, and to be notified and addressed.

Thank you.

Response GP423-2

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP424, **Majar, Mary Ann**

Comment GP424-1

I strongly oppose shipping crude oil from the Port of Grays Harbor. The environmental risks so close to places like the Gateway Mall, an active fishery, and the National Bird Sanctuary does not make sense. The threat to our estuary, beaches, fishery, shore birds, and the local economy is simply not worth the risks involved for encouraging the extraction and shipment of bakken crude or other fossil fuels. Bio diesel is already shipped from our port and presents too great of a risk already given the seismic nature and sensitivity of this area. Please deny permits to move forward with these projects.

Response GP424-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP425, **Mallard, Tom**

Comment GP425-1

A key issue to me is tsunami-safe oil & gas tank storage, regardless of where along the coast, and in Puget Sound north to the Inside Passage. Studying simulations of when the M9 plate-boundary earthquake hits and a single release noting the 2011 was a series of 5 releases. The water shoved into the Straits of Juan de Fuca or up any bay, estuary or river will continue flowing in for 2-3 hours from the lessons of March 11, 2011, the Straits take a full hour for the leading edge to get to where the sound starts since it's shallow and narrow. With multiple releases it triples that inflow time to fill the entire inland waterway with 10m up to 50ft above sea-level. This town Kesennuma is placed in a flooded bay very similar to Puget Sound, it was the largest fishing city in the country and 1/3 of industry was destroyed by the fires that survived the tsunami as structures. There were 7 tsunamis in Kesennuma, the 5 major shocks within minutes along the plate a reason damage was so bad and for multiple tsunamis that don't drain for over a day, this happened at other harbors. The 2007 NOAA simulation of a local M7.3 shows Harbor Island's tanks gone and that spread SE along the waterfront, the debris prevents these fires from being put out easily, with city damage resources are

few, infrastructure damaged or gone, a vignette in the video. On the Columbia River tanks are just sitting ducks, their plan to move them is 50-years and sea-level rise is adding plate-boundary stress, having the Japan release allowed the Pacific Plate to move over ten meters & it accelerated, earthquake activity jumped after that release and has not fallen off much, a M7 occurred two weeks ago near Fukushima. All this creates a "tension" wave tectonically for our end of the Pacific Plate that will encourage a release when it arrives, takes about 3-5 years it's not a long-term situation now ... odds are sooner than later. This is a good summary video of exactly what will happen, how surge height goes a lot higher in confined bays, tanks floating by, the fires started late the first night: 17:03; youtube.com/watch?v=6xOFNgpLzVE Force the tanks be moved by demanding insurance, liability for any deaths due to fires from their products & specialty fire-fighting equipment that works after a tsunami, they have no right to risk the damage without insuring losses on the table with fire-fighting crews trained & equipment in place. Otherwise disallow any more fuel to be put in them and when empty remove them, don't wait for them to do it if you love the people affected, just pay for it wisdom. A mayor of one fishing village held out for a 20m wall, it saved their village. Finally, I have design work on using transducers on the bottom miles at sea to reduce surge height, an automatic system, there is no way to save as many lives per dollar and it applies to any risk area on the planet.

[Tsunami diagram reviewed but not reproduced.]

Response GP425-1

Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Earthquakes and Related Hazards*, describes the potential impacts on the proposed facility in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events.

GP426, **Mann, Cherri**

Comment GP426-1

I'm Cherri Mann from Port Townsend, and I am speaking in care (inaudible). Thank you for the opportunity to speak before you today. I do value your time.

But I would like to talk about justice for our planet and for the people who share our resources. Clean air, water, and energy sources, and sustainability for these resources is an important job when you consider this proposal.

I grew up in Longview, Washington along the Columbia River and it is a very sacred river to me. When you consider this proposal, there is a new paradigm ship out there. We must include local, regional, national, and now global effects resulting from our decision-making policies.

I want to address the most important concern, that is a train wreck that would create an aftermath costing possible lives and devastation to wildlife. But I will leave those details to the scientists who do report to. But here are my grave concerns. I'm going really fast.

The outdated transportation system and the infrastructure of our railroad system, I'm concerned about the lack of transparency dealing with the routes, number of cars, contaminants carried on

them, how can we adequately provide vital and emergency services to potential explosions, derailments. Furthermore, who is going to pay for this?

The Seattle Times right here, and I encourage all of you to get it, it has a story, and the story is this. Just a couple weeks ago, Oil Trains Surge Raises Risks; Patchwork Preparedness in U.S. Cities Survey Finds. And I don't know if you have a copy of that but I'd be happy to provide that.

Second concern. Really, the Columbia Gorge -- is that it?

Response GP426-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP427, **Mann, Cherri (350.ORG)**

Comment GP427-1

RECEIVED OCT 1 2015

Cherri L. Mann

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Port Townsend,

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October 1, 2015

Thank you for this opportunity to speak about this very important proposal before us today. Last week I attended the Moral Action on Climate Change events held in Washington D.C. in support of the Pope's visit and his comments dealing with the moral issues facing everyone on this planet dealing with climate change and the rising temperatures. We need and we will shift our paradigm in regards to how we look at fossil fuels. More specifically, we need to look at the decision-making model that includes both environmental justice and social justice components. Yes, justice for our planet and for the people who share our resources...clean air, water, energy sources, food . . . sustainability of these resources and yes, jobs.

I grew up in Longview, Washington...on the banks of the Mighty Columbia River! The river is sacred to me...knowing its importance in our region! It is a place where we had church and school

picnics...my father fished there...smelt came up the Columbia into the Cowlitz River...I learned to water ski during high school off the sandy shores ...and yes, it was a place for naughty teens to have fun, innocent parties!

And, yes, it created jobs for our local economy. I totally understand the urgency and potential opportunity for the Gray's Harbor community to embrace and welcome 84 new jobs ...I understand that! My father was an iron worker and his jobs were building dams, bridges...jobs are essential to communities. BUT...

When you consider this proposal, in this new paradigm shift, we must include local, regional, national and global affects resulting from our decision-making policies.

I want to address the most important concern I have which is shared with anyone living along the Columbia River. What if...yes, I could list all the train wrecks with lethal contaminants that have cost millions in correcting the results in the aftermath...or the cost of human lives and devastation to wildlife but I will leave this to the scientific reports.

Here are my grave concerns:

The outdated transportation system, infrastructure of our railroad system. I am concerned about the lack of "transparency" dealing with the routes, number of cars, what contaminants are carried in them. How can we adequately provide vital emergency services to potential explosions? Derailments...furthermore, who is going to pay for this? The Seattle Times recently had an article about this very concern. Enough is enough…we need to put a moratorium on the number of contaminants (coal and oil...and other deadly cargo) until we get a handle on public safety.

Response GP427-1

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Final EIS Chapter 4, Environmental Health and Safety, has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures proposed to reduce risks. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

The approach to the risk analysis is to consider different potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, Environmental Health and Safety, this is because a

spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations (refer to the Master Response for Risk Assessment Methods) and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill. Final EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* reflects additional information on the economic and social costs of oil spills. This includes information on derailments and other accidents involving trains carrying crude oil and information on a crude oil spill during marine transport.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP427-2

Second Concern: Really, really...The Columbia Gorge Scenic Byway!!!! Scenic means tourism, it means something special, something we must take care of in order to fully enjoy. What about those salmon runs! One spill could cost millions in years of lost salmon. I envision a salmon trying to make its way up the fish ladder after a spill. Of course, we all know that our river and its fish and wildlife would be dead. No, we will fight to keep the Columbia Gorge free from this proposal...the largest proposal for a terminal in the US.!!!! Twenty-five million gallons of Bakken crude oil...???

You must take into consideration the impact of sending crude oil through our states only to be a financial gain for industry seeking to make a profit off of our natural resource...the Columbia River! The daily threat is incomprehensible! Unimaginable!

Response GP427-2

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

Comment GP427-3

I want to remind you that our Native Nations...The Quinault, Makah, the Warm Springs, Celilo (sea-lie-low) Falls, Yakima Nation, Umatilla Nation...our sovereign peoples who have under our US constitution the right to their lands and resources. Under the Boldt decision, they have fishing rights which are the bases of their economy.

Response GP427-3

Draft EIS Chapter 3, Section 3.12, *Tribal Resources*, addresses potential impacts on tribal resources from construction and routine operation of the proposed action. Draft EIS Chapter 4, Section 4.7, *Impacts on Resources*, identifies potential impacts on tribal resources from oil spills, fires, and explosions.

Comment GP427-4

And private investors who have nothing to do with the health of our natural resources here in the Pacific NW, want to build the largest oil export on the Columbia River and the largest coal terminal

at Cherry Point on ancestral lands of the Lummi Nation...changing our states forever!? Toxic materials going to Asia where increased gas house emissions will continue to rise...causing catastrophic consequences world wide - creating both environmental and social injustices locally, regionally, nationally and globally.

I stand in total support and solidarity with our Native Peoples and their desire to take only what they need to survive and to respect "Mother Earth". Our white European ancestry of consumption must include giving up our dependence on fossil fuels.

Response GP427-4

Refer to the Master Response for Purpose and Focus of the EIS.

Comment GP427-5

What about our small communities along the pathway of increased shipments of crude oil...toxic, deadly. Noise pollution, traffic interruption, and possible spills. There is a small town in Washington along the Salish Sea, Bow, Washington. Its residents have for years and years fought to have the train whistles that sound off at four, train crossings, creating 200 blasts every day! They are in litigation...and now are faced with spending tens of thousands of their own money in order to mitigate the effects of increased number of trains...are there no limits? Are communities taken into consideration?

Response GP427-5

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

Comment GP427-6

In the mid-80's there was an oil spill in Port Angeles. Anyone in making decisions about crude oil should be made to go to these sites of disaster to clean up birds! There are no words to describe walking into the makeshift local high school, with experts flown in...transportation costs out of their pocket...to help guide through the process of trying to clean up the waterfowl. So many died...our birds, salmon, wildlife...they don't cope with these dangers. They just die...

I truly believe that the Pope's message to congress and to the United Nations is the start of global conversation starting with the sentence, "Will this decision greatly impact the continuance and reliance on fossil fuels and is it necessary...and will environmental and social justice be served and embraced locally, regionally, nationally and globally? The range of criteria for making critical decisions has grown exponentially as well as the possible results, consequences of those decisions.

Again, personal financial gain for private enterprise and 84 jobs do not in any way offset the thousands of negative consequences. Do not let this go forward!!!

Response GP427-6

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. This includes the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. However, as noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

GP428, **Marks, Griffith**

Comment GP428-1

Hello, my name is Griffin Marks, and I'm a resident of Central Park, and at my house, we can walk down to the tracks, and it doesn't take very long, and we see how fast the trains go even though they say they're not going that fast, and it scares me that one will eventually crash, but making -- but doing oil trains like this, I believe is not fair for many people because I love to fish. And pretty soon we're going to start trapping as well as a side business, and I believe that it could destroy huge fish populations and destroy jobs for commercial fishermen, crabbers, and charter boat captains.

And, therefore, this is taking away many more of the jobs that they are trying to make people believe they will give.

And also I believe that for professional hunters and trappers, it would be terrible for their business, and then they would be forced to find other jobs, and they will find difficulty trying to supply food and money to their families.

And lastly, other kids who I am trying to get to learn how amazing fishing is will not be able to learn and will not be -- and then not very many people will be able to have fun and then we will have to buy our salmon for even more expensive than it already is. Thank you. Griffin Marks, ten years old.

Response GP428-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. This includes the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. However, as noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7,

Impacts on Resources, describes the types of impacts that could result from an oil spill, fire, or explosion.

GP429, **Maron-Oliver, Dani**

Comment GP429-1

Name: Dani Maron-Oliver
Organization: Longview Land Owner. Citizen for a Safe Community
City/ State/ Zip: Longview, WA 98632

Crude oil delivered by train, transported by sea stored in a very dangerous commodity. Oil spills. Resultant fires & explosions are a scary health hazard to all who live along rail areas, which are extensive for WA all along the railways. Emergency health personnel are not even trained in providing assistance to those injured in the most horrible way by fire & burning oil.

Trains are still unsafe. Tracks are way below safe standards sea vessels can have too often spilled in waterways esp. the Columbia River polluting the rivers killing fish preventing recreation (least but still important)

Pollution the rivers killing fish preventing recreation (least but still important).

I am an RN & have personally seen the effects of horribly burned people.

The fuels also prevent a hazard to the air & cause or exacerbate respiratory problems for all, but especially the very young & the elderly.

I implore you to consider safer, cleaner increases of job worthy sources of energy such as solar wind and wind turbines.

Response GP429-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. This includes the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. However, as noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

GP430, **Marthaller, John**

Comment GP430-1

Considering the economic impact of oil development in North Dakotas Bakken; I think the oil storage facilities should be expanded as requested. The economic benefits of the Bakken have

spread from Coast to Coast across America. It should not be blocked from the citizens of Washington State because of the wishes of a loud minority who wants to push civilization back to the pre-fire days.

Response GP430-1

Comment acknowledged.

GP431, **Martin, Arnie**

Comment GP431-1

Quoting from the Vancouver Hearing Examiner's decision of 6 Oct 2015 on the Proposed NuStar project, page 26 of 31

WAC 197-11-794, Significant

(1) "Significant" as used in SEPA means a reasonable likelihood of more than a moderate adverse impact on environmental quality.

(2) Significance involves context and intensity (WAC 197-11-330) and does not lend itself to a formula or quantifiable test. The context may vary with the physical setting. Intensity depends on the magnitude and duration of an impact.

The severity of an impact should be weighed along with the likelihood of its occurrence. An impact may be significant if its chance of occurrence is not great, but the resulting environmental impact would be severe if it occurred.

(3) WAC 197-11-330 specifies a process, including criteria and procedures, for determining whether a proposal is likely to have a significant adverse environmental impact.

End of quote.

Mr. Shay, there are many statements of significance in these DEIS documents. Exercise your authority under this legal interpretation, and deny all permits for these projects.

Arnie Martin
631 Chenault Ave
Hoquiam, WA 98550

Response GP431-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP432, **Martin, Arnie**

Comment GP432-1

(S-7) Greenhouse Gases

It is totally deceptive to include the percentage of the Washington State 2050 Greenhouse Gas target generated during the rail transport of the crude oil from Centralia to Hoquiam, and in the vessel transport from Hoquiam to the 3-mile limit. This is a striking example of how self-serving these DEIS's are. If the GreenHouse Gas resulting from combustion is not factored in, at least showing the total transportation GHG's would be slightly more factual.

Response GP432-1

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively, in the context of emission inventories and reduction goals. The Final EIS has been updated to include estimated emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

GP433, **Martin, Arnie**

Comment GP433-1

Soil Liquefaction Imperium DEIS section 2.1.4.1

This section states that the piles supporting each of the tanks will be driven 75 feet into the 120 foot deep unconsolidated dredge spoils, and then filled with grout. When unconsolidated soils are shaken, soil liquefaction will occur, and the shaking will be magnified due to resonance.

I would like to remind you that the site is approximately 50 miles from the Cascadia Subduction zone. In the event of a complete full fault rupture, the length of time that the earth would shake can be estimated from the 1964 Alaskan Good Friday quake - approximately 4 minutes.

The designs for the Imperium tank supports are to be similar to the supports for their existing smaller and shorter biodiesel tanks. Placing 26 million pounds of tank, tank pad, and crude oil on top of many 75 foot long pilings (columns) which require lateral support from the soil when the tank is being flung from side to side, on a site where the soil will liquefy during a major quake, it does not seem like you have chosen your site properly.

Similar numbers for the Westway tanks, with approximately 54 million pounds of tank, tank pad, and crude oil on top of pilings extending 120 feet above the consolidated sediments, also seems like a poor choice of site to minimize earthquake damage.

Aside from removing the dredge spoils and replacing them with packed soil, there is no way to lessen the liquefaction potential of these sites. Of course you might try freezing the soil under the tanks, and keeping it frozen for the next 40 years. I suggest that not building these projects would be the proper solution.

Arnie Martin
631 Chenault Ave.
Hoquiam, WA 98550

Response GP433-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

GP434, **Martin, Arnie**

Comment GP434-1

Arnie Martin, Hoquiam, Washington, Grays Harbor County. My comments pertain to both Westway and Imperium. I am a resident of Hoquiam and volunteer at the Grays Harbor National Wildlife Refuge, leading school children to Bowerman Basin to see the amazing annual migration of shorebirds. The mud flats of the basin are a major feeding stop for fuel on the final leg of their journey to their breeding grounds in the arctic.

We try to stage the trips at the best viewing times relative to the high and low tides, but sometimes the basin is totally flooded. Other times hundreds of acres of mud flats are exposed and you can see the birds madly feeding.

I am commenting on the Volume 3, Appendix N, Oil Spill modeling using NOAA's GNOME program. You consider varying oil spill sizes, river flow rates, and wind directions to predict the spill path and the location where a spill would meet the shoreline. The model does not, however, use the changing levels as a factor.

The tidal draining and filling of the basin acts like a pump. The rising tides would bring spilled oil into the basin, oiling the entire mud flat, not just the shoreline depicted in the study. The Geographic Response Plan's proposed booming of the basin proposed anchoring the boom using the former rail pilings, however that is impossible as the pilings are rotted.

The refuge cannot be restored if it is oiled. The shorebirds would not be able to complete their migration to their Alaskan breeding grounds without their food from the mud flats. There would be no new birds.

I strongly urge you to reject these proposals since there is nothing that can prevent oiling of the mud flats in the event of a spill. It's not an oil skimming basin, it's a Federal Wildlife Refuge. Thank you.

Response GP434-1

The Northwest Area Contingency Plan and geographic response plans are maintained by Washington State Department of Ecology. Comments on these plans can be submitted at this website: www.rrt10nwac.com/comment/default.aspx. It is outside the scope of this Draft EIS to update these plans.

Draft EIS Chapter 4, Section 4.7, Impacts on Resources, discusses impacts on avian species and other animals from oil spills, fires, and explosions.

Refer to the Master Response for Oil Spill Modeling Methods. Plants and Animals; Oil Spills, Fires, and Explosions.

GP435, **Martin, Arnie**

Comment GP435-1

Again, my name is Arnie Martin. I live in Hoquiam. My comment relates to both projects, Oil Spill Financial Responsibility, Section 4.4.3.1. That section states, and I quote, Prior to beginning the proposed operations, the applicant will conduct a study to identify appropriate level of financial responsibility for the potential cost for responsive clean-up of oil spills, natural resource damages, and costs to state and affected counties and cities for their response actions, unquote.

This says to me the applicant can begin building the project, but before putting equipment into operation, they can decide what they think is an appropriate level of financial responsibility.

After that, the Department of Ecology determines whether the level of financial responsibility meets the legal requirements.

If the applicant agrees, then they can begin operating. What if the applicant cannot meet Ecology's requirements? Are they allowed to negotiate for a lower amount? Do they have to sell the already-built terminal to somebody else?

The financial responsibility requirement should be decided prior to the start of construction. It wasn't, and the rights to the facility proposed by Imperium was actually constructed by a company which bought the rights from the renewable energy group, and the new company lacked the resources of Westway or Renewable Energy Group, we could be left with a facility which at the current price of crude oil would only be profitable if sold at a loss and operated by some other company without the necessary resources to operate safely.

I ask you to revise the financial responsibilities section to assure that the applicant has the necessary resources prior to the start of construction. Thank you.

Response GP435-1

Under the proposed mitigation measure, demonstration of financial responsibility by the applicant would be made before operations can begin. For additional information about responsibilities in the event of a spill, refer to the Master Response for Liability and Responsibility for Incidents.

GP436, **Martin, Meredith**

Comment GP436-1

I live in the Columbia River Gorge (Hood River). I spend a lot of time windsurfing in the Columbia and biking on both the Oregon and Washington sides of the river. I am very worried about oil trains going through the Gorge. It seems like if there was ever an accident, it would be absolutely catastrophic. Although I know they it happens infrequently, if even one car or one train crashed or leaked, it could ruin the area I live in. Oil in the water would kill the wildlife and cancel windsurfing indefinitely. A spill or explosion near the little towns here would effect everyone. Please say no to the proposed Westway and Imperium oil terminals. We need to be thinking about cleaner energy, not transporting dirty oil via rail through scenic and sensitive areas.

Response GP436-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

GP437, **Mascarenas, David**

Comment GP437-1

My name is David Mascarenas. I'm from Everett, Washington, Snohomish County and Westport, Grays Harbor County. 0034

First of all, I object to the two-minute time limit. This issue is just too important to restrict taxpayers on this issue.

Response GP437-1

The time limit for public testimony in the main room was established to allow the greatest number of people to speak given the large turnout. Numerous other opportunities to comment were also available, including the opportunities to provide oral testimony to court reporters in semi-private areas at the open house and to provide written comments in various formats.

Comment GP437-2

Now you've already heard enough at these hearings that this is a bad proposal. No one gains from this but some oil companies who will make billions of dollars. We all get to take the risk of what's going to happen.

Now, NOAA came out last week with yet another survey that says low levels of oil from Alaska from Valdez is still affecting salmon here. And that just came up last week.

Denny Heck, Congressman, is introducing a bill called Puget Sound SOS to try to get federal dollars to help clean up Puget Sound, and federal agencies that cooperate with the State agencies to clean it up.

So it's a no brainer that we would once yet take another chance for fictitious jobs that we know are not going to be there. It's just not the risk. And you've all heard enough about the opposition to this thing. It's a bummer, folks. Just tell these guys no. If you want to have on oil factory wherever (inaudible), process it back there. Process it back there. Don't ship it out to us and have us take the risk and you sit back and make the millions. It's stupid. So please just say no. You've heard enough. Thank you so much. Good luck.

Response GP437-2

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP438, **Mascarenas, David**

Comment GP438-1

My name is David Mascarenas, Everett, Washington, Snohomish County. I object to the two-minute time limit. It's just not enough time for this important issue.

And the next thing is on this piece of literature, questions and answers, last page, who's responsible for cleanup and cost for a spill? Generally, responsible party for the spill pays for costs and damages.

As we all know, the spills and the fires have been happening on trains back East. The railroads and the parties simply declare bankruptcy and walk away, and they leave the burden for the cleanup to the local communities and to the taxpayers, and then these people simply turn around and they go to another county or down the road, and they start another corporation doing the same damn thing.

I think we are more enlightened in the state of Washington. I think the Ecology is more enlightened than most states. So I would ask you to make it $100 million performance bond of both these corporations to ecology. A nonrefundable $100 million performance bond to pay immediately for the cleanup that is going to fall to the Coast Guard, Ecology, and the citizens. So let's not let them declare bankruptcy and walk out of town.

Thank you.

Response GP438-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP439, **Mather, Linda**

Comment GP439-1

Good afternoon. My name is Linda Mather, and I live in Vancouver. I live within a two-mile blast zone of the tracks that would carry oil to Hoquiam and Grays Harbor. I object to the fact that the environmental impact statement does not include that area -- does not include the area below Centralia, all the way down through Vancouver and up the Columbia River through Washougal.

There are incredible amounts of people, environmental concerns along that area. And I think they should be considered. Please deny these permits for oil trains and terminals to this area. Thank you.

Response GP439-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, and Chapter 6, *Cumulative Impacts*, address potential impacts in the extended study area, including the potential for increased risks, individually and cumulatively, respectively. The analysis of impacts in the extended study area is qualitative for the reasons discussed in the Master Response for Geographic Scope of the EIS. Final EIS Chapters 5 and 6 have been revised to clarify the potential impacts in the extended study area.

GP440, **Mayton, Leona**

Comment GP440-1

I, Robin Moore, am submitting this comment on behalf of a friend who does not have internet and cannot come to the hearings.

ATTACHMENT:

I am a 98 year old widow. I have lived in the same house for nearly 70 years. It is within two blocks of the tracks. I have seen the parked tanker cars and can see that they are old and rusty. I can live with the noise from train whistles. I don't even notice it anymore. I am most concerned with the trains coming through a populated area. I would be bothered by the smell. What will it do to our foliage and flowers? Will vegetables from neighborhood gardens be edible? Will we be able to hang our clothes out to dry?

I also have noticed more empty houses in the neighborhood. Houses don't sell. We have had more crime. Will these projects cause more "creeping decay"?

Response GP440-1

Draft EIS Chapter 3, Section 3.2, *Air*, describes potential impacts on air quality from construction and operation of the proposed action. Final EIS Section 3.2 reflects the addition of a discussion of potential impacts related to odor. The only compound with sufficient emissions to have the potential to have a perceptible odor is hydrogen sulfide. The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, are expected to reduce emissions of air pollutants, including hydrogen sulfide, to below the odor threshold for the most sensitive individual.

Draft EIS Chapter 3, Section 3.4, *Plants*, describes potential impacts on air quality from construction and operation of the proposed action. Final EIS Section 3.4 reflects the addition of a discussion of the potential for impacts on plants as a result of emissions from onsite operation or offsite transport; potential impacts would not be significant.

GP441, **McCarthy, Sally**

Comment GP441-1

Name: Sally McCarthy
City/ State/Zip: Aberdeen, WA 98520

Crude oil by rail will never be safe for this community The risks to the environment and community far outweigh the benefit that increased commerce could bring.

I do not believe the risk of even a minor oil spill can be condoned.

Response GP441-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP442, **McCrummen, JB**

Comment GP442-1

FAILURE OF DRAFT EIS; CALL FOR REJECTION DRAFT EIS AS WELL AS PROPOSED EXPANSION

The Draft EIS on the expansion of bulk liquid storage terminals (petroleum, other flammable and/or toxic liquids by Westway Terminal Company LLC and Imperium Terminal Services and located at the Port of Grays Harbor Terminal 1 is filled with misleading as well as erroneous information, missing analyses, a lack of known analytical methodology for both draft EIS and final EIS documents, artificial "boundaries" that purposely limit comments or facts about the impacts of oil trains to just Grays Harbor county, and does not address macro environmental as well as economic impacts of the proposed expansions due to the fossil fuels.

Based on the above summary, it is clear from the Draft EIS that the preparing firm and its employees and consultants have a bias toward Westway and Imperium. The Draft EIS not only violates rules and regulations governing the preparation of both a draft and final EIS, but was completed by an unqualified firm, if not a firm influenced by Westway, Imperium, and other fossil fuel companies or trade associations.

Therefore, the entire Draft EIS must be rejected as faulty and therefore, the proposed expansion rejected.

If, instead Hoquiam and DOE decide not to reject the project, then a new Draft EIS must be completed and by a different professional, non-biased firm, at the expense of the proposing companies. Neither Westway nor Imperium can be involved in the selection of a different firm or in the preparation of the new Draft EIS.

Response GP442-1

The commenter does not provide sufficient details to allow for response. Refer to responses to more specific comments below.

Comment GP442-2

I am submitting additional comments to illustrate the appalling nature of the Draft EIS.

<u>Comment Section: Draft EIS- Westway & Imperium Proposed Bulk Liquid Storage Terminals</u>

As noted in my introductory comments, I am calling on the Department of Ecology and City of Hoquiam to reject both the Draft EIS and the proposed expansion of oil and other petroleum products by Westway & Imperium. The Draft EIS does not meet the minimum legal standards of the required EIS nor does it meet the objectives outlined on the DOE Comment Web Page that states the Draft EIS must "identify existing environmental conditions, potential impacts on the environment and community, and mitigation measures to reduce or avoid the potential impacts."

The Draft EIS is prejudicial, non-responsive, and does not address analysis of critical impacts of the proposed expansion. As a result, the Draft EIS does not fully complete a Draft EIS, especially on critical strategies to avoid or mitigate environmental accidents or disasters, including:

OIL TRAINS AND TANK CARS

* The terminals would be fed by about sixteen loaded oil train deliveries every week (on average more than two per day) with more than 5 million gallons of oil daily (one barrel = 42 gallons) per day.

* The tank cars cannot be made crashworthy. Non-yard oil train derailment spills will occur, as outlined in recent studies focused on the Columbia River rail line. An oil spill would have significant and adverse impacts that cannot be prevented or mitigated. At best only 14% of the oil is recovered in a spill. Crude oil contains benzene which cannot be recovered from the water. The Draft EIS does not address this topic.

Response GP442-2

Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport,* presents the analysis of risk of oil spills, fires, and explosions from rail transport related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Section 4.5.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident along the PS&P rail line. Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including a discussion of the potential longer-term impacts. Final EIS Section 4.3, *Risk Considerations,* reflects additional information about factors influencing cleanup.

Comment GP442-3

* The oil vapor pressure cannot be lowered enough to prevent ignition. When tank cars are punctured during a derailment, gases rush out and find a spark. Non-yard derailment spills usually lead to fire. Oil train fires are likely to cause burns, deaths, and property damage. Burns, deaths, and property damage are significant adverse impacts that cannot be prevented or mitigated. The Draft EIS does not address this topic.

Response GP442-3

Draft EIS Chapter 4, Section 4.5.2.2, *Fires or Explosions*, addresses potential risks related to fires or explosions associated with rail transport under the proposed action. Section 4.7, *Impacts on Resources*, describes potential impacts of fires and explosion.

Comment GP442-4

* Until all the tank cars have thermal jackets and high capacity pressure relief valves, tank cars sitting in a pool fire, are likely to explode. Firefighters cannot protect the public in those cases. Oil train explosions will be impossible to prevent for nearly a decade. The Draft EIS does not address this topic.

Response GP442-4

Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport,* discloses voluntary measures and design features, applicant mitigation, and other measures that would further reduce

environmental health and safety impacts from rail transport related to the proposed action, in addition to regulatory compliance and best practices. To the extent possible, within the framework outlined in the Master Response for Mitigation Framework, measures addressing the need for more coordinated and focused planning include the role of the applicant as appropriate. However, as noted, no risks can be eliminated and, depending on the circumstances, significant impacts could occur.

Comment GP442-5

* Oil trains block traffic. They interfere with commerce, emergency response and school buses. The adverse impacts will be significant. These impacts cannot be mitigated. The Draft EIS does not address this topic.

Response GP442-5

Draft EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, addresses potential impacts on vehicle delay and emergency vehicle access. The Final EIS section clarifies mitigation and potential significant and unavoidable impacts.

Comment GP442-6

IMPACT ON CLIMATE CHANGE & AIR POLLUTION

* The proposed oil terminals will lead to a net increase of greenhouse gas emissions. The net global oil production could increase. This is additive. This is not simply replacing one oil source for another. The increases cannot be mitigated. The Draft EIS does not address this topic.

Response GP442-6

Refer to Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources and for information on the likely destinations of crude oil shipped through the proposed facilities.

Comment GP442-7

DRAMATIC IMPACT ON RIVERS, FORESTS, COMMUNITIES, AND GRAYS HARBOR

* Increased train traffic of at least 16 more oil trains per week. With increased oil trains there will be an increase in the risks of oil train derailments and oil spills into the Chehalis River, Grays Harbor, (and of course the Columbia, Snake, and other rivers “outside” of the artificial boundary of the Draft EIS) and local communities near the rail trains. The increases cannot be mitigated. The Draft EIS does not address this topic.

Response GP442-7

Refer to Response to Comment GP442-2.

Comment GP442-8

Lower property values- residential, commercial, forest, with increased human diseases. The Draft EIS does not provide a fair and balanced economic analysis (that is, an accepted methodology for economic impacts) of the proposed impacts on property values along the rail line, from oil spills, conversion of the Grays Harbor diversified economy to an "oil economy", increased pollution and the increased illness due to the oil pollution, nor the impact on human health and animal life along the rail line. The topics cannot be mitigated. The Draft EIS does not address this topic. The Draft EIS does not address this topic.

Response GP442-8

Final EIS Section 4.7, *Impacts on Resources*, has been revised to more fully describe potential human health impacts. Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Draft EIS Chapter 3, Section 3.2, *Air*, presents potential impacts on the proposed action on air, including an analysis of cancer risk from emissions of diesel particulate matter related to rail transport in the study area. The Final EIS has been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analysis predicts lower emissions; the level of increased risk is not considered significant.

Comment GP442-9

* The Cost of Emergency Preparedness in all rail communities. NTSB says emergency response planning along the rail routes is "practically nonexistent". The Draft EIS does not address this topic.

Response GP442-9

Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for additional information about the analysis of emergency planning and response capabilities in the study area. For more information about the analysis of potential impacts on the BNSF main line, refer to the Master Response for the Geographic Scope of the EIS.

Comment GP442-10

* Spill Cleanup delays. For example, it took decades for the spill to be cleaned up in the town of Skykomish, WA. The Draft EIS does not address this topic.

Response GP442-10

Comment acknowledged.

Comment GP442-11

* Grays Harbor. A single major spill could devastate the area's maritime economy, productive fisheries, tribal treaty rights and spectacular coastal waters.

Response GP442-11

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action.

Comment GP442-12

The twelve mile long Grays Harbor shipping channel is narrow, shallow, subject to strong currents and has limited staging area for ships and tugs.

Response GP442-12

State-licensed pilots work with the U.S. Coast Guard to avoid any risks associated with vessel transits during periods of poor weather and/or sea state conditions. Refer to Final EIS Chapter 3, Section 3.17.4.4, *Vessel Traffic Management*.

Comment GP442-13

If both terminals were expanded, 638 tankers and barges of oil would need to twice traverse Grays Harbor every year for a minimum of 1276 trips per year. Of course, there could be more trips.

Response GP442-13

As described in Draft EIS Chapter 3, Section 3.17, *Vessel Traffic*, the proposed action would result in a maximum of 238 vessel transits under maximum throughput operations; half of these trips would be laden vessels. As described in Chapter 6, *Cumulative Impacts*, the cumulative projects—the proposed action, the REG (formerly Imperium Terminal Services) Expansion Project, and Grays Harbor Rail Terminal Project —would add 758 trips.

Comment GP442-14

There is no analysis of the possibility of future dredging the channel and the impact on wildlife, fisheries, and the disposal of the dredged materials.

Response GP442-14

The proposed action would not require dredging or deepening of the navigation channel to accommodate proposed vessel traffic.

Comment GP442-15

The Draft EIS analysis of the impact on the Chehalis River, particularly as it moves into the Grays Harbor, is completely faulty-since it does not use data from the Chehalis River and Grays Harbor.

Response GP442-15

Refer to the Master Response for Oil Spill Modeling Methods.

Comment GP442-16

The Draft EIS does not address these topics.

* Transition to Green Energy Economy – not included due to bias by Draft EIS Preparer(s)

Governor Inslee has signed an executive order to reduce carbon emissions in Washington. The proposed expansion would violate that Executive Order.

The Draft EIS purports to provide an economic analysis of the proposed expansion and the value to the local economy. This analysis is clearly bias toward fossil fuels and this expansion, without providing an objective economic analysis, including negative impacts of the proposed expansion and alternatives in the Green Economy-like manufacturing products for the conversion to green energy resources. Of course, the State of Washington provides significant incentives for green economy employers-like for solar component manufacturing.

The Draft EIS does not address these topics.

SUMMARY

In summary, the above points are just a few of the inadequacies of the Draft EIS. They illustrate the unprofessional bias and misconduct of the preparers of the document including a bias toward fossil fuels and prejudice against local communities.

The Draft EIS must be rejected as must the proposed expansion. If DOE and Hoquiam don't reject the project on its face and based on the inadequacy of the Draft EIS, then a new Draft EIS by a different, professional and objective organization must be completed.

As Submitted by JB MCCRUMMEN, ROCHESTER, WA 98579 11/30/2015

Response GP442-16

Refer to the Master Response for Purpose and Focus of the EIS.

GP443, **McCuen, Annie**

Comment GP443-1

We must lessen the effects from impacts of oil and gas on this planet. Please, please, think ahead, beyond profits and immediate gratifications! Pleas protect our Columbia George from disasters. It belongs to all of us, not only to outsiders who want to use and abuse just for immediate money rewards. Please listen to the native nations, to the local people, to the citizens of Oregon and Washington States. Please set the priority right. Thank you for hearing my plea.

Response GP443-1

Comment acknowledged.

GP444, **McKinlay, Bonnie**

Comment GP444-1

All reputable climate science and first-hand observation of increasingly hotter global temperatures, extreme weather patterns, sea-level rise, and unprecedented glacier melt demand us to leave untapped oil resources "in the ground". The DEIS for the two proposed Grays Harbor--Westway and

Imperium--oil terminals lacks a careful examination of the need to stop the expansion in the extraction and transportation of oil. We cannot implement the necessary science-mandated transition to renewable energy sources while endorsing the construction of new oil-based infrastructure. The furthering of the proposed Westway and Imperium facilities undermines progress on renewable energy and ignores our responsibility for insuring climate balance for future life on earth. I urge you to give a close examination of the imbalance of seeking mitigation and "safer" operation of the two proposed Grays Harbor terminals with the much-needed advancement of renewable energy as you move forward with the FEIS.

Response GP444-1

Refer to the Master Response for Purpose and Focus of the EIS.

GP445, **McLachlan, Pat**

Comment GP445-1

My Comments on the Draft Environmental Impact Statements for the Imperium and Westway Oil Export Proposals

Dear Washington State Department of Ecology and City of Hoquiam staff and elected officials,

Good Afternoon, My name is Pat McLachlan. I have lived and worked in Washington State most of my life; since 1970 in Olympia in Thurston County, teaching high school and then managing state-wide housing programs with the Department of Commerce. I have been diving in the waters of Puget Sound. I have hiked, and photographed in the Olympic National Park interior and along its beaches. I have studied shorebirds at the Grays Harbor National Wildlife Refuge.

Westway and Imperium propose to add up to 14 storage tanks and a throughput of almost 2 billion gallons of crude oil a year through their facilities at the Port of Grays Harbor. They want to add 1,188 additional train trips and 638 additional vessel trips per year, the Draft Environmental Impact Statement (DEIS) shows.

Oil spills will happen; they do all the time. In Sightline Daily, Eric de Place describes 17 devastating oil spills from 1976 to 2014 in the U.S. that could also happen here in the Pacific Northwest. After all, Ecology reports that almost 1 billion gallons of crude oil was transported in Washington State in 2013. This proposal would add another 2 billion, making a total of 3 billion gallons of oil transported annually. And numbers of spills are up. In McClatchy News, Curtis Tate states that more crude oil was spilled in U.S. rail incidents in 2013 than was spilled in the last 40 years; 1.15 million gallons of crude oil was spilled.

Ships and tankers spill oil and even drill rigs, and the costs to companies, governments, and all life are devastating.

The Exxon Valdez tanker ran aground in 1989 spilling 11 million gallons of oil along 1,300 miles of shoreline and costing Exxon $2.1 billion. The cleanup was never completed. Fisheries, local human residents, recreational sports and tourism experienced long-term adverse affects. The list of dead wildlife is endless; 250,000 sea birds dead, billions of salmon and herring eggs gone. Many species experienced long-term losses and have not recovered.

The BP Deepwater Horizon in 2010 spewed 130 million gallons of oil into the Gulf of Mexico costing BP $28 billion and counting to address cleanup, loss of fisheries and tourism, and human ill health effects. Death of enormous numbers wildlife continues, including hundreds of thousands of seabirds. The cleanup is not completed.

The risks for an oil spill from a train or tank or ship are huge, especially since the large tankers can contain 26 million gallons of oil, yet the DEIS says a chance of a large spill is "unlikely," admitting when it does occur "there would be the potential for severe impacts on the environment or humans." I believe given the data on frequency of oil spills that the DEIS needs to be corrected to the chance of a larges pill is "likely" and I agree the impacts will be severe. The damage will be significant, adverse and unavoidable. The costs will bankrupt companies and communities. Many lives will be lost. Therefore, this proposal should be rejected.

Response GP445-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP445-2

Two billion gallons a year of dirty, crude oil will be come from oil fields in North Dakota and Canada by trains that wend their way through small and large towns in Washington to be loaded into the tanks in Grays Harbor. From these large tanks, this oil will be loaded into ships that will ply the coastal water north, south and west to refineries and to China. And if this isn't risky enough with aging rails, and tanker cars; narrow harbors with excess boat traffic; and sometimes fierce ocean storms, these actions involving a dangerous pollutant will also take place on the Cascadia subduction earthquake zone which runs 700 miles from California along Oregon and Washington to Vancouver Island, Canada.

In "The Really Big One," Kathryn Schultz, notes that the Pacific Northwest sits squarely within the Ring of Fire. The science is robust. The Cascadia zone has experienced 41 large earthquakes in the past 10,000 years, an average of 1 every 243 years. It has been 315 years since the last one which was a 9 magnitude in 1700. The odds of the big Cascadia earthquake of an 8 to 8.6 magnitude happening in the next 50 years are roughly 1 in 3. The odds of the very big one of a 8.7 to 9.2 are 1 in 10.

When the next full-margin rupture happens, this will be the worst natural disaster in the history of North America. And it is predicted that an 8 or 9 earthquake and the accompanying 100 foot tsunami will wipe out the oil tanks storing the oil in Grays Harbor and the ships loaded with it in the harbor and along the coast. Along with the earthquake's devastation will be spills of hundreds of millions of gallons of oil along the beaches and in the harbors, polluting water, land and air and killing everything in their path.

The magnitude 9.0 Tohuku earthquake and subsequent tsunami in Japan in 2011 killed more than 18,000 people, devastated northeast Japan, triggered the meltdown at the Fukushima nuclear power plant and cost an estimated $220 billion and counting.

The DEIS, gives the chance of a large earthquake happening as "unlikely," when the data shows it is "likely." This needs to be corrected. The DEIS does say if a large earthquake occurs, "There could be the potential for sever impacts on the environment or humans" or oil spilling. I agree: the damage will be significant, adverse, and unavoidable. The costs will bankrupt companies and communities. Many lives will be lost. Therefore, this proposal should be rejected.

Response GP445-2

Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources and for information on the likely sources and destinations of crude oil shipped through the proposed facilities.

Refer to the Master Response for Earthquake Probabilities for an explanation of how the probabilities of strong earthquakes reported in the Draft EIS relate to those identified in recent studies. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction. Final EIS Chapter 3, Section 3.1, *Earth*, clarifies language characterizing the likelihood of events.

Refer to the Master Response for Risk Assessment Methods for a discussion of the assumptions, data sources, and methods used in the analysis of risks.

Comment GP445-3

I believe that State of Washington should deny these companies permits and that these terminals should not be built.

Further, I am a member of Great Old Broads for Wilderness, and we believe that we must keep fossil fuels such as oil in the ground. "It is our only chance to keep global temperatures and the Earth's vital signs from reaching a tipping point." Burning oil for energy heats up our planet. We have a brief span of time to make a difference. We must act now.

By saying no to Imperium and Westway Oil Companies, we can prevent the building of more infrastructure in this area that supports fossil fuel use. We can also prevent the widespread destruction of life that oil spills inflict. Hopefully in the future, Washington State and our federal government can do more to encourage companies to move beyond oil to invest in clean, renewable resources, such as solar, wind, and biofuels to meet our energy needs and to minimize the impact on our previous Earth and its inhabitants.

Respectfully submitted,

Pat McLachlan,
5505 Oyster Bay Rd. NW,
Olympia, WA 98502

Response GP445-3

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP446, **McLachlan, Pat**

Comment GP446-1

My name is Pat McLachlan. I've lived in Washington state most of my life, since 1970 in Olympia, in Thurston County teaching high school and then managing housing programs in the Department of Commerce. I've hiked and photographed the Olympic National Park and along its beaches. I've studied shorebirds of the Grays Harbor National Wildlife Refuge. I love this area and want to protect it.

Westway and Imperium propose to add up to 14 storage tanks which can handle almost two billion gallons of crude oil a year through their facilities at Grays Harbor. They want to add 758 train trips and 638 vessel ships per year. Oil spills will happen. They do all the time. It could also happen here.

Adding two billion to the already one billion gallons of crude oil transported here in this state will make spills more likely. And the number of spills are up. More last year in the U.S. than in the preceding 40 years.

The risk of an oil spill from a train accident or large tanker is huge, especially if the large tankers can contain 26 million gallons of oil. The DEIS says the chance of a spill is unlikely, admitting that if it does occur, there would be potential for sever impact on the environment.

I believe given the data that the DEIS needs to say that a large spill is likely and indeed the impact would be severe. The damage would be significant, adverse, and unavoidable. The cost is bankrupt companies and communities. Lives will be lost.

Washington should deny these companies' permits and these terminals should not be built. I'm a member of Great Old Broads for Wilderness and we believe that we must keep fossil fuels such as oil in the ground.

Burning oil for energy heats up our planet. We must act now by saying no to Imperium and Westway oil companies. We can prevent the building of more infrastructure that supports fossil fuel used. We can also prevent the widespread destruction of life that oil spills can inflict.

Our government must encourage companies to invest in clean, renewable resources like solar, wind, and biofuels to meet our energy needs and to minimize the impact on our precious earth and its inhabitants.

Thank you.

Response GP446-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted,

mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including impacts on birds.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP447, **McLachlan, Pat (Great Old Broads for Wilderness)**

Comment GP447-1

I'm Pat McLachlan, and I've lived and worked in Washington state most of my life. Since 1970 in Olympia in Thurston County teaching high school and then managing state-wide housing for low-income families with the Department of Commerce.

I've been diving in the waters of Puget Sound, I've hiked and photographed in the Olympic National Park. I've studied shorebirds at the Grays Harbor National Wildlife Refuge.

There are seven federally protected wildernesses on the Olympia Peninsula. They are the Washington Islands off Hoquiam and the rest of the coast northward, and others, including the Olympia Wilderness Beaches.

I love these wilderness areas and know that many other people feel the same way. We go to the wilderness to experience beauty, solitude, adventure, spiritual renewal, physical challenge, and a connection to plants, birds, fish, animals, and each other. We want to protect these wildernesses.

They will be damaged by spills and explosions when millions of gallons of crude oil are transported on trains into this area, stored in oil tanks, and loaded onto ships that travel the coastline to refineries.

Pollution of our air, land and water is part of this fossil fuel nightmare. Oil spills and explosions will be caused by derailments of oil tank cars. Train engines pulling tank cars and onsite operations at oil terminals will release toxic pollutants. Accidents involving ships will despoil our beaches.

These wildernesses and the Grays Harbor National Wildlife Refuge all have protection under federal laws. I request that your EISs describe how these proposals will affect them. I believe that these proposals must be rejected or the laws protecting our wildernesses will be broken.

The pollution caused by dirty oil will cause significant environmental damage and it cannot be mitigated. I believe that Washington should deny these companies' permits and these terminals should not be built.

Further, I'm a member of Great Old Broads for Wilderness and we believe that fossil fuels such as oil must be kept in the ground. Burning oil for energy heats up our planet. We must act now by saying no to Imperium and Westway oil. We can prevent the building of infrastructure that supports fossil fuel use. Our state and federal governments must encourage companies to invest in clean energy such as solar and wind to protect this precious earth. Thank you.

Response GP447-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms, including impacts on plants and animals, and clarifies that while impacts would depend on the circumstances of the incident, the resources described in Chapter 3 could be affected.

Final EIS Chapter 4 reflects additional mitigation measures proposed to address these impacts. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions.

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP448, **McManus, Tony**

Comment GP448-1

My name is Tony McManus. I am a resident of Ocean Shores. I'm retired out of Hanford Nuclear Range, so I have a vested interest in keeping things cleaned up.

Two of the issues that I have not heard addressed about this bulk oil proposed terminal.

One is what are they going to do with the additional dredged material, how deep does it have to be, how wide does it have to be, and what are they going to do with that material?

Response GP448-1

The proposed action would not involve any dredging activities.

Comment GP448-2

The other thing is where are they going to discharge the water ballast. I would hate to see us get in a situation like the Great Lakes where Asian carp and other invasive species are discharged into our waters.

Tankers, when they're empty, ride very high. During our winter storms, they are not going to discharge that water out miles into the ocean.

There are a thousand steps that have to be performed, every action perfectly, every transfer, every mile of track, every hooking up of pipes, and they have to be executed perfect every time. It's not going to happen.

We cannot afford to spoil the bottom of our harbors, our rivers, our marine life, our tourist destinations, the fisheries, so many industries, the oyster crops. That's actually all I have.

Response GP448-2

Draft EIS Chapter 3, Section 3.3, *Water*, Section 3.4, *Plants*, and Section 3.5, *Animals*, describe potential ballast water impacts and the regulatory requirements to reduce these impacts. Section 3.4.7.1, *Applicant Mitigation*, and Section 3.5.7.1, *Applicant Mitigation*, identify mitigation measures to further reduce potential impacts.

GP449, **McMurray, Maureen**

Comment GP449-1

My comments relate to both the Westway and Imperium Draft EISs.

Please do not proceed on the crude oil terminal in Grays Harbor. There is no way to mitigate the risks and dangers involved. This is the wrong place, the shallow shipping channel and strong currents is sets it up for a greater chance of an oil spill. That would devastate the area for all other type of economic environmental health. The oil trains are both dirty and dangerous. The history of oil train fires and explosions are proof of the danger to people and the environment.

The air pollution from the trains would be emitted near homes and businesses. Higher level of diesel particulate pollution is shown to increase the risk of cancer asthma and other respitory ailments. This in addition to all the negative traffic impact is ample reason to not proceed with the proposal. There is a better way to meet our energy needs.

Response GP449-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Final EIS Chapter 3, Section 3.2, *Air*, has been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analysis predicts lower emissions; the updated level of increased risk is not considered significant. Therefore, the Final EIS concludes no potential unavoidable and significant adverse impacts on air quality.

GP450, **McVaugh, Skyler**

Comment GP450-1

Please take into account the current condition of the railway that will be used to transport the oil. The railways that are proposed to be used are outdated do not seem to be up to the task of supporting the proposed railway traffic if this project comes to fruition.

Response GP450-1

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP450-2

Furthermore please also take into account the amount of diesel pollution from the oil trains that will be emitted near homes and businesses between Poyner Yard and the Westway Imperium sites.

Response GP450-2

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present analyses of cancer risk from emissions of diesel particulate matter related to the proposed action and cumulative projects, respectively. Final EIS Section 3.2 and Section 6.5.1.2 have been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analyses predict lower emissions; the level of increased risk is not considered significant.

Comment GP450-3

Lastly, please consider a very effective emergency response plan should an oil tanker or oil trail crash and spill oil into the environment. Thank you for your time.

Response GP450-3

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location,

amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

GP451, **Meacham, Michael**

Comment GP451-1

Dear Consultants, Ecology and City of Hoquiam, The people of the State of Washington have the right to decide which risks they are willing to accept and which they are not, and just because some dangerous projects were permitted, that doesn't mean we should approve more of them. We urge you to reject the oil terminals proposed in Grays Harbor because they will create the following significant and adverse impacts which cannot be avoided or mitigated and are unacceptable.

Response GP451-1

Refer to responses to detailed comments below.

Comment GP451-2

1. The tank cars cannot be made crash worthy. Non-yard oil train spills are guaranteed to happen in the extended area several times per decade with significant and adverse impacts that cannot be mitigated.

Response GP451-2

Draft EIS Chapter 5, Extended Rail and Vessel Transport, addresses potential impacts from rail and vessel transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Final EIS Chapter 5 further describes the potential risks associated with rail transport in this area.

Comment GP451-3

2. The oil vapor pressure cannot be lowered enough to prevent ignition. When tank cars are punctured during a derailment, gasses rush out and find a spark resulting in large explosions, death and property damage.

Response GP451-3

Draft EIS Chapter 4, Section 4.5.2.2, *Fires or Explosions*, addresses potential risks related to fires or explosions associated with rail transport under the proposed action. Section 4.7, *Impacts on Resources*, describes potential impacts of fires and explosion.

Comment GP451-4

3. Until all tank cars have thermal jackets and high capacity pressure relief valves, tank cars sitting in a pool fire are likely to explode. Firefighters cannot protect the public in those cases.

Response GP451-4

Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport,* discloses voluntary measures and design features, proposed applicant mitigation, and other measures that would further reduce environmental health and safety impacts from rail transport related to the proposed action, in addition to regulatory compliance and best practices. To the extent possible, within the framework outlined in the Master Response for Mitigation Framework, measures addressing the need for more coordinated and focused planning include the role of the applicant as appropriate. However, as noted, no risks can be eliminated and, depending on the circumstances, significant impacts could occur.

Comment GP451-5

4. Oil trains block traffic. They interfere with commerce, emergency response and school buses. the adverse impacts will be significant.

Response GP451-5

Draft EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, addresses potential impacts on vehicle delay and emergency vehicle access. The Final EIS section clarifies mitigation and potential significant and unavoidable impacts.

Comment GP451-6

5. The oil terminal will stink, particularly if the vapor combustion unit fails. The city of South Portland, Maine has banned the trans-loading of crude oil into marine vessels for that reason. Hydrogen sulfide first deadens the sense of smell, then it kills you. It gets trapped in in low lying pockets.

Response GP451-6

Final EIS Chapter 3, Section 3.2, *Air*, reflects the addition of a discussion of potential impacts related to odor. The only compound with sufficient emissions to have the potential to have a perceptible odor is hydrogen sulfide. The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, are expected to reduce emissions of air pollutants, including hydrogen sulfide, to below the odor threshold for the most sensitive individual.

Comment GP451-7

6. False prosperity. An oil terminal can only begin the slide toward altering the landscape, river, and quality of life here. There will be no other direction once it begins. The construction unions in Texas oil towns have been starved to death. And once they've get their foot in the door, big oil is as happy as any other corporation to break unions. The prosperity we're being offered is a poison pill.

Response GP451-7

Comment acknowledged.

Comment GP451-8

7. The proposed terminals will lead to a net increase in greenhouse gas emissions. If all the terminals in Washington and Oregon are approved, the net global oil production could increase 496,000 barrels per day. This is additive. This is not simply replacing one oil source for another.

Response GP451-8

Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources and for information on the likely destinations of crude oil shipped through the proposed facilities.

Comment GP451-9

8. Lost property values moer than reported in the Economic Impact Analysis Planning model used by ECONorthwest. That model doesn't distinguish between unit oil trains and other types of freight.

Response GP451-9

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values.

Comment GP451-10

9. The Cost of Emergency Preparedness in all rail communities. NTSB says emergency response planning along the rail routes is "practically nonexistent".

Response GP451-10

Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for additional information about the analysis of emergency planning and response capabilities in the study area. For more information about the analysis of potential impacts on the BNSF main line, refer to the Master Response for the Geographic Scope of the EIS.

Comment GP451-11

10. I worry about the future of my children and grandchildren. It is well documented that climate change is happening, and that Humans burning fossil fuels is the major cause of it. If we don't begin to move away from fossil fuel use NOW, we will be leaving an Earth that will be uninhabitable for future generations. Is it really worth short term financial gain when the future of our beautiful planet is at stake?

Response GP451-11

Comment acknowledged.

GP452, **Megargle, Paul**

Comment GP452-1

I SUPPORT the project. I want to see more bio diesel and bio jet fuel available, I want more jobs in Grays Harbor. Westway and Imperium have a very good track record of Safety. I would be proud to work with them or for them. I live and raise my family in the immediate area. I also think it's better to have the products going here rather than Puget Sound.

Response GP452-1

Comment acknowledged.

GP453, **Mergler, Gerald**

Comment GP453-1

Concern & Question Oil Car safety is a major concern of mine, both on Life and environment. In review of the subject projects the issue of DOT-111, modified and newer CPC-1232 cars, significant articles, and scientific reports indicate they are not SAFE ENOUGH for transport of the proposed oil! Question-- Why is the latest design,DOT-117 Car, not required as only acceptable rail car for this kind of transport? Time to produce sufficient cars to meet demand should not be sufficient reason unless DOT can put a value of life factor vs. loss of revenue to justify not waiting for car availability. Thank You Jerry Mergler

Response GP453-1

Draft EIS Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* acknowledges the voluntary applicant measure for all new rail cars to meet or exceed the U.S. Department of Transportation Specification 117 design or performance criteria and that all existing tank cars be retrofitted in accordance with the U.S. Department of Transportation-prescribed retrofit design or performance standard (80 *Federal Register* 26643). However, as noted in Section 4.5.4, *Would the proposed action result in unavoidable and significant adverse environmental impacts related to rail transport?* the risks cannot be eliminated.

GP454, **Mergler, Gerald**

Comment GP454-1

Concern/Question: The statistical analysis appears to me to be faulty and presents a rosier picture of probable spills and does not provide a adequate cost/benefit analysis associated with spill cleanup, Injury and death associated hazardous material transport by rail car for any accidents. As example, Fig. 6-7 shows scenarios and associated risks. Small spills have higher potential for occurrences and large spills less occurrences. This has significance in decision making if it is associated with some cost/environmental impact, injury or loss of life. I worked on the APOLLO Space Program in the 1970s and initial statically reliability reflected a very high probability of success but when potential loss of life was factored into the statistics, decisions to design costly redundancy into design because of the potential loss of life. Where is this kind of analysis? Same here in oil transport. we have recently seen oil car disasters with associated loss of life and injury. The analysis is skewed toward

positive results. Same section shows extreme failure of storage tank occurring every 9000 years!! What tank built today has a functional life of 9000 years? Although it sure sound good. Why is there little cost/risk analysis? The cumulative impacts section (Chapter 6) also evaluates various types of risks such as Rail and vessel. What is lacking is a beginning to end analysis which combines the various Cumulative failure points. My question is "what is probability of a mishap during a combined rail/handling/storage/loading and then vessel transit of any kind from point of origin until delivery?

Response GP454-1

Refer to the Master Response for Risk Assessment Methods for a discussion of the assumptions, data sources, and methods used in the analysis of risks.

GP455, **Mergler, Gerald**

Comment GP455-1

Concern/Question: I live near the entrance to Grays Harbor in Ocean Shores WA for past 10 years and I have experienced the coastal weather extremes at harbor entrance and along our coast. Why does this report not adequately and specifically address all potential environmental and economic impacts on our city (Ocean Shores) Ocean Shores in a spill event along the coast as well as within the bay and rivers? With our tidal currents and ocean currents, any spill occurring on the rivers feeding into the Grays Harbor Bay, within the bay and entrance as well as out to the barge or vessel coastal traffic lanes, The potential is catastrophic on the Marine life, Coastal birds including millions of seasonal fly-way migration shore birds, economic impact to our city (Tourist destination point) and our local sport and commercial fisheries. Where is this analysis in subject reports? How is this city protected from financial losses? Thank You Gerald Mergler

Response GP455-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP456, **Mergler, Gerald**

Comment GP456-1

Concern/comment: I live in Ocean Shores WA near the Grays Harbor entrance. In section Chapter 3 "Escort Tug service", indicates existing Emergency Tug Service at Neah Bay! My question is this, how does this much needed support in case of a barge or vessel major spill help us? Even smaller spills on our community beaches could require this type of support. Our sea conditions are some of the worst along the West coast of US. 12 to 18 hour delay, indicated in the report 3.17-9, along our coast line or within our harbor would be catastrophic. Why does this report not provide much analysis of coastal impacts especially on the towns such as Ocean Shores and Westport WA?

Response GP456-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. The geographic response plans referenced in Final EIS Chapter 4, Section 4.2, *Applicable Regulations*, provide additional information on sensitive resources that could be affected by a spill at specific locations in the study area. The plans also identify appropriate response strategies. Final EIS Sections 4.4.3, 4.5.3, and 4.6.3 have also been revised to include additional mitigation measures to address risk related to spills, fires, and explosions. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

GP457, **Mergler, Gerald**

Comment GP457-1

Comment/Question: Chapter 3 Ballast water (3.3-25 describes the ballast water delivery plan for ships/barges that enter Grays Harbor. My concern is our coast is heavily reliant on our shellfish and fish recreation and commercial fisheries. This section of report notes that "The increase in number of oil related vessels entering the port (max 119/yr) would increase the risk of introducing invasive aquatic plants and other organisms and I assume other non-native marine life. This could have serious impact on our Fish and Shellfish sport and commercial industries. What plan would be implemented to eliminate these potential problems and how would it be managed?

Response GP457-1

Potential ballast water impacts on the aquatic environment are addressed in Draft EIS Chapter 3, Section 3.4, *Plants*, and Section 3.5, *Animals*. Existing federal and state regulations address ballast water management. The Washington State ballast discharge regulations (RCW 77.120.040 and WAC 220-150) include reporting, monitoring, and sampling requirements of ballast water; all vessels must submit nonindigenous species ballast water monitoring data. Washington Department of Fish and Wildlife may also board and inspect vessels under WAC 220-150-033 without advance notice to provide technical assistance, assess compliance, and enforce the requirements of Washington State ballast water management program laws and regulations. Penalties and enforcement of not complying with the regulations are covered in WAC 220-150-080. To further minimize the risk of ballast water on vegetation communities and animals, proposed mitigation is included in Sections 3.4 and 3.5 for the applicant to develop and implement a monitoring plan in consultation with Washington Department of Fish and Wildlife prior to the start of proposed operations.

GP458, **Messmer, Louis**

Comment GP458-1

My name is Louis Messmer. I'm a retired Grays Harbor biologist. I'm here to speak about the effects of the plants and the ecosystem. I've led a few hundred field trips around Grays Harbor, and I've work in an industrial pollution control lab for six years. I've worked in razor clam biology for six years, and as a wetlands consultant I've completed 70 projects in the Grays Harbor area.

We, the people, have worked our way into this beautiful Grays Harbor ecosystem only in the last few thousand years. It now sustains at least 30 percent of our jobs and economy.

The plants sit at the base of the food pyramid that sustains our ecosystem. In sunlight, those wetland and aquatic plants make -- convert carbon dioxide and water with minerals to create tens of millions of pounds of organic matter per year. This food material is used over and over to support the rest of the players in the ecosystem.

A major oil spill would shut down that plant base of the system for years, at least. The impact of such a spill is inevitable and unavoidable given human error, equipment failure, and more extreme natural disasters.

There is no way to offset or make up for such an impact. The no action alternative is essential for these oil port proposals.

Thank you.

Response GP458-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. This includes the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. However, as

noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

GP459, **Messmer, Louis**

Comment GP459-1

October 6, 2015 Westway and Imperium Terminal Services Expansion Projects EISs. c/o ICF International 710 Second Street, Suite 550

Seattle, WA 98104 My comment on: lmperium Health, economy, aesthetics

I am a resident in a senior community in downtown Hoquiam. Right now, the air quality here seems to be good. I feel that any new, larger oil terminal here would generate odors (fumes) in its day-to-day operations that could cause respiratory problems to the residents here. (Health) Additionally, prospective residents of similar senior health care residences or their caregivers could be repelled by those odors.(Aesthetic), (Economy).

These are very probable negative impacts on the health and the economy of this town.

Of course, any large spill in the Harbor would make things worse.

Sincerely,

Louis W. Messmer 907 K St. Apt 609 Hoquiam, WA 98550 (360) 532-7851 lmessmer@reachone.com

Response GP459-1

Final EIS Chapter 3, Section 3.2, *Air*, reflects the addition of a discussion of potential impacts related to odor. The only compound with sufficient emissions to have the potential to have a perceptible odor is hydrogen sulfide. The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, are expected to reduce emissions of air pollutants, including hydrogen sulfide, to below the odor threshold for the most sensitive individual.

GP460, **Messmer, Louis**

Comment GP460-1

Nov.15, 2015 Westway and Imperium Terminal Services Expansion Projects EISs c/o ICF International 710 Second Avenue, Suite 550 Seattle, WA 98104

I am a resident of the city of Hoquiam and a retired biologist.

I am concerned about the potential impact upon the young salmonids that rear in and pass through Grays Harbor from on-going operations or spills at the proposed oil facilities here.

978 pgf

There are several studies reported that document adverse effects on salmonids from exposure to petroleum-related products.

These studies cite effects on behavior from concentrations as low as ten parts ber billion (10) ppb).

The EIS mentions toxicity at levels beginning at (15) ppb. for some animals in the study area.

There is no attempt to relate any of these toxicity levels to Grays Harbor waters to the proposed scenarios.

What dilutions in amounts of Harbor waters would produce 10 or 15 parts per billion, (10-15) ppb?

For instance: **1 gallon in XXXX gallons of Harbor water at the operation site; or 1 drop of oil in 75,000 gallons of water**.

Sincerely, Louis W. Messmer 907 K St. Apt 609 Hoquiam, WA 98550 (360) 532-7851 lmessmer@reachone.com

Response GP460-1

Parts per billion (ppb) refers to the concentration of one unit of measure in one billion equivalent units. For example, 10 ppb could refer to 10 gallons of crude oil in one billion gallons of water.

The approach to the risk analysis is to consider different potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms, including the potential impacts related to toxicity. Section 4.7 also acknowledges resources that could be adversely affected in the event of an oil spill, fire, or explosion in the study area, including impacts on salmonids.

Final EIS Chapter 4 reflects additional mitigation measures proposed to address gaps in emergency preparedness planning and response capabilities. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances of an incident, the environmental impacts could be significant.

GP461, **Messmer, Louis**

Comment GP461-1

Nov. 20, 2015 Westway and lmperium Terminal Services Expansion Projects c/o ICF International 710 Second Avenue, Suite 550 Seattle, WA 98104

There are several shortcomings in the descriptions of the study area within Grays Harbor: These tend to downplay the dimensions of the plant base of the ecosystem that is impacted by oil that spreads onto the Harbor surface

1.The full area of the intertidal within the Harbor (from construction sites to the Harbor mouth): This could be around 60,000 acres.

2.The area of potential eelgrass habitat is probably larger than the "7605 acres" due to recent invasion of Zostera japonicaat mid-tidal levels. This has become great enough to provoke negative reactions from shellfish growers.

3.The extent of productive high salt marsh beyond the mapped and mentioned "high quality salt marsh" becomes notable when you drive the roads around the Harbor and its tributaries noting that tidal mudflat edges are bordered by Carex lyngbyei , and other high marsh associates except where development or bank erosion prevents it.. Even a large fraction of this un-noted strip of high marsh 3 feet wide could be responsible for tens of tons of dry weight organic matter per year.

Sincerely,

Louis W. Messmer 907 K St. Apt 609 Hoquiam, WA 98550 (360) 532-7851 lmessmer@ reachone.com

Response GP461-1

The vegetation study area is shown in Draft EIS Figure 3.4-2, *High-Quality Vegetation Communities in and along the Shoreline of Grays Harbor*. As shown in the figure, this study area covers all of Grays Harbor plus an additional 0.5 mile around Grays Harbor. Draft EIS Chapter 3, Section 3.4, *Plants*, covers aquatic vegetation (eelgrass and macroalgae), salt marsh and dunegrass, kelp, and low-elevation freshwater wetlands. The Draft EIS estimates the maximum area of Grays Harbor where eelgrass grows or could grow; Section 3.4.4.3, *Grays Harbor*, *Aquatic Vegetation*, *Eelgrass*, states that at least 7,605 acres of Grays Harbor are estimated to lie at elevations suitable for eelgrass according to one study, but that up to 15,000 acres of the harbor are at elevations that could support eelgrass based on bathymetric analyses. Draft EIS Chapter 3, Section 3.4, *Plants*, provides the general locations and descriptions of salt marsh vegetation communities in the study area.

GP462, **Messmer, Louis**

Comment GP462-1

November 23, 2015 Westway and lmperium Terminal Services Expansion Projects EISs· c/o ICF International 710 Second Avenue, Suite 550 Seattle, WA 98104

I am a retired biologist. I have worked six years in the WDF shellfish mangement program, taught Marine Biology, Zoology, Botany and Gdneral Biology here at Grays Harbor College, and have been involved in Sea Grant programs on Grays Harbor and USAGE Channel project planning. projects.

I am concerned about the potential impacts to the surf-zone populations of razor clams on the outer Washington coast.

The razor clam populations are found on sandy beaches 20-30 miles north and south of Grays Harbor in some of the most productive surf zones on earth. We are able to harvest the clams at the first step in the food web where they filter-feed on surf-zone diatoms. Masses of those golden-brown diatoms are often found on the beaches at low tides in layers several inches thick or coloring the surf and foam. We benefit economically from other components of the surf-zone diatom based food web such as the Dungeness crab fishery.

The vessel traffic, as described, increases the shipping traffic in the narrow space between the north and south jetties for about 5 nautical miles. While the shipping channel is already narrow, this increases the chances of accidental hull from the jetty rocks. Other parts of the channel only are bordered by more yielding mud or sand sediments Pilot error and machine breakdown have occurred here in the past. Of course, any large spills in the Chehalis drainage could also reach the coast.

The few benefits of the proposed oil port terminals are short-term. The sustainable economic, aesthetic and social benefits of the present situation would suffer hugely from the impacts of large oil spills. Sincerely,

Louis W. Messmer 907 K St. Apt 609 Hoquiam, WA 98550 (360) 532-7851 lmessmer@ reachone.com

Response GP462-1

Draft EIS Chapter 4, Section 4.6, *Environmental Health Risks—Vessel Transport*, presents an analysis of potential impacts from increased risk of vessel collisions, groundings, and allisions and related consequences (e.g., release of crude oil) under the proposed action and proposes mitigation measures to reduce the likelihood of a vessel incident.

GP463, **Meyer, Bonnie**

Comment GP463-1

Please do not allow expansion of the two Grays Harbor terminals. I frequently visit this area to look at birds. Many visit on annual migrations. The birds would be at risk from terminal expansion. This is not a good place for a dirty terminal that could cause environmental harm. Any migrations to the potential harm would be useless should there be severe storms or weather. This is too risky and not in the best interest of residents and wildlife.

Response GP463-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP464, **Meyer, John**

Comment GP464-1

My name is John Meyer. I live in Marquam, Washington, Grays Harbor County. I was employed for 27 years in the operations end of the railroad business, and I just have two things that I think the EIS would benefit from mentioning.

Number one, with regard to train delays, out at the mall particularly, they did a very good job of talking about how long the delays are. I would posit that if they would mention that if the track speed was raised to 20 miles an hour, a one-mile-long train would only occupy a crossing for three minutes.

The problem they have now is there's a five-mile-an-hour speed restriction over the Wichita River draw. And once that's repaired, and if you put lights and gates on the crossing, you could have a whistle-free zone and the Federal Railroad Administration is all for them.

Response GP464-1

Draft EIS Section 3.16, *Vehicle Traffic and Safety*, analyzed potential impacts with speed restrictions over the Wishkah bridge at 5 miles per hour in 2017. As described in Section 3.15, *Rail Traffic*, PS&P has identified an improvement to the Wishkah bridge to improve speeds across the bridge by 2037.

Comment GP464-2

Second of all, there's been constant comment and full magnum of fear in the process of this with regard to the -- they keep mentioning the Canadian derailment where all the people were killed. It would help if they mentioned that cannot happen in this project. The track is flat. That train was sitting on a hill of such steepness and duration, the train got up to over 60 miles an hour before it went to a flat curve at the bottom and derailed, although the engines made it around into a town full of LPG. That's how they heat it. And everything started blowing up.

We cannot have any kind of derailment of that magnitude anywhere in this flat area here. It won't happen, can't happen, and we ought to quit fulminating the fear and hysteria that's being used in the media in order to derail this project here. Thank you.

Response GP464-2

Comment acknowledged.

GP465, **Meyer, Jon**

Comment GP465-1

My name is Jon Meyer. I was employed in the railroad industry in operations for 27 years. At one point, I was the division trainmaster for the Burlington Northern Railroad, and my territory included the mainline tracks between Astoria, Oregon and Wishram, Washington following the Columbia River by and large.

One morning, during a conference call, I was alerted to the fact that we had a derailment of Train 691, a Pasco/Tacoma mixed freight train, that had derailed in the vicinity of the Wind River Bridge and partially into the Columbia River and two tank cars of oil were involved, two or three.

We sent a copy of the wheel report of all of the train list to the relevant public officials in that county including where all of the hazardous cars were and the hazardous handling response forms for each of those commodities.

By the time I got up there, our contractors had already spread the absorbant materials to -- in case of leakage on the Columbia River. The railroad keeps those kinds of materials stashed in containers along the right-of-way, and we have contractors available, 24-hour calls, on call.

When I got up there, I determined that it was either two or three tank cars of oil had -- were part of the derailment. They didn't cause it, but they were part of it, and they had ricochetted off of the

abutment of the bridge of the Wind River where it joins the Columbia. This is right next to Drano Lake.

The cars then rolled down the embankment approximately 50 feet down rip rap rock and landed in the Columbia River with such a splash that one of the trollers, salmon trollers, claimed we drowned out his engines. That wasn't the case. Other fishermen told us that he couldn't get them started before the wreck happened, and I would have had him arrested by our special agents, but we had a lot more fish to fry at that point.

It was determined that there was no leakage of these cars, and we proceeded to pick up the derailment and open the mainline. This took approximately a day and a half.

I remember that we had at least 25 public officials there concerned about the Gorge and the river and the tank cars, among other things.

After about a day and a half, a van pulled up and it had two sets of scuba divers in it, two teams. We had to use two because it was so deep there that they would get the bends if they didn't decompress on their way up.

Shortly thereafter, a barge crane that I had hired -- I think from Rydell International, but I can't be sure. I can't remember for sure -- showed up with this tugboat, and we proceeded to raise the tank cars up and laid them on their sides on top of the empty barge that was brought up as well. We then sent the equipment back down the river, and when we got to Portland, we arranged to take the tank cars off of the barge, place them back on wheels, repair the safety appliances, the air brakes, etcetera, on the cars, and we shipped them off to their city.

My point in relating this to you is despite the hysteria and knowingly false information being promulgated by the opponents of this project, things did not always blow up and kill people.

In fact, I don't think there's been a death or much of an injury in the United States from the few derailed cars, and we ship over 500,000 tank cars of oil a year.

The only death toll was in Canada where 44 or so people lost their lives, and that was due to several gross rule violations by the engineer and the single employee on the train. Parking a train on a hill of such grade and duration that the train reached speeds in excess of 60 miles an hour before they got to the curve at the bottom of the hill in the town.

The locomotives made it around the corner, and then the tank cars started to derail. Subsequently, with the train still on the hill and still moving at 60, it caused a massive pileup and fire.

It should be noted that the town this occurred in is very isolated and relied upon propane gas for their heating, and the town was full of propane, outdoor propane tanks, which I believe contributed to the explosions and the damage.

And I'd just like this to be made aware so we don't all get caught up in the fear and hyperbole that's being promulgated to stop this project.

Thank you. P.S. This is approximately 1995, my name is Jon, J-O-N, Meyer, M-E-Y-E-R, phone number (360) 648-2395.

Response GP465-1

Comment acknowledged.

GP466, **Meyer, Jon**

Comment GP466-1

Name: Jon Meyer

Organization Name: 9 Johns River Ln

City: Aberdeen State: WA Zip 98520 Date: 11-25-15

Olympic Gateway Plaza Traffic

The trains currently are required to go 5 mph over the Wishka River Swing Bridge. Repairing this bridge to industry standards of 20 mph would allow a 1 mile long train to only black a crossing for 3 minutes. Installing lights and gates with minor crossing improvements would allow a "whistle free zone" to be approved by the F.R.A., which encourages this with financial aid.

Oil Spills or Explosions during Derailment

The wreck in Canada happened as a result of a flagrant rule violation, flawed corporate policy, and topography unique to the area. These do not exist here. The fear and hysteria over this incident has been dishonestly used by the groups opposed to this project, the official report issued by Canada's transport ministry shows that the engineer did not apply enough handbrakes, that fire department members put out a fire on the lead locomotive, that as a result of this the locomotive's engine was stopped, that this allowed the air brakes on the engines to become ineffective, and when this happened the unattended train rolled down a very steep hill that it had been parked on. The train was going over 60 mph when it went around an unbanked curve at the bottom. The engines and some cars made it around the curve, spreading the rail causing the following cars to derail with the rest of the train still on the hill pushing into the pile. This cannot happen here. Please do not allow the hyperbole deliberately fostered by opponents to influence your report.

Thanks,

J. Z. Meyer.

Response GP466-1

Comment acknowledged.

GP467, **Meyer, William**

Comment GP467-1

do not approve oil terminal expansion oil trains are not safe. they put our communities and rivers and the seafood industry at risk. the volatility of crude oil trains has already killed too many people...more trains will lead to more deaths, pollution in our towns, rivers and estuarys we should not be transporting fossil fuels this way...the risks far exceed the short term benefits bill and nadean meyer

Response GP467-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP468, **Michslek, David**

Comment GP468-1

I'm David Michslek, and I live in the blast zone. I want you to reflect what that really means. Not too long I only have two minutes. Last year there were 14 explosive train derailments in the United States. Fourteen.

If that happened while I was at home, I would die. If my family was at home, they would die as well. My house would be incinerated. I have to ask why is my life threatened? So some corporation can profit?

Enough is enough. You all have the ability and power to send a clear, unequivocal message to the United States and to the world that we are going to stop this madness and leave the oil in the ground.

Thank you.

Response GP468-1

Comment acknowledged.

GP469, **Milholland, David M. (Oregon Cultural Heritage Commission)**

Comment GP469-1

I have traveled up and down the Washington side of the Columbia River several times this summer, spending my money in riverside communities and appreciating the effort the state makes to keep its lands in top condition. This past weekend, during a visit to Horse Thief Lake State Park to visit our region's most iconic work of art, Tsagaglalal / "She who watches," the group of 18 I led stood less than 10 yards from a passing freight train [see attached images], which took nearly two minutes to pass. I had moved down the same corridor on an Amtrak train from Spokane to Portland only a month previous. What's exposed every time an oil train passes by such a vital location? One of our most fragile and productive watersheds, struggling to regain its primacy as a salmon corridor, at costs of billions of U.S. and state $$ to date. Even one spill of a multi-car oil train would cause decades of damage. Then there's the Native American art and a spectacular landscape, which draws millions from across the planet. Also the small riverside communities we visited including Maryhill and Lyle, where our visitor spending helps keep jobs and hope alive. Any jobs imagined or created by these projects must be seriously weighed against the health of the river and its human, animal, and plant inhabitants, as well as its physical beauty and the reputation of Washington in the world.

Not to speak of the heavyweight impact of thousands of oil cars would have on the rails and non-oil rail shipping vital to our region's economy. No fair reading of such a project trade-off can counterbalance the above-mentioned costs, especially if weighed in over long time. Horrifying

accidents happen, with greater frequency during the last few years. Much faster deterioration of the rail resource from such ongoing oil train impact is inevitable. Thank you for your consideration of these concerns. As a former Washington resident, I'm regularly drawn to your beautiful state. – David Milholland, President, Oregon Cultural Heritage Commission

See original attachment for photos of visit to Tsagaglalal

[Photos reviewed but not reproduced.]

Response GP469-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

GP470, **Miller, Bev**

Comment GP470-1

Subject: Westway and Imperium crude oil-by-rail terminal EISs

The following are my comments on the Draft Environmental Impact Statements (DEISs) for the oil-by-rail terminals proposed by Westway Terminal Company LLC and Imperium Terminal Services (now Renewable Energy Group) in Hoquiam, Washington. I must admit that I have not personally read the DEISs in their entirety, but I have skimmed them and have read what others are saying about their content. I do not understand why they needed to consume over 3000 pages! I also question their legality based on noncompliance with the State Environmental Protection Act (SEPA). WAC 197-11 requires that, "The EIS text shall not exceed seventy-five pages; except for proposals of unusual scope or complexity, where the EIS shall not exceed one hundred fifty pages." I suspect it may be an attempt by the City of Hoquiam and the Department of Ecology (co-lead agencies) to "baffle 'em with bullpucky!"

Response GP470-1

The length of the Draft EIS reflects the amount and complexity of information deemed adequate for the full disclosure of impacts. Due to the size, other materials such as the *Summary* and fact sheets were prepared to convey impacts in a condensed format. See response to previous comment regarding printed copies.

Comment GP470-2

The fact that printed copies of the DEISs were available at relatively few locations, it was cost prohibitive for most people to have copied, and many people do not have access to an electronic versions through the Internet may well have an impact on the number of comments upon which the final EISs are to be prepared.

Response GP470-2

Printed copies of the Draft EIS were available for review at the following locations: Washington State Department of Ecology, Lacey; City Hall, Hoquiam; Aberdeen Timberland Library, Aberdeen; Centralia Timberland Library, Centralia; Hoquiam Timberland Library, Hoquiam; Lacey Timberland Library, Lacey; Olympia Timberland Library, Olympia; McCleary Timberland Library, McCleary; and Ocean Shores Public Library, Ocean Shores.

Comment GP470-3

The DEISs are deficient and defective in many respects. First, the co-lead agencies invited members of the public, and various groups, agencies, and tribes to comment on what should be analyzed in the draft EISs and then failed to include at least 32 scoping comment letters submitted in the final scoping comment report that summarized input from the public. It is suspect to me that the comments of opponents of these projects were the ones omitted from the DEISs. The City of Hoquiam and the Department of Ecology need to go back to the drawing board and take into consideration all comments to the DEISs in their analysis.

Response GP470-3

The co-leads reviewed and considered all scoping comments. Final EIS Appendix A, *Scoping Comments*, provides a catalog of all written comments received during the formal scoping period.

Comment GP470-4

Because I am unable to determine whether or not my scoping comments, submitted May 27, 2014, were included in the final scoping comment report, here they are again:

> These are my comments regarding Environmental Impact Statements (EIS) for the two expansion projects proposed by Imperium Renewables and Westway at the Port of Grays Harbor, and also the oil storage and shipping facility being proposed by U.S. Development Group (to be built near the Grays Harbor National Wildlife Refuge at Bowerman Basin and Hoquiam High School) and their potential impacts to the community.
>
> 1. <u>We are not alone</u>! Personally, I don't know how the Washington State Department of Ecology and the City of Hoquiam can do any kind of environmental impact statement without taking into consideration the impacts these projects will undoubtedly have on other towns, cities and states from the point of origin of the crude oil to the terminals in Hoquiam. These projects don't just effect the citizens of our fair city. They effect everything along the routes they travel - business, people, animals, the environment. Are the Port of Grays Harbor and the City of Hoquiam actually willing to proceed with these projects without studying the potential impacts on others? These projects may increase revenues to the Port and Hoquiam, but will they in turn decrease revenues for others. It's like they are thumbing their collective noses at everyone else and saying that just because they want this to happen, it should happen, whether others are harmed in the process or not.
>
> Have studies been done of the infrastructure currently in place along the routes to determine if they are adequate? Are communities all along the routes equipped to handle catastrophic events such as spills, explosions, etc.? Has anyone asked them if they mind having several miles of tank cars full of explosive materials passing through their neighborhoods, thereby increasing the

danger of collisions with vehicles? - or people? - or animals? Would they mind if their property values decrease? What about the effects on trade and commerce? How would the increased traffic on the rail system and on our waterways affect other businesses/companies using those same means of transportation?

This may sound a little far-fetched to some, but what about the possibility of an increased risk of terrorism? A hundred tank cars filled with flammable/explosive materials could do some serious damage in the right location.

Response GP470-4

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

Comment GP470-5

2. First they have to get it here! The two expansion projects alone would bring more than three trains through our communities each day. The wisdom of transporting that much oil from North Dakota in puncture-prone tank cars considered by experts to be mostly unsafe by rail industry standards, along poorly-maintained tracks and across bridges that were not built to withstand those types of loads, totally escapes me. These trains will be up to a mile and a half long, which most likely means they will cut off some areas of our cities, towns and neighborhoods from necessary emergency response for prolonged periods as they rumble along for over 1500 miles toward their final destination on land - Hoquiam. In some areas, railroad tracks that would be used to transport this oil to the Port are within mere feet of people's homes and businesses. In other areas, the trains travel within blocks of schools and hospitals.

While the Imperium and Westway projects are supposed to receive the bulk of their oil from North Dakota, when (not if) the international market demand is ripe, the crude by rail terminals in Hoquiam will become transshipment points for Canadian crude from Alberta's tar sands (the

second largest oil deposit on the planet). It's my understanding that this type of crude is even harder to handle.

The state of Washington should consider placing a moratorium on expansions of existing oil train facilities and to oppose new oil-by-rail transfer terminals until the safety of all oil train cars and the tracks they travel on are properly upgraded and regulated. What would happen if there were a derailment... or an explosion... or a spill? Our local first responders are wonderful at what they do, but there are simply too few of them and they do not have the tools nor are they trained to handle a crisis of that magnitude. Who would provide training? Who would take care of the cleanup/damages/recovery?

Response GP470-5

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. This includes the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. However, as noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources and destinations of crude oil shipped through the proposed facilities.

Comment GP470-6

3. Benefit to Hoquiam Marginal: We are all aware that jobs are needed, locally and across the nation. However, once the construction phase of these projects is concluded, the number of permanent jobs created locally would be minimal over all... especially compared to the jobs that would be lost if a disaster were to occur and our natural environment were threatened or destroyed.

Response GP470-6

Comment acknowledged.

Comment GP470-7

3. Impacts are many. A few examples of the impacts are: risks to the marine life and to the environment from oil spills/derailments/increased use of our waterways; risks to migratory bird habitats; potential risks to the health of our communities from increased diesel air emissions; decreased property values in areas where the trains travel and near where the storage tanks are to be located; potential risks for loss of life and property in the event of a catastrophic explosion; increased traffic impacts on some neighborhoods; risks to children

living along and going to school along the path of the trains and near the storage facilities; increased noise and air pollution; potential impact to tourism industry.

Our local communities are faced with the threat of earthquakes/tsunamis and the increased costs associated with insuring our properties, causing a decrease in property values. I can't help but think that oil terminals in our midst would further erode the investment that property owners have made in their homes, a sad ending to a lifetime of work.

When weighing the risks versus the rewards, the risks involved in these projects are too great and there appear to be few, if any, rewards. Most of us don't live here for the weather... we live here for the natural beauty, the natural resources, and the quality of life. Let's not allow oil companies to terminate that quality by placing their oil terminals in Grays Harbor.

Bev Miller
Hoquiam

Response GP470-7

Refer to the Master Response for Purpose and Focus of the EIS for a list of resources addressed in the EIS and a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action..Although no formal response to scoping comments is required under SEPA, scoping comments submitted electronically were presented in the Draft EIS as Appendix A, *Scoping Report*. The scoping report includes a reproduction of all comments submitted electronically. These and other comments received (e.g., by mail or orally at scoping meetings) were considered in determining the scope of the Draft EIS. Appendix A provides a catalog of all the comments that were received during the formal scoping period.

Comment GP470-8

In spite of their length, the DEISs fall short in many respects and appear to be riddled with inconsistencies, inaccuracies, and assumptions. The DEISs attempt to diminish the risks of catastrophic events by claiming the risks are "low."

<u>Oil train derailments, explosions, fires</u>: Even with all of the train derailments that have occurred over the past several years in other areas of the country, there are still some locals who believe derailments resulting in crude oil spills, fires or explosions couldn't happen here and that opposition to these proposals are from a few "environmental nutjobs." They fail to hear the voices of the scientists, seismologists, government officials, doctors, emergency responders and others who say these projects are a mistake. The DEISs only considered approximately 59 miles of the route to get the crud (oops! "crude") to Hoquiam. What about all of the folks along the way?

Grays Harbor has been lucky thus far. There were at least three derailments of trains carrying grain or other non-hazardous materials during the summer of 2014. I would be willing to bet the folks in Lac-Megantic, Quebec (July 6, 2013 - claiming 47 lives), Pikens County, AL (Nov. 8, 2013), Casselton, ND (Dec. 30, 2013), Philadelphia, PA (Jan. 20, 2014), Augusta, MISS (Jan. 31, 2014), Lynchburg, VA (April 30, 2014), LaSalle, CO (May 10, 2014), Mt. Carbon, WV (Feb. 16, 2015), and Galena, IL (March 5, 2015) were also told by oil and rail industry officials that the transport of crude oil through their communities and along their waterways was totally safe. After all, those industries have one goal in mind - getting the crude oil out of the ground and to its destination as quickly as possible, with the ultimate goal of increasing their profits, no matter what the cost to the communities through which

this hazardous material must travel. Donald Kunkle, executive director of the Pennsylvania First Emergency Services Institute noted that if an oil train derails, ruptures and explodes, much of the damage is already done before emergency responders even get the call.

US crude oil production rose by 3.2 million barrels per day between 2008 and 2013. In 2014, railroads carried 500,000 carloads of crude oil compared to 9,500 carloads in 2008 - a mere 6-years! Increased rail traffic results in increases in risk of derailment, spill, fire, explosion. The National Transportation Safety Board says "... changes to the North American energy landscape provide many more chances for fires, explosions and releases of flammable liquids...". The "push" to bring Baakan crude oil from North Dakota to the West Coast can be felt throughout the region. The oil companies are sniffing around various locations in Washington and Oregon for places to site new oil refineries. A Seattle-based nonprofit that focuses on sustainability issues (Sightline Institute, Seattle) reports that "In Oregon and Washington, 11 refineries and port terminals are being planned or built or are already operating oil-by-rail shipments." The proposed Tesoro-Savage oil terminal in Vancouver would receive approximately 120 oil trains per month. The Riverside Energy Inc. refinery being proposed for Longview would bring in approximately 1 unit train every three days (or about 10 unit trains per month). Locally, the proposed terminals alone would bring an additional two trains per day through our county.

Response GP470-8

Refer to Responses to Comments GP470-4 and GP470-5.

Comment GP470-9

Earthquake/tsunami: The DEISs are deficient in that inadequate attention was given to the very real threat of a major earthquake in the region and how these terminals would withstand such a catastrophic event.

Response GP470-9

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP470-10

My understanding is pilings for the storage tanks would be installed up to 150 feet deep, while bedrock in the proposed areas begin at 200 feet.

Response GP470-10

Piles would be driven to the depth of competent soils, which geotechnical investigations completed at the project site indicate is generally reached at 150 feet below-ground surface (Hart-Crowser 2013; as cited in Section 3.1, *Earth*). Refer to the Master Response for Seismic Risk and Design Requirements for more information about the iterative, ongoing risk assessment and design processes commensurate with the project's stage in development.

Comment GP470-11

Seismology experts who study the Cascadia subduction zone seem to agree the odds of "the big one" striking the area in the next 50 years are about 1 in 3 and the odds of a very big one (between 8.7 and 9.2) 1 in 10.

Response GP470-11

Refer to the Master Response for Earthquake Probabilities for an explanation of how the probabilities of strong earthquakes reported in the Draft EIS relate to those identified in recent studies.

Comment GP470-12

Would the proposed tanks withstand violent shaking for two, three or even four minutes? It states on page 5 of the DEIS Executive Summary for the Westway Expansion Project that: "The risk of damage to the new facilities from an earthquake could increase potential impacts. Depending on the magnitude of the event, the new storage tanks could also become rupture [sic] and result in a leak of crude oil into the environment." The same grammatical error appears on page 6 of the Executive Summary of the Imperium proposal.

Response GP470-12

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP470-13

Regarding the risk of a tsunami, the DEIS stated, "...current design standards do not require consideration of tsunami risks." If not, why not? It goes on to state: "The project site is also in an area that has the potential to be inundated by tsunami waves."

Response GP470-13

Current building codes and applicable design standards do not address site-specific tsunami risks. For this reason, tsunami impact modeling and analysis (Draft EIS Appendix C, *Tsunami Impact Modeling and Analysis*) were conducted to evaluated tsunami risks at the project site, including specific wave and debris forces.

Comment GP470-14

The final EISs for these projects need to better review the health risks, spill cleanup issues, global warming impacts of both Bakken crude and Alberta tar sands, noise and vibration issues, climate change, tourism, property values, effects of increased rail and vessel traffic, risks to the environment, etc.

Response GP470-14

Chapter 3, *Affected Environment, Impacts, and Mitigation*, addresses potential impacts from construction and routine operation of the proposed action. Increased risk of incidents (e.g., storage

tank failure, train derailments, vessel collisions) and potential consequences (e.g., release of crude oil) are addressed in Chapter 4, *Environmental Health and Safety*. Section 4.7, *Impacts on Resources*, describes the general types of impacts that could occur as a result of an oil spill, fire, or explosion, including impacts on human health. Final EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, address economic considerations, social policy implications, and the costs and benefits associated with the proposed action. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP470-15

In economically depressed areas such as ours, the desire for job creation can cloud our collective judgment. We feel a certain amount of "panic" because we fear the economic downturn of the communities that comprise Grays Harbor may not have reached bottom and, in our eagerness to attract new businesses to the area, we let that panic cloud our judgment. However, I firmly believe these projects are not a good fit for our communities. There are too many dangers - to the environment, fish and wildlife, the economy, the citizens, the next generation! Phrases repeated throughout the documents are "... cannot be fully mitigated..." and "... no mitigation measures can be implemented..."

Permits for these projects need to be denied! If these facilities are allowed to be built, the citizens in Grays Harbor would be taking all the risks while the oil companies would be raking in the profits.

I can't think of any additional comments that have not been made by other folks. The question is, who is listening?

Response GP470-15

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP471, **Miller, Dave**

Comment GP471-1

October 29, 2015

Please accept my comments below regarding this proposed project.

I live in Camas, Washington, within the "blast zone" of crude oil trains on the BNSF railroad. But my greater concern is for the wildlife and environment of the Columbia River Gorge, especially the Pierce National Wildlife Refuge.

Since 2006 I have been volunteering for the USFWS at the refuges in the gorge – Steigerwald Lake, Franz Lake, and Pierce National Wildlife Refuges. In my work at the Pierce refuge several years ago, I noticed on several occasions the carcasses of elk that had been killed by trains on the refuge. I was curious how often this occurs, so I got permission from the refuge manager to walk along the edge of

the railroad right of way with a GPS and camera, and document the carcasses. I have repeated this survey several times over the last few years.

I was fairly shocked by what I found. In the 2.5 miles of track that run through the Pierce refuge, I have found the remains of at least 50 animals killed by trains (the count was 47 when I made these charts in 2013):

See Original Attachment for Photographs & Graphs

I used the GPS to ensure I did not count the same carcass more than once.

The current train traffic is killing large numbers of wildlife now. This is unacceptable!

Over the last few years we have been absolutely bombarded with fossil fuel export proposals, each of which would exponentially increase the train traffic along the Washington side of the gorge, and in turn kill even greater numbers of wildlife at the Pierce refuge *and at all places where the tracks go through good wildlife habitat.*

Besides directly killing wildlife, increased fossil fuel train traffic will:

- Prevent animals from migrating across and down the tracks like they do currently (there are numerous game trails crossing the tracks). At some point very soon the tracks will become a 1200 mile barrier wall, because there will be a train on them most of the time. Think about the wildlife impacts of that.

- Make a nearly continuous deafening roar at the refuges. This will add stress to the wildlife, and disrupt their aural communications.

- Greatly increase diesel emissions.

- Greatly increase the risk of fossil fuel spills (it already drips onto the railroad bed), explosions, fires, etc. Think about the impact of a crude oil tank car derailment and explosion on a windy August day in the gorge. Such a fire would be impossible to extinguish.

- BNSF is also currently spraying herbicide into creeks along the railroad (see photos below). More trains probably means more herbicide along the tracks.

- Note that the cumulative effects of all these projects multiply the negatives of each project. You need to look at the effects of all the projects!!

I have several theories why so many animals are being killed by the trains. In all my visits to the Pierce refuge, I have only seen or heard of two animals being killed by cars on Hwy 14, which runs parallel to the tracks, while over 50 animals have been killed by trains. Obviously there is something different going on at the tracks vs. the highway. Here are my theories, based on my observations at Pierce:

- Elk and deer tend to be herding animals. If a herd is near (or on) the tracks when a train approaches, they may run across the tracks to safety. The last few animals may dash in front of the train to avoid becoming separated from the herd.

- Animals use the tracks as a travel path. I have seen evidence of this. When a train comes, their natural instinct is to outrun it, which they cannot do. The trains are traveling about 50mph through the Pierce refuge.

- There are a lot of trains hauling grain, and a lot of grain is spilled on the tracks (see photos). The grain attracts animals, especially during the winter. The animals are hit and killed by trains.

- An animal is killed on the tracks. Scavengers come to feed on the carcass and are also killed. This is probably why I have found dead turkey vultures and coyotes.

At the very least, you should require that appropriate wildlife over/under passes be built in areas where large numbers of wildlife are being killed.

Please examine the photos below, all taken at the Pierce NWR.

See Original Attachments for Photographs.

[Photos reviewed but not reproduced.]

Regards,

Dave Miller
Camas, WA
3509 NW 3rd Ave Camas, WA 98607 davem98607@yahoo.com

Response GP471-1

Final EIS Chapter 3, Section 3.5.5.2, *Proposed Action*, *Operations*, reflects additional information to address the potential habitat corridors along the existing rail corridor in the study area where there could be a higher risk of wildlife interaction with trains and mortality.

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 further describes the potential risks associated with rail and vessel transport in this area. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP472, **Miller, Sharon**

Comment GP472-1

Please consider the short term planning that investing in the fossil fuel industry will establish in Grays Harbor. This unhealthy and dangerous industry does not have a long future as countries that the fuels are being exported to are now transitioning away from fossil fuels and are moving to renewables, as well. With the chance to invest in our future, why would we invest in regressive industries like these??

Response GP472-1

Comment acknowledged.

GP473, **Miller, Sharon**

Comment GP473-1

Please.....Deny this request and allow Grays Harbor to make room for sustainable and renewable energy industries.

Response GP473-1

Comment acknowledged.

GP474, **Miller, Sharon**

Comment GP474-1

Move away from fossil fuels ahead of federal requirements to do so. Let's be progressive!

Response GP474-1

Comment acknowledged.

GP475, **Miller, Sharon**

Comment GP475-1

Grays Harbor is known as a recreational area and making it an industrial center for fossil fuels will drive tourists from the area. They cannot afford this.

Response GP475-1

Comment acknowledged.

GP476, **Miller, Sharon**

Comment GP476-1

Hello. Thank you for hearing us today. You can tell that most of us communities -- my name is Sharon Miller, and I'm a resident of both Clark and King Counties. I commute to Vancouver between Seattle each week. I notice the 100-car oil trains that traverse our state paralleling I-5 and keep an eye on it because I know of the derailments.

I'd like to speak today to the statement of the DEIS that says, Although the likelihood of a large spill, fire, or explosion is low. I found that so hard to believe knowing of Lac-Megantic, Quebec where there were 47 deaths in 2013. And that train had 74, not 100 cars. The mayor of the city said that their city looked like a war zone.

But that was in Quebec. So I would like to read a statement from the Seattle Times from 1999. The series of explosions fueled by a ruptured gasoline pipeline rocked Bellingham, Washington Thursday sending a wall of flames racing along the creek and critically injuring two 10-year-old boys.

The explosion sent a plume of thick, black smoke billowing up 10,000 feet and darkened the sky and the city about 90 miles north of Seattle.

People close to it said it felt like an earthquake. Fires burned for hours after the explosion, damaging a house, and part of the water treatment plant, and destroying dozens of trees along the creek.

The boys had been playing near the creek in the city park at the time of the explosion and were taken to Harborview Hospital in Seattle where they were listed in critical condition with burns over 90 percent of their body.

Nearly 300,000 gallons of gasoline spilled in the creek and spread a mile through the city.

I think you should change your statement and say the risk is high.

Response GP476-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or within Grays Harbor, respectively. Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP477, **Mintkeski, Walt**

Comment GP477-1

To: Washington Department of Ecology and City of Hoquiam

I wish to comment on the DEIS's for Westway and Imperium oil terminal proposals. They must be substantially revised to fully disclose the risks of oil spills, train accidents, increased train and oil tanker traffic, air pollution, noise, harmful impacts on tribal culture and resources, vehicle delay at railroad crossings, and negative impacts on the Columbia River Gorge National Scenic Area. The indirect and cumulative environmental impacts from these projects will be significant and very difficult to mitigate.

Furthermore, the DEIS's failed to substantively address specific concerns related to the Columbia River Gorge National Scenic Area. This is inconsistent with the scenic area act, and it is illegal under the State Environmental Policy Act to ignore these impacts.

Some specific examples of this include:

The DEIS's fail to analyze the cumulative impacts to grade crossings from the proposal and other oil and coal export proposals, the likely need to construct additional sidings, overpasses, and second tracks, and the need for additional emergency response capacity along the entire rail route.

The DEIS's do not list the Columbia River Gorge National Scenic Area Act and Management Plan as an applicable regulation, despite the fact that the cumulative impact of additional oil train traffic would require new construction in the National Scenic Area.

The DEIS's fail to disclose the actual risk of an oil spill or explosive accident in the Gorge. The DEIS provided analysis of the risk of a spill or explosion near the facility where maximum speeds are limited to 25 mph. The DEIS's do not disclose the risk of spills and explosions in the Gorge, where the maximum speed is 50 mph for unit trains of oil and 60 mph for mixed-commodity trains with up to 34 oil tank cars dispersed throughout the entire train.

The DEIS's do not analyze the likelihood of a spill in the Columbia River along hundreds of miles of the BNSF rail line. Along with failing to analyze the likelihood of a spill, the DEIS's do not analyze safety impacts to local communities, environmental impacts to threatened and endangered salmon species in the Columbia River, and operational impacts on Columbia River Dams.

There is simply too much risk and too little reward from these proposals: Grays Harbor and rail-line communities would take on the risk and oil companies would reap the profits, while Grays Harbor and the Columbia River Gorge would become a through-way for oil going elsewhere.

The alarming safety record of oil trains means an explosive oil train derailment is a question of when, not if. Less dramatic but equally concerning is the air pollution, spill risks, and traffic delays oil trains would bring to communities along the rail line from Aberdeen to Chehalis, through the Columbia River Gorge, and all the way to the source of the oil in North Dakota and elsewhere.

There are better way to meet our energy demands. Washington State is rapidly moving away from fossil fuels and towards clean, renewable sources to meet our electricity needs and respond to global warming. Building more, large infrastructure for yesterday's energy is the wrong path to meet today's energy needs and a big economic gamble for Grays Harbor. Washington state should continue to lead on safe, renewable, clean energy solutions and say no to more oil and coal. I urge you to do everything in your power to stop these dirty and dangerous projects.

I urge you to protect Grays Harbor, the Columbia River Gorge, and our communities by rejecting the proposed Westway and Imperium oil terminals.

Thank you, Walt Mintkeski 6815 SE 31st Ave Portland, OR 97202 mintkeski@juno.com

Response GP477-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that

could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

GP478, **Mizutani, Patricia**

Comment GP478-1

Based on the Draft Environmental Impact Statements (DEISs) which have been released for two proposed oil holding facilities in Grays Harbor County, I urge the Washington Department of Ecology and City of Hoquiam to reject the terminals. The DEIS has determined that the transport of the highly volatile Bakken crude oil to these terminals will be associated with air, land and marine pollution.

In the event of derailment, the spilled crude oil which has a blast zone of 1 mile could result in considerable loss of human life and property.

The length of the trains carrying the crude will lead to long delays at track crossings and could contribute to life threatening situations for very sick patients in emergency vehicles.

Being in the tsunami zone, the terminals will be highly vulnerable to damage since current design standards are inadequate. Please use the analysis and findings in the DEISs to reject these oil shipping terminals.

Response GP478-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP479, **Mohr, Brian**

Comment GP479-1

Dear Washington Department of Ecology and City of Hoquiam: The DEISs for Westway and Imperium oil terminal proposals must be substantially revised to fully disclose the risks of oil spills, train accidents, increased train and oil tanker traffic, air pollution, noise, harmful impacts on tribal culture and resources, vehicle delay at railroad crossings, and negative impacts on the Columbia River Gorge National Scenic Area. In reality, it is highly likely that the indirect and cumulative environmental impacts would be significant and impossible to mitigate.

Furthermore, the DEIS failed to substantively address the concerns raised by many environmental groups and individuals, in particular the specific concerns related to the Columbia River Gorge Environmental Policy Act to ignore these impacts.

Response GP479-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP480, **Moore, Dianna**

Comment GP480-1

I have thought long and hard about the best way to address my thoughts and feelings about the oil terminals on Grays Harbor, and the act of drilling or extracting oil from the earth in general. My ultimate conclusion is pretty simple; this earth is already showing the effects of human-caused pollution with more powerful storms, wildly fluctuating weather, and oceanside communities going under rising sea levels. So here we are, using methods destructive to the earth to extract a product we know does harm to humans, and all living things, and the environment, yet we justify it... because we need the jobs? I don't buy that for a minute! This is about money, power, and greed, pure and simple.

Response GP480-1

Comment acknowledged.

GP481, **Moore, Julia**

Comment GP481-1

My name is Julia Moore. I'm from Olympia, Washington, that's Thurston County. And I agree with all of the arguments that the people have brought today for why you should not approve these proposed terminals.

But I have a further request for you, and that is, it's not that I want Imperium and Westway to take their business somewhere else, because there is no other place to take unmitigatable energy-producing companies like that. We're all one globe. And that's like saying you can throw something away. There is no way.

What I'm asking you, and I'm not sure how this all works together -- but I want to ask you, to encourage you to ask companies to come here with alternative energy solutions. Put your money and your time and -- I mean, I'm a tax payer. I'm asking you to produce for me a better situation than you've given me so far. And I speak for millions of people who feel the same way.

Find us some alternative ways to run our economy, supply our energy, be creative, and be moral. Don't forget that that piece of it is just as important as the money.

And I speak for those who can't speak. The earth, mother earth, those green grassy hills that the children run through, and the seven generations of the future who aren't here who can't speak. Thank you.

Response GP481-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP482, **Moore, Julia**

Comment GP482-1

I'm Julia Moore. Our dependency on oil is like drug addiction. We're enslaved to a lifestyle built on unsustainable principles that rely on us to not look too close or think too hard about the harmful consequence of our choices. Addiction buries our goodness in denial.

Your fact sheets are good examples of denial. I was impressed with how they made bad things sound good and spun the off-the-charts high risk facts into palatable bites, helped with colorful photos and charts. I especially liked the chart that gives the impression that I could slide the dial and lower the risk.

Like an old snake oil ad, I became hypnotized by the fact writer's repetitive use of scary words like oil spill risk factor until the words lost their power. Is this your purpose? Do you hope we won't look too close, not think too hard about these horrific risks?

These are the tactics of drug pushers. It's how to do business as usual. What if we wanted to stop doing business as usual? How could we end this slavery that keeps us from following our goodness?

In recovery from addiction, one learns that the point is it's never between slavery and freedom. We must always choose between slavery and the unknown. That's the secret from getting off the addiction oil train. We must see that we're enslaved by notions of victimhood and entitlement.

To be free, you must be willing to sacrifice what is most familiar from what is most true. To be free we need to act on integrity, on trust sometimes for a long time. We must believe we can reclaim our capacity to know and live by the innate goodness in us to serve, and to belong to one another, and to life.

Response GP482-1

Comment acknowledged.

GP483, **Moore, Robin**

Comment GP483-1

Economic Questions for the DEIS of Imperium:

This also applies to Westway, and any other crude oil terminal projects to be built in Grays Harbor. As the financial benefit to the rails, storage, and shipping corporations is dependent on cumulative volume, the three crude oil projects MUST be considered, together.

Many people have chosen to grow old in Grays Harbor. Some are lifelong Harborites who never wanted to leave. Some came here purposely because of the quiet lifestyle and natural environment. I find living on a fixed income possible in this area. As the introduction to chapter 7 of the Imperium DEIS states, economic and social impacts must be addressed.

What would be the benefit of these crude oil projects to the many retired people who live here?

Response GP483-1

As discussed in Draft EIS Chapter 6, *Cumulative Impacts,* the cumulative analysis considers the combined effects of the Westway Expansion Project (proposed action), the REG (formerly Imperium Terminal Services) Expansion Project, and the Grays Harbor Rail Terminal Project. Draft EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, addresses economic considerations, social policy implications, and the costs and benefits associated with the proposed action. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7.

Comment GP483-2

On page 7-7, in the paragraph before Table 7-7, it says: Essentially, all business taxes and net business income related to onsite operations and income earned by rail and vessel operators would leave Grays Harbor County and would not result in regional employment or income.

Grays Harbor has significant economic problems. One reason was over dependence on the timber industry. Yet, there are areas of growth. (Table 7.3) among which are health and social services. These are the sort of services that retired people need and the type that are largely supported by tax dollars.

If the taxes and income are leaving the Harbor, how is this a benefit to the retired population?

Response GP483-2

Draft EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, addresses economic considerations, social policy implications, and the costs and benefits associated with the proposed action. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7.

GP484, **Moore, Robin**

Comment GP484-1

Questions for Westway DEIS regarding Study Area:

On page 3.0-2, the Draft EIS states the “study area is from Centralia to the project site.” As I read through the scoping comments, I saw people from Spokane, Idaho, and Montana voice concerns. Their communities will be exposed to the same risks of derailment, explosions, traffic, noise, air

pollution as those in the study area. Farming and ranching, which are dependent on rails, are already being hurt by the monopolization of the lines by coal and oil trains.

Grays Harbor is the destination for these petroleum products. It does not exist in isolation. Will the study area be expanded to include all communities impacted by the Westway project? Will the cumulative impact of all three crude oil projects be considered?

Response GP484-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP485, **Moore, Robin**

Comment GP485-1

In Table S-1 of the Westway DEIS, the third column is, "Were potential unavoidable and significant adverse environmental impacts identified in the Draft EIS?" There were 14 No's and 17 Yes's. When mitigation measures are implemented, do they carry the power of law? Who or what agency is responsible for inspection to see if the mitigation is properly implemented? How often will inspections be done and with what degree of authority to fine or shut down operations?

Response GP485-1

Refer to the Master Response for Mitigation Framework for information on the enforcement of mitigation.

GP486, **Moore, Robin**

Comment GP486-1

This comment is regarding Chapter 3.9 Aesthetics, Light, and Glare. As both Westway and Imperium DEIS documents are nearly identical, and the light and glare from one facility cannot be separated from the other, they should be considered together.

It is not displeasing to see lighted buildings on a dark night. Aesthetically, it can be comforting. The buildings themselves have a gritty beauty. The whole of Port Dock Road has the feel of human progress.

Response GP486-1

Refer to the Master Response for Cumulative Impact Analysis.

Comment GP486-2

However, the area where the third oil terminal is planned is not industrialized to the same extent. The lights and glare would be jarring in that natural setting. It would have a very harmful effect on the birds and other wildlife. The expansion of Westway and Imperium bulk liquid storage facility would create a precedent for the creation of the third facility. They are not the same but cannot be considered in isolation. Whereas light and glare might not be significantly more noticeable with expansion of Westway and Imperium, it would have a very detrimental impact on the third proposed oil terminal. Is there any legitimate reason not to consider all three of these projects and their cumulative impacts as one whole?

I am not using the name of the third terminal because it has changed hands and names during this process.

Response GP486-2

Refer to the Master Response for Connected or Similar Actions.

Chapter 6, *Cumulative Impacts,* presents the analysis of the incremental addition of the proposed action to impacts from past, present, and reasonably foreseeable future actions—including the REG (formerly Imperium Terminal Services) Expansion Project and the Grays Harbor Terminal Expansion Project. Cumulative impacts were analyzed only for those resources for which impacts of the proposed action were determined to be additive or cumulative. Impacts of the Grays Harbor Terminal Expansion Project or any other future project proposed at that site would be assessed as appropriate under that project's SEPA review process.

Comment GP486-3

Now Imperium has changed hands, and possibly names. How are the responsible parties to be identified? With the seeming instability of upper management, can any of them be trusted to follow through honestly and competently with any mitigation measures? Are you, our public officials, keeping a skeptical eye on the corporate maneuverings?

Response GP486-3

The comment is specific to the REG (formerly Imperium Terminal Services) Expansion Project and would be addressed in responses to comments as part of the Final EIS for that proposed project.

GP487, **Moore, Robin**

Comment GP487-1

Regarding the following from the Westway DEIS:

4.2.2.4: The applicant [Westway LLC]currently operates without Ecology oil spill plans because methanol does not fall under the definition of oil for Washington State.

4.2.2.5 Rail and Vessel Oil Spills Plans

PS&P does not currently transport oil in bulk and, therefore, does not have an oil spill response plan.

Response GP487-1

Draft EIS Chapter 4, Section 4.2.2, *What framework prepares for an incident?* describes the formal planning framework in place to address risks related to oil spills, fires, and explosions. Section 4.4, *Environmental Health Risks—Terminal (Onsite)*, includes a discussion of the existing risks and emergency planning and response capabilities specific to the existing methanol operations. Final EIS Section 4.2.2 has been revised to indicate that railroad operators would be required to develop spill contingency plans consistent with new state requirements.

Comment GP487-2

4.2.3.2 Spill Notification Requirements

Oil and hazardous substance spills must be reported under federal and state law. The spiller is always responsible for reporting a spill. Any spill that causes any of the following conditions must be reported to federal and state agencies and appropriate spill response actions must be taken.

One would hope that forward thinking corporations would exhibit their integrity by pre-planning for that which they know they will be responsible. Have Westway and Imperium developed their spill plans yet? Has PS&P developed a spill response plan? Have they shown responsible compliance with spill notification in the past? As the three proposed crude oil projects must be considered together, what is the spill plan and compliance history of the Terminal Three facility?

Response GP487-2

As noted in Draft EIS Chapter 4, Section 4.2, *Applicable Regulations*, contingency plans are not required prior to operations and have not been developed. However, once contingency plans have been submitted to Ecology, they will be available for public review and comment for a period of 30 days consistent with WAC 173-186. Final EIS Section 4.2, has been revised to provide updated information regarding the state requirements for railroad operators to provide contingency plans and to demonstrate financial responsibility. Refer to the Master Response for Connected and Similar Actions for a discussion of how other projects are addressed in the EIS.

Comment GP487-3

Corporations have a habit of filing for bankruptcy after a major accident. Or they litigate for years before paying deserving parties. In light of the priority of corporations to provide profit for their shareholders, we the citizens of Grays Harbor must be proactive, using RCW 88.40 cited here.

From Appendix B of the Westway DEIS:

B.2.48 Transport of Petroleum Products – Financial

Responsibility (RCW 88.40)

RCW 88.40 defines and prescribes financial responsibility requirements for vessels that transport petroleum products across state waters and facilities that store, handle, or transfer oil or hazardous substances near navigable waters of the state. Tank vessels that transport oil in bulk as cargo may be required to demonstrate financial responsibility to pay $1,000,000,000.

Have any of the three proposed crude oil projects, PS&P, or any likely shipping companies shown the ability to secure one billion dollars to relieve damages of an accident or spill? Would one billion

be enough to compensate the community, tribes, fisheries, economic, and cultural institutions of Grays Harbor for their losses due to a spill or accident? What manner of enforcement is in place to ensure payment?

Response GP487-3

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP488, **Moore, Robin**

Comment GP488-1

Appendix O, Chapter 5 exposes the limitations of Imperium's fiscal analysis, and therefore any economic benefits to the region from any of these projects (underlining for emphasis):

IMPLAN estimates all other taxes including those incurred indirectly and through induced spending and employment. IMPLAN has only limited fidelity for taxes rates by industrial classification, asset classes and geography for these secondary effects, and the results should be seen as illustrative and not construed to be the detailed analysis of a tax professional. Cumulatively, state and local taxes, permits, and fees would be approximately $3.6 million in the first year of full operations.

Limitations of Input-Output Models

Like many quantitative tools, input-output models rely on a set of assumptions. The use of simplifying assumptions imposes certain limitations on the use of input-output modeling. These limitations should be fully understood and guide its use....

Input-output models have fixed production relationships, including the following assumptions:

- *Constant Returns to Scale* means that an industry's production function is linear, and an increase in output requires all inputs to increase proportionately.

- *Fixed Commodity Input Structure* means that input-output models do not allow changing input prices to affect the production decisions of businesses.

- *No Supply Constraints* means input-output models show how local industries respond to some initial change in final demand, but assume that supplies of raw materials and intermediate goods are unlimited.

- *Sector Homogeneity* means in input-output modeling, industry sectors are assumed to be homogenous. That is, all businesses within an industry sector 1) produce commodities in fixed proportions and 2) produce identical commodities that are perfectly substitutable.

It is appreciated that the DEIS includes these caveats. Are the co-lead agencies paying attention to them? The Department of Ecology and the City of Hoquiam are making life changing decisions based on "illustrations, simplified assumptions, and fixed production relationships." The Economic Impact Analysis is a year old. Already we see that those fixed production relationships have changed. Oil is a global commodity. The specifics of Hoquiam, the study area, and even the United States cannot be

taken in isolation. The co-leads must use information beyond the study and the DEIS that show the trend in decline of the oil industry. The "study area" should not be shackled to a dying industry. Who will be accountable for making decisions based on this self-identified flawed analysis?

Response GP488-1

The comment is specific to the REG (formerly Imperium Terminal Services) Expansion Project and would be addressed in responses to comments as part of the Final EIS for that proposed project. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP489, **Moore, Robin**

Comment GP489-1

[These comments are directed at all three proposed oil terminal projects. They are dependent on one another. They cannot be considered in isolation. The DEIS of both Westway and Imperium seem identical for section 3.10 except for the map indicating project site.]

The section on impacts to recreation describes the many parks, boat launches, and wild life viewing areas we have in Grays Harbor. In the first paragraph it says these bring in over a million dollars a year. This money is not in the hands of one or three corporations, but in the hands of many small businesses catering to tourists on yachts and kids who need a new a soccer ball.

One popular playfield is the Westend Park in Aberdeen. One edge has a short bit of vegetation between it and the rail lines. I have a friend who lives right next to the park. She is worried about the noise, smell, and shaking of her house that will come with increased rail traffic. But she is mostly worried about what could happen to the kids playing in the park should an accident happen.

Response GP489-1

Comment acknowledged.

Comment GP489-2

If these projects do not go forward we have the "No Action Alternative:"

3.10.5.1 No-Action Alternative

Under the no-action alternative, impacts on recreation related to construction of the proposed action would not occur. The applicant would continue to operate its existing facility as described in Chapter 2, Section 2.1.2.2, *Existing Operations*. Although the proposed action would not occur, it is assumed that growth in the region under the no-action alternative would continue, which could lead to development of another industrial use at the project site within the 20-year analysis period (2017 to 2037). Such development could result in impacts similar to those described for the proposed action.

This implies you can't escape, another development for industrial use will come along, so give up now. My friend and I do not accept this as a reason to say "Yes" to these projects. We say draw the

line now. The mitigation measures are inadequate. There can be no compromise with our safety or the right to enjoy our recreation facilities. We demand corporate and governmental accountability. You must deny the permits. You must consider with fore thought the impacts of any future industrial uses for the Port.

Response GP489-2

The analysis of the no-action alternative does not assume that a future development similar to the proposed action would occur at the project site. Refer to the Master Response for Baseline and No-Action Alternative. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP489-3

Because there was no fore thought applied at the beginning of this process, how much time, energy, and money has it cost the people of Hoquiam, Grays Harbor, and Washington State?

Response GP489-3

A third-party contractor was hired to prepare the EIS. The City of Hoquiam administers the contract and the City and Washington State Department of Ecology oversee and direct the contractor's work. The cost of the analysis, document preparation, and public outreach activities are paid by the applicant.

GP490, **Moore, Robin**

Comment GP490-1

This is my own comment from the earlier EIS.

Organization:
Commenter: Robin Moore
Commenter Type: Public
Comment Excerpt Text:

The oil industry is an extraction economy, thus has a limited life span. I am concerned that the socioeconomic character of our community will suffer from these crude oil projects. Grays Harbor's established forestry and fishery industries are renewable. The intensity of the proposed crude oil projects will adversely impact the woods and the waters. Long term employment will be sacrificed. Family traditions will be lost. Why should these short lived projects be given permits to proceed when we will likely have another round of unemployment when the plants shut down? Can Imperium and Westway be compelled to provide adequate post-employment compensation for their workers?

I see nowhere in the DEIS that the issue of basing the future economy of Grays Harbor on this dubious commodity has been addressed. Nor do I see the concerns of the many Montanans who wrote in about the present impact that coal trains coming to the coast are making on their population. Such harmful impacts will only increase if more facilities are built in Washington.

Hoquiam does not exist apart from the rest of the state, nation, or world. The following is from the Hoquiam Municipal Code. It lays out the protections we give ourselves.

11.04.020 Purpose.

This chapter is intended to carry out the responsibilities imposed on the city of Hoquiam by the Shoreline Management Act of 1971. It is the policy of the city to provide for the management of the shorelines of the city by planning for and fostering all reasonable and appropriate uses. This policy is designed to provide for the development of these shorelines in a manner which will promote and enhance public interest. This policy contemplates protecting against adverse effects to the public health, the land, its vegetation, wildlife, and the waters of the state and their aquatic life, and incidental rights. The city council declares that the interest of all of the people are paramount in the management of shorelines of statewide significance. In adopting the guidelines for shorelines of statewide significance, the city council has given preference to the uses in the following order of preference which:

(1) Recognize and protect the statewide interest over local interest;

(2) Preserve the natural character of the shorelines;

(3) Result in long-term over short-term benefit;

(4) Protect the resources and ecology of the shorelines;

(5) Increase public access to publicly owned areas of the shorelines;

(6) Increase recreational opportunities for the public in the shorelines.

(7) Provide for any other element as defined in RCW 90.58.100 deemed appropriate or necessary.

Does the Department of Ecology take the long term, global aspects of these three oil terminal projects into consideration when making their final determination? Can the narrowness of the study area be set aside in an effort to avoid harmful impacts to the people of Montana, Idaho, Spokane, the Columbia Gorge, and all the little towns and burgs from North Dakota to Beijing? Can you deny the permits?

Response GP490-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for an explanation of the scope of the analysis of potential economic impacts in Draft EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of the incremental addition of impacts from the proposed action to impacts from past, present, and reasonably foreseeable future actions—

including the REG (formerly Imperium Terminal Services) Expansion Project and the Grays Harbor Rail Terminal Project. Refer to the Master Response for Cumulative Analysis for more information on the scope of this analysis.

GP491, **Moore, Robin**

Comment GP491-1

Comments regarding vessel traffic for the Westway and Imperium Expansion Projects

Vessel traffic from these two projects cannot be adequately studied without including the project proposed for Terminal 3.

Westway supposes an additional 238 trips per year, Imperium, 400. We might imagine Project 3 somewhere in the middle with 300 trips. This is a total of 938 ADDITIONAL vessel trips per year. In 2012, the total vessel trips were 281 (Table 3.17-7)

The No-Action Alternative expects vessel traffic to increase in 2017 to 338. That would be 1,376 vessels a year or at least three a day.

Is this at all realistic in this harbor with a narrow channel, hazardous crossing bar, and unpredictable weather?

Response GP491-1

Draft EIS Chapter 6, Section 6.5.6, *Vessel Traffic*, presents the analysis of the cumulative impacts associated with construction and operation of the three projects proposed for development at the Port of Grays Harbor: the proposed action, the REG (formerly Imperium Terminal Services) Expansion Project, and Grays Harbor Rail Terminal Project.

Comment GP491-2

Are there funds available for the extra tugs and pilots that will be needed? Is it realistic to expect mitigation measures involving escort tugs and “pretransit conferences” to be strictly followed when they will adversely impact profits?

Response GP491-2

As described in Draft EIS Chapter 3, Section 3.17.5.2, *Proposed Action*, tug and pilot capacity would not be exceeded under the proposed action. Implementation of applicant measures would be enforceable by the conditions of a permit, if issued by the City of Hoquiam.

GP492, **Moore, Robin**

Comment GP492-1

Comment concerning corporate decision making:

During the week of October 19, 2015, Westway Grays Harbor sent out large postcards to all postal recipients.

"We are seeking to expand our terminal operations, which will create more local family-wage jobs in Grays Harbor.

By supporting our project, you can help build a stronger future for our community."

The photos show a sunny and serene harbor. There is no information other than a website. If this were the first exposure to the intended expansion project, a person may very well think "Fine." Those of us who have been following the news know there is much more involved.

The postcards are indicators of how Westway makes decisions. They are a last minute effort to minimize the seriousness of the projects. Why would responsible business people decide to spend money in this way? They should be saving up for mitigation requirements and compensation payouts. Deny the permits.

Response GP492-1

Comment acknowledged.

GP493, **Moore, Robin**

Comment GP493-1

The purpose of the DEIS process is to discover potential hazards ways to mitigate those hazards with government regulation. Two examples, one internationally known, the other local, should suffice to show the disregard with which corporations treat regulations.

The BP oil spill in the Gulf of Mexico in 2010 is illustrative not only of what goes wrong when regulations are ignored, but how the largest and richest corporations avoid responsibility:

On 4 September 2014, U.S. District Judge Carl Barbier ruled BP was guilty of gross negligence and willful misconduct... Barbier ruled that BP had acted with "conscious disregard of known risks" and rejected BP's assertion that other parties were equally responsible for the oil spill. He described BP's actions as "reckless." and determined that several crucial BP decisions were "primarily driven by a desire to save time and money, rather than ensuring that the well was secure."

BP issued a statement strongly disagreeing with the finding, and saying the court's decision would be appealed. (Reuters, 2-23-13)

Right here in Grays Harbor we have an example of a well regarded company that provided jobs and built something very important for the state's infrastructure, which still could not bother to follow the regulations:

Kiewit-General Joint Venture, the state-hired contractor commissioned to build the SR 520 pontoon construction facility in Aberdeen, faces a $90,000 fine from the Department of Ecology for improperly decommissioning 15 groundwater monitoring wells at the site, according to a Thursday morning press release from the department. (The Daily World, 11-7-15)

Corporations large and small need to maximize profits for their shareholders. They do this by taking short cuts in labor and ignoring regulations. Past behavior predicts future behavior. Neither the Environmental Protective Agency, the Washington State Department of Ecology, nor the City of Hoquiam Municipal Code has the power to reverse this corporate habit. The risk of an oil spill in Grays Harbor is too great. We cannot afford the loss of habitat. We cannot afford the loss of jobs

dependent on that habitat. We cannot afford the escape from responsibility the corporations will take. We cannot afford years of litigation. For this most human and non-technical reason, the permits for all oil terminal projects proposed for Hoquiam must be denied.

Response GP493-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP494, **Moore, Robin**

Comment GP494-1

On this Thanksgiving Day, I want to thank you in advance for denying the permits.

Response GP494-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP495, **Moore, Robin**

Comment GP495-1

Last Chance Gulch

This is a "Comments Noted" comment. A software program could not see the passion, fear, or determination on the faces of the hundreds of people that spoke at the various hearings. If there is a live human reading this, you are important. You are not a computer chip. You have all the data at your finger tips. You also have an independent mind and heart.

The construction of three little oil terminals doesn't amount to a hill of beans in this crazy world. Except that they are three terminals in our part of the world and we have to take a stand. Please use all your wisdom and expertise to make a decision for long term wealth instead of short term pocket change. That wealth will be of more than the economic type, such as the lucrative fishing and tourist industries. That wealth will be that of preserving a community worth living in. You can do the right thing. You can deny the permits.

Response GP495-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP496, **Moore, Robin**

Comment GP496-1

Hello. My name is Robin Moore. I live in Hoquiam. I've lived there for 28 years. I too was a amazed to realize that you people had a sense of humor to have this meeting in the shadow of these coin towers. You know, Satsop doesn't get enough credit. It's the safest nuclear plant in the world. And

you people have the power to make these oil tanks the safest oil tanks in the world. Deny the permits. Thank you.

Response GP496-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP497, **Moore, Robin**

Comment GP497-1

Hello, my name is Robin Moore. I've lived in Hoquiam for 28 years. I'm addressing my comments to all three of the port terminals because I believe they need to be considered as a cumulative whole. So today we are in a theater, and we are all actors playing our parts. To permit or not to permit, that is the question, whether tis nobler in the minds to suffer the slings and arrows of a possible lawsuit, or to take up arms against the sea of disastrous environmental impacts and, by opposing, end them. Do not gamble with our future. Deny the permits.

Thank you.

Response GP497-1

Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of the incremental addition of impacts from the proposed action to impacts from past, present, and reasonably foreseeable future actions—including the REG (formerly Imperium Terminal Services) Expansion Project and the Grays Harbor Rail Terminal Project. Refer to the Master Response for Cumulative Analysis for more information on the scope of this analysis. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP498, **Morabito, Joan**

Comment GP498-1

Tourism is the life's blood that keeps the City of Ocean Shores up and running. Ocean Shores attracts visitors because of the pristine beaches, waters, air and landscapes. It's all about the outdoor activities here that make our city a great place to visit and live. Living here year round has been my goal and I have achieved it a year ago. Ocean Shores is my new home and I am grateful every day to be living around such natural beauty. My two questions to you are as follows.

1.) No one comes to vacation in a disaster area. If Westway Terminal Company is granted permits for crude oil projects and that crude spills into our waters and on our land, how will Westway compensate the City of Ocean Shores for the loss of the revenue through tourism, that keep our city alive?

2.) I put my life's savings into my retirement home. If Westway Terminal Company is granted permits for crude oil projects and that crude spills into our waters and on our land, how will Westway compensate me, the individual homeowner, when my property value plummets? I feel the handling of crude oil here in Grays Harbor County will ONLY benefit Westway Terminal Company.

Inevitable spills and explosions will turn our county into a filthy, unhealthy, unsafe place to live or visit. PLEASE DENY THE PERMITS Sincerely, Joan Morabito Ocean Shores, WA

Response GP498-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP499, **Mossett, Kandi**

Comment GP499-1

In my hometown of New Town, ND life has forever changed because of fracking and the lust for oil; the horrible thing is that it's changed for the worse. This is no modern day Mayberry; this oil boom using fracking has been devastating for us and NO amount of money can ever give us back what's being lost. Many in our own communities have died because of accidents with the hundreds of trucks that have taken over the roads, our land is being sterilized our water poisoned and our air tainted and harder to breath. Our culture has taken a back seat to strangers populating the land, many with dark intentions. Rape of both men and women is on the rise along with things we've never dealt with before such as sex trafficking of young teenagers. Heroin abuse runs rampant as big city drug cartels move in and our once quite town of 1,500 is now a dangerous and scary place to be, let alone to raise a child.

My daughter is 15 months old and my heart aches that I do not even want her to be at home for fear of what she'd be exposed to. Murder is not a word we came across in our town before the oil boom, now we just wait for the next and the next as many have been murdered, yes murdered, in our little communities, much of it associated with the drugs and gangs that follow the money. Our own people are becoming addicts and need treatment but they continue to be arrested and sent to jail while the true perpetuators of the crimes keep slipping away only to bring more drugs, guns and crime.

I can't even begin to describe to you the heaviness in my heart having buried my brothers' beautiful 28 year old step daughter just a few weeks who could not stop using heroin which destroyed her body so much we had to have a closed casket. We found my little cousins body in the lake this spring; he disappeared last fall after last being seen with two known MS13 gang members. His death was ruled an accidental drowning and the case was open and shut. Just this past week two armed robberies occurred at two separate downtown businesses on our little main street.

Take these words that have been read here today and quadruple the horrors and maybe then, you might begin to get a sense of what's happening to us in our communities on Fort Berthold in North Dakota as a direct result of our countries addiction to fossil fuels and fracking. Its sick and its sad and I would never in my life wish this kind of horror on anyone else.

If you have a choice do what you can now to help stop this kind of devastation from spreading, we need help, will you help us? Do not support fracking, the social and environmental impacts from it are negatively life altering and those impacts are spreading across this country like a disease, please, from one compassionate human being to another, help us and do not support fracking. Mod-zi-gidaz (thank you).

Kandi Mossett is a member of the Mandan, Hidatsa, and Arikara Nations in North Dakota, and is the Native Energy & Climate Campaign Organizer with the Indigenous Environmental Network.

Comments apply to both projects

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Response GP499-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP500, **Murphy, Donna**

Comment GP500-1

There are better way to meet our energy demands. Washington State is rapidly moving away from fossil fuels and towards clean, renewable sources to meet our electricity needs and respond to global warming. Building more, large infrastructure for yesterday's energy is the wrong path to meet today's energy needs and a big economic gamble for Grays Harbor. Washington state should continue to lead on safe, renewable, clean energy solutions and say no to more oil and coal. I urge you to do everything in your power to stop these dirty and dangerous projects.

Response GP500-1

Comment acknowledged.

GP501, **Murr, Bobbee**

Comment GP501-1

What effects will the pipeline installation have on marine habitat for all marine life, from mammals to plankton? How will any spills be cleaned up, and what will be the effects on life of spills. We need solar power, not more fossil fuel extraction, transport and combustion.

Response GP501-1

Draft EIS Chapter 3, Section 3.5.5.2, *Proposed Action*, describes the impacts on marine life, including impacts on mammals and plankton, from construction and routine operation of the proposed action, including pipeline installation and operation. This section also describes why minor spills and leaks from routine operations are anticipated to result in low impacts on animals as the result of exposure to contaminated stormwater.

GP502, **Murrell, Gary**

Comment GP502-1

How do we ensure that a company responsible for an oil spill or accident involving oil trains, rather than paying for making the community whole, simply declares bankruptcy and walks away? How

will we know that each project has purchased insurance to a dollar amount necessary to make the community whole after an oil spill or accident involving oil trains?

Response GP502-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP502-2

What specific plans do the railroads have for protecting the 6,000 children who go to school in the potential blast zone between Centralia and Hoquiam?

Response GP502-2

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment GP502-3

Specifically, how much would the cleanup from a major spill or accident cost?

Response GP502-3

Final EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, has been revised to include a discussion about the costs of recent oil spill incidents. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP502-4

Specifically, how much more delay time will motorists encounter if these projects are approved?

Response GP502-4

Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, describes impacts of the proposed action on rail traffic in the study area, including rail line capacity and train occupancy times at grade crossings. Section 3.16, *Vehicle Traffic and Safety*, describes the potential impacts of increased rail traffic on vehicle

traffic, including grade-crossing delay and queuing at nearby intersections. For detailed vehicle delay information, refer to Section 3.16.5.2, *Proposed Action*, and Appendix L, *Vehicle Traffic Analysis.*

Chapter 6, *Cumulative Impacts*, presents the analysis of the incremental addition of impacts from the proposed action to impacts from past, present, and reasonably foreseeable future actions—including the REG (formerly Imperium Terminal Services) Expansion Project and the Grays Harbor Rail Terminal Project.

Comment GP502-5

How, specifically, do these projects plan to deal with sea lever rise due to global climate change?

Response GP502-5

Final EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts, Climate Change*, reflects clarification regarding predictions of sea level change in the project area and potential for flooding at the project site. With predicted sea level rise in the project area for 2050 of 1.57 feet, the project site will remain approximately 5 feet higher than the projected high tide. As such, it would not be subject to flooding even during extreme storm events.

Comment GP502-6

How does BNSF plan to mitigate the potential for accidents on sections of track that can not be secured to the ground?

Response GP502-6

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts, including those related to rail operations on the BNSF mainline to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action. For additional information regarding the development of mitigation in the EIS, refer to the Master Response for Mitigation Framework.

Comment GP502-7

How, specifically, will the health of community members be affected if these projects are approved? How do the proponents propose to mitigate the health risks to citizens?

Response GP502-7

The Draft EIS considers the following impacts related to human health. Final EIS sections have been revised, as noted below, to more fully describe these impacts.

- Chapter 3, Section 3.2, *Air*, describes potential impacts on air quality and the potential for increased cancer risk from emissions of diesel particulate matter related to construction and routine operation of the proposed action. The Final EIS section has been updated to reflect

revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analysis predicts lower emissions; the level of increased risk is not considered significant.

- Chapter 3, Section 3.7, *Noise*, describes potential impacts on sensitive receptors near the project site and transportation corridors from increased noise and vibration related to construction and routine operation of the proposed action.
- Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, describes potential impacts on public safety and emergency vehicle access from increased vehicle delay related to rail traffic from routine operation of the proposed action.
- Chapter 4, Section 4.7.1.7, *Human Health*, describes potential impacts of an oil spill on human health. The Final EIS section reflects a fuller description of these potential impacts.
- Chapter 4, Section 4.7.2.3, *Human Health*, describes potential impacts of a fire or explosion on human health. The Final EIS section reflects a fuller description of these potential impacts.

Comment GP502-8

Who will pay for a site cleanup in the event of a bankruptcy by one or all of the companies? How much exactly will a cleanup cost?

Response GP502-8

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP502-9

How will these projects affect endangered species?

Response GP502-9

Draft EIS Chapter 3, Section 3.5, *Animals*, addresses potential impacts of construction and routine operation of the proposed action on animals, including endangered species. Chapter 4, Section 4.7,

Impacts on Resources, describes impacts on animals that could occur in the event of an oil spill, fire, or explosion.

Comment GP502-10

How much will first responders in affected communities be delayed by trains? What compensation will the companies provide in the event of loss of life or property due to first responders being delayed by trains?

Response GP502-10

Section 3.16, *Vehicle Traffic and Safety*, describes the potential impacts of increased rail traffic on vehicle traffic, including grade-crossing delay and queuing at nearby intersections. The vehicle delay impacts in this section would also apply to emergency service responders. Refer to the Master Response for Mitigation Framework for an explanation of how mitigation measures were identified in the Draft EIS.

Comment GP502-11

How can these projects be approved when the EIS states quite clearly that the risks of oil spills during rail transport, at terminal sites, and during marine vessel transport through Grays Harbor cannot be fully mitigated? What is the probability of harm for the one million people wo live along the entire route of oil trains?

Response GP502-11

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP502-12

What adverse financial impact will established businesses encounter if these projects are approved? How will property values in Grays Harbor be affected by adopting these proposals?

Response GP502-12

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be

adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values.

GP503, **Murrell, Gary**

Comment GP503-1

My name is Gary Murrell. I'm history professor at Grays Harbor College, and I live in Hoquiam. I just handed these woman (indicating) 650 comment cards from citizens in this community who oppose this project. I have a question. What specific plans does the railroad have of protecting the children that go to school in the potential blast zone created by crematoria between Chehalis and Hoquiam? Our children's deaths cannot be mitigated and for this reason alone this project should be denied.

Response GP503-1

The Draft EIS Chapter 3, *Affected Environment, Impacts, and Mitigation*, considered proximity of schools in its analysis of resource impacts that could affect the health and well-being of schoolchildren from construction and routine operation of the proposed action, including air quality (Section 3.2), noise and vibration (Section 3.7), hazardous materials (Section 3.14), and vehicle traffic and safety (Section 3.16). Draft EIS Section 3.2.4.3, *Sensitive Receptors,* lists all sensitive receptors, including schools, within 1 mile of the project site.

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The general approach to the risk analysis is to consider different potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. Section 4.7 clarifies that while impacts would depend on the circumstances of the incident, the resources described in Chapter 3 could be affected.

The analysis considers the effectiveness of existing regulations and proposes additional applicant mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the potential impacts of an incident at the terminal, along the PS&P rail line, or within Grays Harbor, respectively. Final EIS Section 4.2.2 has also been revised to indicate that railroad operators would be required to develop spill contingency plans consistent with state requirements and a mitigation measure is proposed for a contingency plan to be submitted to Ecology until state requirements are in place. Nonetheless, these measures would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant.

For information about the development, implementation, and enforcement of mitigation measures, refer to the Master Response for Mitigation Framework.

Comment GP503-2

How can we ensure a company responsible for an oil spill or accident involving an oil train rather than paying to make the community whole simply declares bankruptcy and simply walks away? Bankruptcy cannot be mitigated, therefore the project should be denied.

How will we know that each project has purchased insurance to a dollar amount necessary to make the community whole after an oil spill or accident involving oil trains? Is it possible to purchase enough insurance to pay for a major spill or accident? The lack of insurance cannot be mitigated and therefore these projects should be denied.

Response GP503-2

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP503-3

Since the EIS admits in several places that there are potential risks that can't be mitigated at all, why have these projects not been canceled already? Since there're no safe way to move oil by train, how can there be any mitigation for moving oil by train? How can the railroad mitigate the danger present in places where tracks cannot be secured to the earth?

We've got places on these tracks where the tracks cannot be secured because it's swampy, so the trains have to slow to five miles an hour and they can tip over. It can't be mitigated therefore the projects should be denied.

Response GP503-3

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP504, **Myhre, Rebecca**

Comment GP504-1

My comments relate to both the Westway and Imperium Draft EISs.

Oil refineries, oil train travel/transport and storage is dangerous to the local citizens, rivers, indigenous wild life, and our save environment. Oil companies have enough money to develop technologically, environmentally safe production procedures to produce oil and use it in ways that and environmentally safe; like renewable energy. Oil use is becoming antiquated.

The Columbia River is currently yielding pollution that is endangering all life; property, wild life, vegetation, and humans due to water and air pollution. If oil pollution [sic] is added to our already damaged environment, our Cowlitz River / Longview community will be a dangerous environment for growing families, crops, and drinking water. I already suffer from "leaky gut" and "irritated bowels" which started shortly after our drinking water was changed to a different water supply

source (Mint Farmwell) from the Cowlitz River. These two physical problems of mine are potential causes of may more serious medical issues. My needed life style changes are multiple, costly, and inconvenient. Thus, I focus on a cleaner environment. Please, reconsider this unwise opportunity. I have no choice to relocate as long as my special needs daughter is alive.

Response GP504-1

Comment acknowledged.

GP505, **Newsome, Dave**

Comment GP505-1

The Oil terminals should not be allowed in Grays Harbor. There is too much danger of spills and destruction of the Grays harbor Estuary.

Response GP505-1

Comment acknowledged.

GP506, **Nickell, Aaron**

Comment GP506-1

My name is Aaron Nickell. I am the former chair and co-founder of the City of Aberdeen Historic Preservation Commission and a former policy analyst at the Washington State Department of Commerce. I am a resident of Grays Harbor County and I am vehemently opposed to transporting crude oil through the Port of Grays Harbor. I do not believe that the Port of Grays Harbor, Westway, or Imperium can adequately predict nor mitigate potential natural disasters relating to oil transport. If oil terminals were built, an estimated 319 oil-laden tankers would need to traverse the shallow, narrow Grays Harbor shipping canal every year, increasing the chances of a disaster similar to the Exxon Valdeez spill. The Washington State Department of Fish and Wildlife has confirmed that Grays Harbor is "an area particularly sensitive to the adverse effects of oil spills." A major oil spill could devastate Grays Harbor's natural resource economy. The University of Washington estimates that more than 30% of Grays Harbor's workforce is dependent on marine resources jobs. Furthermore, an economic study by the Quinault Indian Nation found that an oil spill could put more than 150 tribal commercial fishermen out of a job, resulting in as much as $20 million in lost wages and up to $70 million in revenue. Grays Harbor sits in a major earthquake and tsunami zone. Geologists estimate the chance of a major Cascadia quake at 33% in the next 50 years; the chance of a very major earthquake is estimated at 10%. The proposed terminals could store up to 72 million gallons of oil – approximately 2526 oil tank cars – that could be rendered unstable during a major quake. Finally, oil trains are dangerous. At least 10 crude oil trains have exploded recently in North America, including a 2013 accident in Quebec that killed 47 people. A freight train derailed – on average – every 3.5 days from June 2011 to December 2013 in the Northwest. There is no safe way to move oil via rail. In 2013, more oil spilled from trains into rivers, lakes, and marine waters than in the past 40 years combined. Washington State and the Port of Grays Harbor need to be examining economic growth through confronting alternative energy needs such as solar and wind energy. We need to avoid crude oil transport in favor of developing high-tech industry cluster development as proposed by the Washington State Economic Development Commission in 2010: carbon fiber

precursor manufacturing, clean energy, cloud computing and data storage, healthcare, and a host of other burgeoning industries. I thank you for your consideration and hope Grays Harbor can move forward toward a progressive, healthy, clean economy. Building oil terminals at the Port of Grays Harbor is not worth risking our environment for a paltry number of jobs.

Response GP506-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 to reduce the likelihood of a spill reaching the environment and the potential impacts if an incident occurs at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP507, **Nightingale, Terry**

Comment GP507-1

I oppose both of these proposed projects to ship crude oil through Grays Harbor. The shipping channel is dangerous, and the risks both at sea and on the railroad are too great for wildlife, people, and the area's economy.

Speaking specifically to wildlife, the Grays Harbor area is home to six state-recognized Important Bird Ares (IBAs), including one of hemispheric significance. Put simply, Grays Harbor is an exceedingly poor choice of location for a crude oil terminal.

Response GP507-1

Comment acknowledged.

GP508, **Nobles, Carrie**

Comment GP508-1

I am completely opposed to the proposed oil-by-rail terminals in Grays Harbor, WA. The potentially explosive Bakken crude-oil trains serviced by these terminals would travel through, and directly threaten, the Columbia River Gorge National Scenic Area and the small towns contained therein. The risks to the region and its communities far outweigh any advantages of oil-by-rail terminals.

Response GP508-1

Comment acknowledged.

GP509, **Norgren, Tim**

Comment GP509-1

Hi. I'm Tim Norgren. I work through Laborers Local 737 in Portland, OR and live in Stevenson, WA. Stevenson is like a lot of rail-side towns in that most everything we have is near the tracks. The businesses, city buildings, elementary school, and many homes are within a quarter mile of them. The Port office and the volunteer Fire Dept. (all we have) are literally just a few feet away from the tracks as well. Our only firefighting equipment could be preemptively annihilated by a tanker explosion within the city limits, as is the case in Lyle, just upstream, and likely many other towns along the various routes. Even if our equipment survived to protect some of our homes it could do nothing to fight an oil fire.

Yet we can see the trains from our front windows as they fly through town at 50+ miles per hour, bouncing over the grade crossings as they go. The kids growing up in these towns often live their lives within the blast zone, more or less unaware of the danger they face from these fracked petroleum exports, much as some folks closer to the source may consider the higher cancer rates and dependence on bottled water to be a normal part of life. But this isn't normal, and it isn't sane. A tanker explosion along the Puget Sound or anywhere, could kill and maim a lot of people, and destroy homes and businesses either through a blast and shrapnel) or through wildfires. When this year's all-time record high temperatures became a record dry summer due to lack of snow-melt our state saw incredible fires even without a train explosion to ignite them! We were miles away, yet some days the smoke was thick enough that we stayed inside and considered the real and terrifying possibility that the forest around us could be next! Please consider the impact such an event would have on the lives of many people and creatures "upstream" from this terminal.

Response GP509-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

Comment GP509-2

Also consider that on the downstream end this proposal would add profit motive to the extraction of more fossil carbon in a world already being ravaged by climate change, at a time when every scientist not on a profiteer's payroll is telling us we can't even afford to burn all the fuel that's been extracted and that we're fast approaching a few "feedback loops" of no return. And as a Building-Trades Worker I ask you to consider the proposal's ties to and support of globalization and the so called "free trade" agreements unilaterally opposed by unions and labor activists. While these agreements allow companies to outsource employment from countries like ours which consists of safe, living wage jobs in factories (exporting goods though our ports- out of terminals we build!) with substantial emissions and safety standards, to places with unregulated death trap factories and subsistence wages and NO EMISSIONS STANDARDS WHATSOEVER, the result is obviously not only a drastic increase in carbon emissions, water pollution, and the like at the endpoint of our exports, but also a reckless increase in pollution from shipping traffic in a system in which a product may cross the globe several times in various forms before even making it to market! Yet by allowing these terminals to be built we make polluting fuels cheap and easy to attain for those who see fit to exploit workers at every turn and dump their waste where they please. Please deny this proposal for the many reasons that it's harmful to so many along every stretch of this toxic material's journey! Thanks so much, Tim Norgrent_norgren@juno.com

Response GP509-2

Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources and for information on the likely destinations of crude oil shipped through the proposed facilities.

GP510, **Norton, Sonya**

Comment GP510-1

Here in Vancouver, we are fighting fossil fuel debarkment and fossil fuel train pass-through for the same reasons that you should not be contemplating facilities for them. the trains impede other traffic, are unsafe. a terminal increases community costs due to the necessity of providing local emergency services. the jobs of construction are not replaced by long-term jobs, since the terminal will be largely automated. reclamation of the area when the fossil fuel era is over will be long and exceedingly costly. you should be thinking beyond fossil fuels now, rather than destroying your town for a temporary flush of dollars. Sincerely, Sonya Norton

Response GP510-1

Refer to the Master Response for Purpose and Focus of the EIS.

GP511, **Nugent, Virginia**

Comment GP511-1

There are so many reasons to oppose these fossil fuel projects such as, toxic fumes polluting the air of near by neighborhoods,train derailment, explosive fires, defective tank cars, all threatening

communities and the Columbia River along the way. I am concerned about climate change and ocean acidification. If we are to save our planet for future generations, we absolutely must wean ourselves off of fossil fuels rather than building projects that will increase their usage. Ocean acidification and warming waters are threatening our fishing, and shell fish industries. Washington state's shell fish industry employs 3200 people and adds $270 million to our states economy. These fossil fuel projects pose a direct threat to our shellfish industry and our environment. Washington state is known for it's fish, shellfish and pristine natural beauty and wildlife. We must not let our state be turned into a fossil fuel state! Our past governor, Christine Gregoire, recognized the threat of ocean acidification to our shellfish industry and ordered Executive Order 12-07. It directs "all cabinet agencies that report to the Governor, to advocate for reductions in carbon dioxide emissions at a global, national and regional level." We cannot reduce emissions if these fossil fuel projects are approved. We must not ignore Governor C. Gregoire's Executive Order 12-07! Virginia Nugent 2600 NE 142nd St. Vancouver WA 98686 Phone-360-573-1672

Response GP511-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

GP512, **O'Connor, Jenny**

Comment GP512-1

Okay. My name is Jenny O'Connor. My background is that I worked for the City of San Francisco, Department of Public Works. And I worked there for 15 years. And during the period of time I worked there -- I worked there seven years, and out of that, we worked on a replacement project for the damaged freeway that was done. It was damaged in the 1989 Loma Prieta earthquake.

So I was working on the City side. I was a project manager so I worked with the federal government and state government. And we worked on environmental review. So I wanted to give that background just so you could put it into context that that's my background.

And so one point I want to make is there's a no-build alternative. So that's what I'm requesting, is that they vote for the no-build alternative. Because there are a couple of impacts that have come out of this report that are unmitigable. And if they're unmitigable due to the financial burden to mitigate them, then it shouldn't be built. We shouldn't have those impacts, the impacts of the noise and the impacts of how it's going to reduce traffic.

The increase in trains is really going to slow down traffic in the whole region. So those are the two reasons that I think they should consider not agreeing to do this.

Response GP512-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP512-2

The other thing is the cumulative impact. There are, I think, what? 28 fossil fuel projects that are being proposed in the region? And if any one of them, or several of them, are built, there are going to be all those other trains coming, in addition to the ones that are coming here.

So that compounds and that hasn't been considered in the environmental review process. So I I would say that if they're going to go back and look at more mitigation factors, they need to do a cumulative impact and consider the other projects that are being proposed in the region.

Response GP512-2

Chapter 6, *Cumulative Impacts*, presents the analysis of the incremental addition of impacts from the proposed action to impacts from past, present, and reasonably foreseeable future actions—including the REG (formerly Imperium Terminal Services) Expansion Project and the Grays Harbor Rail Terminal Project. Refer to the Master Response for Connected or Similar Actions and the Master Response for Geographic Scope of the EIS.

Comment GP512-3

Okay. So that's -- boy. And the last thing I want to say is -- I'm going to read this; okay? And this is with regards to jobs; okay? Because that's a big thing. You know, that's a big thing for the town, is jobs. And I understand that.

I'm just going to read this. It says, The BlueGreen Alliance is part of a great turning away from fossil fuel domination to green energy independence. Here's something we can all cheer about. The Washington State Labor Council is sponsoring a state-wide initiative petition to put a cap on carbon pollution and raise revenue to transfer us to a green energy economy.

Instead of sending billions to out-of-state oil companies, we'll keep that money here at home, here in your own town. We'll create our own energy and jobs in the process. We can't do that if we lock ourselves into more dependence on fossil fuel.

So, thanks.

Response GP512-3

Comment acknowledged.

GP513, **O'Hanley, Kelly**

Comment GP513-1

My name is Dr. Kelly O'Hanley, and I'm a psychologist (obstetrician gynecologist) with Grays Harbor Public Health, and I've worked in 40 countries, and I have taught at Harvard and Stanford

Universities. I am affiliated with Oregon Physicians for Social Responsibility, and I will speak to greenhouse gas emissions.

First, the DEIS states that climate change would affect Washington state and the region by increasing the risk of wild fires, floods, and drought, changes in precipitation, increased temperatures, and ocean acidification. Climate change would contribute to sea levels rise. I would suggest the warning be changed to, Is already affecting Washington state.

Second, the report quantifies greenhouse gas emissions from operations and transportation per tank to be equipped to about 9,200 vehicles per year. For me, that is too much.

Response GP513-1

Comment acknowledged.

Comment GP513-2

Third, regarding end use, the DEIS states that whether the projects result in an increasing greenhouse gas emissions depends on speculative factors. Crude oil can only be transported to U.S. refineries with a limiting capacity by law. Therefore, this oil would simply replace oil currently used in U.S. refineries and there would be no net increase in emissions. Moreover, if facilities are not built, the product would simply be transferred to another facility. That's the report.

Be informed there may be a vote in the U.S. House tomorrow on a proposal to lift the ban on oil exports. Ever changing politics and markets is precisely why we must reject the assumption in the DEIS.

To conclude, the end use of these facilities would not increase greenhouse gas emissions is disingenuous and is an insult to our intelligence.

If we are honest and accept responsibility for our actions, we must say no to these projects, thereby we take a critical step to protecting ourselves from climate change, the single greatest merging threat to human health.

Thank you.

Kelly O'Hanley, MD, MPH * 6134 NE Alameda Street Portland, OR 97213 * kohanley@qmall.com * 503-88D-8844

Response GP513-2

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action.

Final EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, have been revised to include emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination as well as combustion of maximum throughput of crude oil. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

GP514, **Olson, Jean**

Comment GP514-1

Mayor of Hoquiam, Director of Ecology Maia Bellon, and Governor Inslee: As a Surfer and Birder, I value the importance of preserving recreational and wildlife viewing opportunities in Grays Harbor from the direct threat of an oil spill. I travel to the Grays Harbor area many times a year to recreate as do many of my friends in the birding and surfing community. The recent report by the Surfrider Foundation found that of the estimated 4.1 million annual trips to the Washington Coast, more than 1/3 of them were to Grays Harbor. Of the total $481 million spent in coastal areas, at least 150 million was spent in the Grays Harbor area. This money was spent supporting local businesses like hotel, restaurants, fishing charters and surf shops. Since oil companies cannot guarantee they will not spill oil. We cannot take the risk of losing the birds, fish, mammals and clean beaches to a spill. Haven't we learned from the BP spill and from all the rail car spills. According to the Washington Post in 2014 there were 141 "unintentional releases" (aka spills) from rail cars. I can't see why we would be lucky and not have a spill when so many other places have been unlucky. As a recreationalist that support small business and the local economy, I demand that small businesses and our neighbors and their customers be heard in the decision-making process. I also demand that you reject the permits for the Westway and Imperium oil terminals. Thank you.

Response GP514-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including impacts on recreation.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP515, **Opfer, Warren**

Comment GP515-1

Do not expand these terminals. Aberdeen's existing roads will be blocked by trains causing severe disruption of transportation. This affects business and truck drivers, forest products deliveries, UPS and FedEx deliveries, customers and staff who patronize and work business south of the rails. How

much less will log truck drivers make because their daily loads are reduced? Road blockage affects citizens who can't reach Riverfront Park, or can't get out of the park. Road blockage affects emergency services for health, fire and police. Increases in road blockage are highly probably as Congress will change the law to allow export of domestic crude. Ground transportation blockage is severe as proposed, and increases will cause severe hardship on Aberdeen's business and citizens.

Response GP515-1

Final EIS Chapter 3, Section 3.16.8, *Would the proposed action have unavoidable and significant adverse impacts on vehicle traffic and safety?* clarifies that while implementation of proposed mitigation could reduce impacts on vehicle traffic, average and peak hour vehicle delays at the following grade crossings in Aberdeen would remain significant.

- Average hour: East Heron Street and Newell Street (Olympic Gateway Plaza area).
- Peak hour: Washington Street (Port of Grays Harbor area).

Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources and for information on the likely destinations of crude oil shipped through the proposed facilities.

GP516, **Opfer, Warren**

Comment GP516-1

Oppose expansion. Train noise is heard now at 5am. I live on the hill on the north side of town, well away from the rails, and the train horn and track/wheel noise is clearly heard and disrupts sleep.

Expanding the terminals and increasing the train traffic day and night reduces the quality of life for residents of Aberdeen. I oppose increasing train traffic. Once expanded, you can't go back and reduce the terminals. Once in place, the only way to reduce activity is it isn't economically feasible and the terminals shut down. If terminals are running, they keep running. You can't go back and say "we over reached".

It's a poor idea to place terminals with multi-millions gallons of oil in a tsunami zone. Better to have the tanks and rails out of the tsunami zone and pipe the oil to ships.

Terminals preclude Aberdeen's "clean" industries as the quality of life in a community attracts high tech business. Local tourism for Aberdeen would no longer be encouraged. Terminals and expanded train traffic discourage visitors from stopping in Aberdeen, but to "pass through and keep on going". Hopefully, no spills or catastrophes occur. But the negative affect on local Aberdeen business and residents is significant. I oppose expansion.

Response GP516-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP517, **Orgel, Linda**

Comment GP517-1

My name is Linda Orgel, Aberdeen. We came to Grays Harbor over 25 years ago because of its working harbor, natural resources and beauty. We support industries that will enhance the economy, not destroy it.

I'd like to speak about the inconsistency in projected jobs these projects are purported to create as stated in the DEIS.

For example:

In Vol. 1, Chapter 7, Economics, Social Policy, and Cost-Benefit Analysis: Westway reports on page 647 that there will be 36 direct jobs for onsite operations, but on page 672, they report estimates of 15 direct operational jobs.

In Vol. 1, Chapter 7, page 663, Imperium reports 103 direct jobs for onsite operations. On page 688, they estimate 15 direct operational jobs.

However in Vol. 3, there is also a discussion of impacts from vehicle traffic of employees with the proposed actions. Both proponents state: "It is assumed that for every one worker there would be one trip to and one trip from the project site." Therefore, the total vehicle trips are double the number of employees. (WW p. 252)

In the very next paragraph, under Onsite Operations, Westway states the proposed action would result in an additional 50 employee vehicle trips. (p. 253). Imperium states 30 employee vehicle trips. (p. 250)

Using their calculations, the number of employees would be one half the number of vehicle trips. Therefore, Westway would have 25 employees for onsite operations and Imperium would have 15.

These inconsistencies are found throughout both documents for both construction workers and onsite operations.

Since the proponents use job creation as propaganda for these projects to move forward and have been publicly exaggerating job numbers in excess of any numbers that are in the DEIS, it would seem to me a requirement for the EIS would be accuracy and consistency in reporting the true job numbers throughout the document. The economic cost in loss of fishing, tourism, real estate and local business because of crude oil, in comparison to real jobs created has not been adequately assessed.

The EIS should state:

1. What are the actual direct job numbers and positions for operation sand construction that would be a result of each of these projects?

2. What is the cost/benefit of whatever the number of project jobs might be versus the risk of a sustainable Grays Harbor economy?

Response GP517-1

As stated in Draft EIS Chapter 7, Section 7.1.4.2, *Proposed Action*, 36 direct jobs would be generated from terminal, rail, and vessel operations related to the proposed action. The reference to 15 jobs is in regards to the number of direct jobs that would be generated from terminal operations only.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comments specific to the REG (formerly Imperium Terminal Services) Expansion Project would be addressed in responses to comments as part of the Final EIS for that proposed project.

Comment GP517-2

Table L-6. Grade Crossing Infrastructure Projects Planned but Not Funded - No-Action Alternative (2017 and 2037)

Project Title: Tower Street Crossing
Year: 2017
Project Lead: WSDOT
Location: Tower Street grade crossing with the PS&P rail line in Centralia
Brief Description: Add early warning system and crossing gates. Construction anticipated being complete by 2015
Source: Stemkoski pers. comm.

Project Title: Pearl Street Crossing
Year: 2017
Project Lead: WSDOT
Location: Pearl Street grade crossing with the PS&P rail line in Centralia
Brief Description: Add early warning system and crossing gates. Construction anticipated being complete by 2015
Source: Stemkoski pers. comm.

Project Title: Devonshire Road Railroad Crossing Protection
Year: 2037
Project Lead: Grays Harbor County
Location: US 12 Milepost 7.09 to 7.10
Brief Description: Install concrete crossing, gates, and signs (currently flashers)
Source: Washington State Department of Transportation 2014b

Project Title: Glenn Road Railroad Crossing Closure
Year: 2037
Project Lead: Grays Harbor County
Location: US 12 milepost 0.0 to 0.2
Brief Description: Remove existing crossing and build new access road and cul-de-sac
Source: Washington State Department of Transportation 2014b

Project Title: Newman Creek Road Railroad Crossing Protection
Year: 2037
Project Lead: Grays Harbor County
Location: US 12 milepost 0.21 to 0.22
Brief Description: Install signs and gates (currently passive)
Source: Washington State Department of Transportation 2014b

Project Title: Calder Road Railroad Crossing Protection
Year: 2037
Project Lead: Grays Harbor County
Location: US 12 milepost 0.26 to 0.27
Brief Description: Install signs and gates (currently passive)
Source: Washington State Department of Transportation 2014b

Listed projects are currently planned projects that have not secured funding. These projects are listed under WSDOT's Six Year Transportation Improvement Plan for 2014 to 2019. These projects may or may not be funded after 2019.
WSDOT = Washington State Department of Transportation; PS&P = Puget Sound & Pacific Railroad

Impacts of the Proposed Action

This section describes the vehicle traffic and safety impacts that could occur in the study area as a result of construction and routine operation of the proposed action.

Construction

As described in Chapter 2, *Proposed Action and Alternatives*, construction of the proposed action could occur in two phases, with Phase 1 lasting 10 to 12 months and requiring approximately 86 workers and Phase 2 lasting approximately 10 months and requiring approximately 49 workers. It is assumed that for every one worker there would be one trip to and one trip from the project site, so 86 constructions workers during Phase 1 would create 172 vehicle trips. Additional vehicle trips to and from the site associated with this temporary increase in construction workers and the delivery of construction equipment and materials could also increase vehicle delays at intersections

Westway Expansion Project
Draft Environmental Impact Statement

[Table L-6 is repeated]

Impacts of the Proposed Action

This section describes the vehicle traffic and safety impacts that could occur in the study area as a result of construction and routine operation of the proposed action.

Construction

As described in Chapter 2, *Proposed Action and Alternatives*, construction of the proposed action could occur in two phases, with approximately 76 workers for Phase 1 and 34 more workers for Phase 2. It is assumed that for every one worker there would be one trip to and one trip from the project site, so 76 construction workers during Phase 1 would equal 152 vehicle trips. Additional vehicle trips to and from the site associated with this temporary increase in construction workers and the delivery of construction equipment and materials could also increase vehicle delays at

intersections surrounding the project site. However, the potential for additional construction-operations to and from the project site by rail and vessel operators. This amount does not include the value of the commodities (e.g., new bulk liquids) that would be shipped through the Port of Grays Harbor (Port), which, for this analysis, comprise pass-through costs with no economic impacts. The annual economic output includes annual operating costs of Imperium Terminal Services (applicant), PS&P, and vessel operators related to the proposed action, business taxes, and net business income.

Imperium Terminal Services Expansion Project

Draft Environmental Impact Statement

At full buildout, the proposed action would generate an estimated 103 direct jobs in Grays Harbor County associated with onsite operation of the proposed action (by the applicant), rail transport (by PS&P), and vessel transport (by vessel operators). The proposed action would generate an estimated 207 jobs throughout the County's economy. These jobs would account for $9.2 million in annual direct labor income and benefits, and $13.1 million in total annual labor income and benefits throughout the County's economy (Table 7-7).

The annual operating of the proposed facilities (by the applicant), rail transport (by PS&P), and vessel transport (by vessel operators) was estimated at $18.4 million. One-third of this spending ($4.5 million) would be attributed to the applicant, and the remaining two-thirds ($8.0 million) would be attributed to the rail and vessel transport operators. Of the total spending, $9.2 million (50%; Table 7-7) would be paid as income or benefits to employees and proprietors with the remainder going to non-labor expenditures.

The difference between the annual economic output and annual operating costs would consist primarily of business taxes and net business income. A substantial share of the applicant's net business income would probably be allocated to retire debt incurred during the construction phase. Essentially, all business taxes and net business income related to onsite operations and income earned by rail and vessel operators would leave Grays Harbor County and would not result in regional employment or income. The regional economic effects of operation of the proposed action are shown in Table 7-7, with income and output levels expressed in 2013 dollars per year.

Table 7-7. Estimated Economic Impacts in Grays Harbor County of Operations at Full Buildout - Proposed Action (2013 dollars)

Direct
Employment (Jobs): 103
Labor Income and Benefits: $9,169,000
Economic Output: $77,813,000

Indirect
Employment (Jobs): 60
Labor Income and Benefits: $2,416,000
Economic Output: $7,925,000

Induced
Employment (Jobs): 45
Labor Income and Benefits: $1,487,000
Economic Output: $5,051,000

Total
Employment (Jobs): 207
Labor Income and Benefits: $13,071,000
Economic Output: $90,789,000

Multiplier
Employment (Jobs): 2.01
Labor Income and Benefits: 1.42
Economic Output: 1.17

Source: Appendix O, *Census Block Group Data*
The multipliers for operation of the proposed action are smaller than those for construction primarily because the study area for operation is much smaller (Grays Harbor County) and the industries that would be most affected by operation are, on average, less labor-intensive and have lower wages.

In addition to these economic impacts, operation of the proposed action was estimated to generate $1.6 million in increased annual property, sales, and business and occupation tax revenues at full buildout (Table 7-8).

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Operations

The annual economic output of the proposed action in Grays Harbor County was estimated at $19.9 million (Table 7-7). This includes onsite operation of the proposed action and rail and vessel operations to and from the project site. This amount does not include the value of the commodities (e.g., crude oil) that would be shipped through the Port of Grays Harbor (Port), which, for this analysis, comprise pass-through costs with no economic impacts. The annual economic output includes annual operating costs of Westway Terminal Company LLC (applicant), PS&P, and vessel operators related to the proposed action, business taxes, and net business income.

At full buildout, the proposed action would generate an estimated 36 direct jobs in Grays Harbor County associated with onsite operations (by the applicant), rail transport (by PS&P, and vessel transport (by vessel operators). The proposed action would generate an estimated 73 jobs throughout the County's economy. These jobs would account for $3.6 million in annual direct labor income and benefits and $5.1 million in total labor income and benefits throughout the County's economy (Table 7-7).

The annual operating costs of the proposed facilities (by the applicant), and rail transport (by PS&P) and vessel transport (by vessel operators) related to the proposed action was estimated at $6.6 million. One-third of this spending ($2.2 million) would be attributed to the applicant, and two-thirds ($4.4 million) would be attributed to the rail and vessel transport operators. Of the total spending, $3.6 million (54.8%; Table 7-7) would be paid as income or benefits to employees and proprietors with the remainder going to non-labor expenditures.

The difference between the annual economic output and annual operating costs would consist primarily of business taxes and net business income. A substantial share of the applicant's net business income would probably be allocated to retire debt incurred during the construction phase. Essentially, all business taxes and net business income related to onsite operations and income

earned by rail and vessel operators would leave Grays Harbor County and would not result in regional employment or income. The regional economic effects of operation of the proposed action are shown in Table 7-7, with income and output levels expressed in 2013 dollars per year.

Table 7-7. Estimated Economic Impacts in Grays Harbor County of Operations at Full Buildout - Proposed Action (2013 dollars)

Direct
Employment (Jobs): 36
Labor Income and Benefits: $3,620,000
Economic Output: $19,942,000

Indirect
Employment (Jobs): 20
Labor Income and Benefits: $856,000
Economic Output: $2,961,000

Induced
Employment (Jobs): 17
Labor Income and Benefits: $574,000
Economic Output: $1,951,000

Total
Employment (Jobs): 73
Labor Income and Benefits: $5,051,000
Economic Output: $24,854,000

Multiplier
Employment (Jobs): 2.58
Labor Income and Benefits: 1.40
Economic Output: 1.25

Source: Appendix O, *Census Block Group Data*
The multipliers for operation of the proposed action are smaller than those for construction primarily because the study area for operation is much smaller (Grays Harbor County) and the industries that would be most affected by operation are, on average, less labor-intensive and have lower wages.

In addition to these economic impacts, operation of the proposed action was estimated to generate $1.27 million in increased annual property, sales, and business and occupation tax revenues at full buildout (Table 7-8).

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construction jobs are filled by construction workers that reside in Hoquiam (as assumed above), construction would generate an estimated $3.1 million to $3.6 million in labor income for construction workers residing in Hoquiam during both Phase 1 and Phase 2 of construction.

Additional labor income would be generated in Hoquiam, associated with indirect and induced jobs. CONorthwest estimates 283 indirect and induced jobs would be generated during construction (both Phases 1 and 2) in Washington State. It is not possible to infer from the ECONorthwest study

and from readily available data how many of these jobs would be likely to occur in Hoquiam. These jobs would average $53,500 in annual labor income per job (ECONorthwest 2014).

Operations

During operations, ECONorthwest (2014) estimated that 14 direct jobs would be supported at the terminal if only Phase 1 infrastructure were operational, and an additional 6 direct jobs would be supported at the terminal if both Phase 1 and Phase 2 infrastructure were operational. An additional 27 indirect and induced jobs (20 in Phase 1 and 7 in Phase 2) would be generated in Grays Harbor County, associated with the creation of the direct jobs at the project site. As noted in Section 7.1, Economics, additional direct, indirect, and induced employment in Grays Harbor County would be generated associated with vessel and rail transportation; however, it is anticipated that most of these jobs would occur outside the local communities. Although some rail and vessel jobs may be filled by residents of Hoquiam or Aberdeen, for the purposes of providing a conservative estimate, job creation associated with increased rail and vessel operations are not included.

Assuming all direct jobs in Grays Harbor County would be located in Hoquiam and Aberdeen (excluding vessel and rail transportation direct jobs), it is possible to estimate the number of operations jobs filled by workers who reside in Hoquiam. Assuming each job is filled by one worker, and using the same U.S. Census Bureau commuting pattern estimates used to analyze construction jobs, between 23 and 27% of direct operations workers would reside in Hoquiam. This would correspond to 4 to 5 workers (from a total of 20). A share of the indirect and induced employment could also occur in Hoquiam.

ECONorthwest (2014) estimated that each direct terminal job would pay approximately $65,000 a year in total compensation (wages and benefits). Under these assumption, total labor income in Hoquiam, supported by operational jobs directly linked to the proposed action, would correspond to between $ 260,000 (4 multiplied by $65,000) and $325,000 (5 multiplied by $65,000), assuming a full build-out (after Phase 1 and Phase 2 construction).

Additional labor income would be generated in Hoquiam, associated with indirect and induced jobs. ECONorthwest (2014) estimated that 105 indirect and induced jobs would be generated during operations (at full build-out) in Grays Harbor County. It is not possible to infer from the ECONorthwest study and from readily available data how many of these jobs would be likely to occur in the City of Hoquiam. These jobs would average $38,600 in annual labor income per job (ECONorthwest 2014).

Operations jobs would be permanent. Because permanent jobs generate income year after year, they are more likely to induce additional economic activity attracting businesses and local investment than temporary construction jobs.

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Operations

During operations, ECONorthwest (2014) estimated that 11 direct jobs would be supported at the terminal if only Phase 1 infrastructure were operational, and an additional 4 direct jobs would be supported at the terminal if both Phase 1 and Phase 2 infrastructure were operational. An additional 10 indirect and induced jobs (6 on Phase 1 and 4 in Phase 2) would be generated in Grays Harbor County, associated with the creation of the direct jobs at the project site. As noted in Section 7.1,

Economics, additional direct, indirect, and induced employment in Grays Harbor County would be associated with vessel and rail transportation; however, it is anticipated that most of these jobs would occur outside the local communities. Although some rail and vessel jobs may be filled by residents of Hoquiam or Aberdeen, for the purposes of providing a conservative estimate, job creation associated with increased rail and vessel operations are not included.

Assuming all direct jobs in Grays Harbor County would be located in Hoquiam and Aberdeen (excluding vessel and rail transportation direct jobs), it is possible to estimate the number of operations jobs filled by workers who reside in Hoquiam. Assuming each job is filled by one worker, and using the same U.S. Census Bureau commuting pattern estimates used to analyze construction jobs, between 23 and 27% of direct operations workers would reside in Hoquiam. This would correspond to 3 to 4 workers (from a total of 15). A share of the indirect and induced employment could also occur in Hoquiam.

ECONorthwest (2014) estimated that each direct onsite job would pay approximately $65,000 a year in total compensation (wages and benefits). Under this assumption, total labor income in Hoquiam, supported by operational jobs directly linked to the proposed action, would correspond to between $195,000 (3 multiplied by $65,000) and $260,000 (4 multiplied by $65,000), assuming a full build-out (after Phase 1 and Phase 2 construction).

Additional labor income would be generated in Hoquiam, associated with indirect and induced jobs. ECONorthwest (2014) estimates 37 indirect and induced jobs would be generated during operations (at full build-out) in Grays Harbor County. It is not possible to infer from the ECONorthwest study and from readily available data how many of these jobs would be likely to occur in Hoquiam. These jobs would average $38,600 in annual labor income per job (ECONorthwest 2014).

Operations jobs would be permanent. Because permanent jobs generate income year after year, they are more likely to induce additional economic activity attracting businesses and local investment than temporary construction jobs.

7.3.3.2 Fiscal Revenues to the City of Hoquiam

As discussed in Section 7.1.4.2, Proposed Action, in addition to generating increased employment and income, construction and routine operations of the proposed action would also result in increased fiscal revenues. As discussed below, it is possible to estimate the proportion of revenues that would likely accrue to the City of Hoquiam. Increased revenues would be generated by the property tax, sales tax, business and occupation tax, utility taxes, and building permits.

Property Tax and Leasehold Excise Tax

The Port is a public port and a taxing district. The use of public land and publicly owned property pays a leasehold tax to the Port in lieu of real estate property taxes. A portion of the leasehold tax is transferred to the city where the property is located. The tax rate for the city's portion of the

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Response GP517-2

Comment repeats text from the Draft EIS.

GP518, **Orgel, Linda**

Comment GP518-1

My name is Linda Orgel, and I live between Aberdeen and Westport. I just wanted to comment, a previous speaker talked about that (inaudible) and so on. And I wanted to make comments about rail.

Pasco to North Dakota, flat as a board. Huge explosion derailment. Aliceville, Alabama, flat as a board, huge derailment. Lynchburg, Virgina. (Inaudible), because they happen almost every month.

Seattle, Washington, five miles an hour under the Magnolia Bridge, an oil train tipped over. Thankfully nothing happened.

But the fact that we don't have hills here does not mean that (inaudible) is not going to happen. An evacuation zone of a half a mile is not enough. A half a mile is a vaporization zone, after that comes the fire and the heat.

So in your DEIS, your talking about evacuating a half a mile is not enough. I submit that these permits should be denied. Thank you.

Response GP518-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP519, **Orgel, Linda**

Comment GP519-1

My name is Linda Orgel. I live in Grays Harbor County. I'd like to speak about the inconsistencies and suggested jobs for these projects that's reported creative thinking in the DEIS.

For example, Volume I, Chapter 7, Westway reports on page 647 there will be 36 direct jobs for on-site operations; on page 672, they report 15 direct jobs. In Volume 1, Chapter 7, page 653, Imperium reports 103 direct jobs for on-site operations; on page 688 they estimate 15 direct jobs.

Response GP519-1

As stated in Draft EIS Chapter 7, Section 7.1.4.2, *Proposed Action*, 36 direct jobs would be generated from terminal, rail, and vessel operations. The reference to 15 jobs regards the number of direct jobs that would be generated from terminal operations only.

Comment GP519-2

Impacts from vehicle traffic of additional employees, both proponents think it is assumed that for everyone that works there, there will be one trip to and trip from the project site. Therefore the total vehicle trips are double the number of employees.

In the next paragraph Westway states the proposed action would result in additional 50 employee vehicle trips; Imperium says 30 vehicle trips. Using their calculations, the number of employees

would be one half of those. Therefore Westway would have 25 employees for on-site operations and Imperium would have 15. These inconsistencies are found throughout both documents for both construction workers and on-site operations.

Since the proponents whose job creation and propaganda for these projects to move forward have been publicly exaggerating job numbers and in excess of any numbers that are in the DEIS, it would seem to me a requirement for DEIS would be accuracy and consistency in reporting the true job numbers throughout the document.

Response GP519-2

The jobs numbers identified in Draft EIS Chapter 7, Section 7.1.4.2, *Proposed Action*, represent full-year equivalents. Employee vehicle trips identified in Draft EIS Section 3.16, *Vehicle Traffic and Safety*, are based on the number of employees anticipated to travel to and from the site each day on average. Each roundtrip does not represent a full-year equivalent job.

Comment GP519-3

The economic costs in loss of fishing, tourism, real estate, possible loss of lives because of crude oil in comparison to the real jobs created has not been adequately assessed. The DEIS should state what are the actual direct jobs and positions for operation and construction that would result from these projects and what is the cost benefit of whatever number of project jobs might be versus the risk for Grays Harbor economy.

Response GP519-3

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP520, **Parker, Camille**

Comment GP520-1

I am writing to submit my extreme opposition to any increase in oil train/tanker traffic going through Seattle and Grays Harbor. As a resident of Seattle who lives within blocks of the railway, and as the daughter of a resident of Ocean Shores, WA, I strongly urge you to cancel all plans for oil traffic expansion. Already, we see so many oil trains traveling this route. The underwater topography of Grays Harbor makes this a dangerous proposition and our Washington shores and maritime industries are too precious to put at risk. Please say NO to oil traffic expansion!! Sincerely, Camille Parker.

Response GP520-1

Comment acknowledged.

GP521, **Parks, Carrie**

Comment GP521-1

Please do not allow any oil terminals or expansion of any oil or gas terminals in Hoquiam or on the coast of Washington. I used to live out in that area, and still go to the coast every year as a tourist. I fell in love with the coast because it was beautiful and wild, and unspoiled. It's like that because it isn't polluted. Bringing oil, gas and coal through the area is wrong. It threatens our fishing industry, our agricultural exports, our wildlife, our tourist jobs. Don't do it.

See original attachment for photos

[Photos reviewed but not reproduced.]

Response GP521-1

Comment acknowledged.

GP522, **Parks, Carrie**

Comment GP522-1

The oil companies get their product out of the ground, but the oil, gas and coal are national resources that belong to all of us. They are not charged the true value of those natural resources. Then they want to transport it through our state, putting thousands of lives in danger so that a handful of executives can make money. If something goes wrong, they expect those of us who pay taxes to assume the cost of clean up and repair. I, as a tax payer, don't feel that I should be forced to assume huge risks for a dangerous product, nor those clean up costs for companies where the benefits are only going to a few people. The jobs that would be generated aren't worth it, and in fact, turning our most beautiful areas of the state into dirty, industrial ports full of pollution will drive away our clean industries and cause greater job loss. Who's going to want to go to the ocean for a weekend, just to look out on tanks, smoke stacks and oil spills? Who's going to buy fish, clams and crabs that have been living in a toxic stew full of oil products? Oil, gas and coal do not belong in the Pacific Northwest.

We should continue our focus on being a world leader in clean renewable technology.

Response GP522-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP523, **Parks, Carrie**

Comment GP523-1

I concur with what these kids are trying to do. We owe it to them to leave them a livable world that is free of toxic pollutants. There are many good points in this article that pertain to the Grays Harbor terminals. BREAKING: WA JUDGE RULES ATMOSPHERE A PUBLIC TRUST! WELC changes the climate game in huge case! A message from WELC Attorney Andrea Rodgers... Late last night, King County Superior Court Judge Hollis R. Hill affirmed, as we boldly asserted in our Washington youth climate change, that Washington state has a constitutional responsibility to protect the public's interest in a safe, protected climate. I've worked on this case for 18 months for free -- pro bono -- because I believe in the importance of changing the game on climate change. Yesterday's decision represents a huge step forward! Judge Hill said in her ruling that "if ever there were a time to recognize through action this right to preservation of a healthful and pleasant atmosphere, the time is now." Judge Hill's decision will set the stage for Washington state to develop strong climate rules to protect the right of youth and future generations.

What a great day for the climate, the kids, and Our Children's Trust, our partner in this work! Here are some powerful words from two of my clients: Youth petitioner Aji says: "This victory feels great but it is also tinged with disappointment. Why do we children have to fight for our lives? Why did it take this long for the government to acknowledge that they have the responsibility to protect my future and my generation's future? This cannot be an end but must be a beginning, because protecting our future and the futures and health of millions of other children is true justice." Youth petitioner Adonis says: "After all these years of fighting, this is our biggest victory yet, but with the joy that has sprouted from this victory so has determination -- determination to make this not the last victory but the first of many. This ruling affirms that companies do not have the right to destroy my generation's future and the futures of generations to come for the sake of money. As a child of this Earth I have rights. As children of this earth we have rights and those rights must be protected." Our strategic legal advocacy builds momentum for strong climate action on behalf of Washington's citizens and should help prevent the state from avoiding its constitutional responsibility to protect the climate by proposing half-measures. We must keep applying pressure, keep fighting, and keep using the power of the law to change the game on climate change. We hope you will stand with us in this fight! Stand with us as we fight for a habitable planet for future generations by making a donation to support our campaigns to protect the climate. Sincerely yours in this critical fight, Andrea Rodgers, Attorney Western Environmental Law Center

Response GP523-1

Comment acknowledged.

GP524, **Patton, Kathleen**

Comment GP524-1

As a citizen of Cowlitz County I object to these oil facilities because they bring more dangerous and polluting trains through our county.

I do not believe we should be exposed to the risks and clean up costs associated with spills or worse, explosions. I request that a thorough assessment of the state of the tracks in our State be fully

assessed and the complete costs to the state and the citizens of derailment and explosion be calculated and made public.

Response GP524-1

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

GP525, **Patton, Kathleen**

Comment GP525-1

I have to follow the tall guys. Good evening. I'm the Reverend Kathleen Patton, and I'm an Episcopal priest from Longview in Cowlitz County, Washington.

There are a lot of ways of talking the value and cost to a community of a project like this, but I cannot imagine how any economic benefit of bringing oil by rail can be weighed against the threat to safety and the potential for a catastrophic spill.

But I'm here to raise another aspect of this conversation. I want us all to consider this from a moral angle. For me there are a number of pressing concerns. Obviously there's the safety of all those along the rails in places that experience no benefit whatsoever from the risks that this terminal exposes them to. And I'm thinking of people all along the Columbia Gorge and the town of Kelso, which is our next-door neighbor, and Washougal, where there are schools located directly on those tracks.

Beyond that, I believe that this EIS fails to consider the carbon footprint of this project. After a season of horrific fires and horrendous droughts throughout the west, we can see that climate change is now impacting our citizens directly, their health and their economies.

How can we imagine that allowing big oil to exploit our state and increase profit at the expense of every person and all life forms on the entire planet is an acceptable decision.

When does it become time to stand up and say that's enough. That's enough.

Is that it?

Response GP525-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident. As noted, mitigation would not

completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

GP526, **Paulson, Lauri**

Comment GP526-1

My name is Lauri Paulson and I live in Aberdeen. I came here not expecting to speak and I was going to listen, but I feel compelled to speak. Others have spoken today and for me to repeat them is a waste of our time.

I moved to this area over a decade ago. I had the option to live anywhere I wanted and I chose Grays Harbor because of the natural beauty of this region. Our miles of coastline and beaches and wetland are irreplaceable. People come here to dig for our clams and watch the shorebirds. Oil spills and train derailments do happen and if there is a spill of crude oil it would destroy this beauty and destroy its population of shorebirds.

We have tourist traffic. On our busiest weekends, tourist traffic would be impacted by the increased amount of rail traffic, which would affect our economy. Also Aberdeen is in a blast zone, including the main access into and out of our communities, and goes along the entire business district, groceries, shopping. The benefits of jobs of our communities outweigh the risk of the transportation of crude, and I urge you to deny the permits.

Response GP526-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

GP527, **Paynter, Mary**

Comment GP527-1

The Draft EISs note that the probabilities of significant oil spills, train derailments, and explosions are very low, but also acknowledge that should these unlikely events occur, the environmental damage would be severe. There is no mitigation that can address ruined beaches, destruction of

wildlife habitat, and loss of livelihoods in the commercial fishing and shellfish industries, recreation, and tourism. We have only to look at events such as the BP oil spill and the many recent train derailments and explosions to see that accidents do happen, and when they do, the result is lasting devastation.

Response GP527-1

Comment acknowledged.

Comment GP527-2

If the alternative to these proposed projects were that Americans would freeze in the dark due to lack of fossil fuels, that would be one thing—maybe the risks would be worth taking. But these projects are not designed to meet America's energy needs. Instead, they are intended to enrich the fossil fuel industry by exporting petroleum products to Asian markets.

Furthermore, the resulting pollution and greenhouse gases, once the products are consumed in Asia, affect all of us by degrading the air worldwide and contributing to climate change. It is my fervent hope that permits will not be granted for these projects.

Response GP527-2

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP528, **Paynter, Mary**

Comment GP528-1

Hi, my name is Mary Paynter. I'm a native of Washington. When I was a little girl my family lived across the street from a trail that led to the beach, and this was in southwest Seattle, and the neighborhood. We spent a lot of time down there swimming, beachcombing, playing follow the leader on the logs. One day a sign showed up in the water and said P-O-L-L-U-T-E-D.

We were shocked to learn this meant we couldn't swim in the water, we couldn't dig the clams and the geoducks. And our neighborhood beach had become dirty and contaminated. Our family didn't depend on that beach for food or livelihood, but still it was shocking.

Recently I was talking with a member of the Lummi Nation. And this is his story. The beaches where we used to dig for clams are now covered in coal dust. Again, pretty shocking.

As I read through the DEIS for these Grays Harbor projects, I felt the same kind of shock that I experienced as a little girl when I saw that sign as I felt as an older woman too as his story of the Lummi Nation.

The DEIS had characterized the probability of the spill or some kind of accident as small. But if it happens, it will be devastating. Mitigation cannot address it, as many people have said. There is no mitigation that can cover destruction as a result of the loss of livelihoods -- people, and the amount of fish, shellfish, tourism, and recreation.

Response GP528-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP528-2

Now, maybe, maybe, this will be justifiable if Americans were freezing and in the dark. But we are not. All indications are these projects will not do one thing to support our energy. Please deny them.

Response GP528-2

Refer to Response to Comment GP527-2.

GP529, **Pelly, Mike**

Comment GP529-1

Name: Mike Pelly
Organization Name (if applicable):
City: Olympia State: WA Zip: 98502

Grays Harbor County does not need to endanger its ecology or economy by taking the unnessisary risks of allowing itself to be used by the oil industry. This is a boom and bust proposition. 10 years from now the oil industry will have morphed into something completely different from what it is today. Greys Harbor County does not need to take the risk -> (more on other side) or enabling the oil industry to have a major spill in her backyard of bay.

Think of the big picture and do as other municipalities have been doing. Say No! to dirty oil trains and oil terminals. You sleep with dirty dogs you are bound to end up with fleas.

Tourism is the most viable future for GH County. Please don't louse up this opportunity by enabling the oil companies to do here what they have done to Alaska's Prince William Sound or to the coastline in the Gulf of Mexico.

Those oil trains are <u>not</u> the answer, they are simply means to destroy some of the best things about GH County. Don't be fools to Big OiL! They really don't give a rip about the citizens of G.H. County.

Response GP529-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP530, **Pelo, Ann**

Comment GP530-1

My name is Ann Pelo, P-E-L-O, and I live in Montesano. And the thing about running trains through, they have a track record of failing, and they have a track record of causing decimation of a land.

It's moving backwards in terms of our -- I'm thinking about energy resources rather than moving forward.

So I'm just here to say, no, this is wrong and bad and needs to stop. We need to put our energy into something that is going to be life creating and sustainable in the long haul. That's all.

Response GP530-1

Comment acknowledged.

GP531, **Pennant, Sandie**

Comment GP531-1

I do not want this oil permit to be granted here in our small town. My largest fear is that the train tracks will never be safe enough. I highly doubt that the railways will ever spend enough money (and nobody seems to be able to force them) to make us (and our beautiful town) completely safe from trains derailing. Of course I am worried about our waterways in regards to birds and fish also, but derailments and explosions are my biggest concern.

Response GP531-1

Comment acknowledged.

GP532, **Penry, Marlene**

Comment GP532-1

In Section 3.16 you state that traffic along the US 101 and US 12 corridors between Aberdeen and Hoquiam is becoming more congested due to growth at the Port of Grays Harbor, and that you calculated annual average daily traffic for existing year, 2017, and 2037 for this DEIS. You also use "Peak Hour" to determine vehicle delays. Did any of these calculations area? All of this traffic flows through the study area. Did "Peak Hour" take into consideration that due to tourist traffic, peak volume is just as likely, if not more likely, to occur on a weekend than a weekday? If the North Beach was not considered in Section 3.16, it needs to be rewritten with those figures taken into consideration.

Response GP532-1

Draft EIS Section 3.16.3, *How were impacts on vehicle traffic and safety evaluated?* explains that peak hour was assumed to be 11.5% of the annual average daily traffic based on available traffic count data which includes weekend and weekday traffic. Therefore, the annual average daily traffic data includes tourism traffic because it is the annual average daily traffic for all days in a year. The analysis does not represent the absolute worst peak hour in the year.

GP533, **Penry, Marlene**

Comment GP533-1

Westway and Imperium Terminal Services Expansion Projects EISs

Section 3.15 indicates the PS&P rail line crosses 55 bridges, all crossing water. It states the FRA never inspects bridges unless a problem is reported. It states PS&P has made 7 bridge repairs and the 20 year plan is to upgrade 3 bridges. That doesn't sound like much.

1) Has PS&P inspected all of these bridges? Where are the inspection reports?

2) It also indicates "where feasible, physical tracks were inspected."

Why is it not feasible to inspect all of the tracks? Where is the report of the inspection and testing that was done? All of these reports must be made available to the public.

There have been three derailments on these tracks in the past few years.

Where are the investigation reports for those accidents? Have the problems that caused those derailments been fixed?

It is unacceptable to allow these permits to carry crude oil by rail until PS&P has inspected all 55 bridges, all 59 miles of track, the inspection reports have been made public, and all repairs have been made to the satisfaction of the FRA.

Page 3- 15.11 states "For about 1,000 feet at a point about 4 miles west of Montesano, the speed limit is 10 mph. The track is on the bank of the Chehalis River. The soil condition is such that maintenance to the tolerance required for 25 mph speed limit is difficult."

So, the proposal is to send extremely heavy mile-long trains carrying explosive oil multiple times a day over unstable soil along a major river. Why is that an acceptable risk?

It is not an acceptable risk. Deny these permits.

Response GP533-1

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless,

compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP534, **Penry, Marlene**

Comment GP534-1

From Section 6.5.6.3 Cumulative Impact mitigation measures: "To reduce potential risk of incident of vessel collision while in Grays Harbor, the vessel management system will take the following actions. Ensure vessel traffic is limited while a laden tank vessel is in the navigation channel. Prohibit the transit of any other deep-draft vessels within the south channel (just off Westport) to Terminal 1 in both directions whenever a laden tank vessel is transiting within the same channel." This appears to mean that oil vessels would have priority in the navigation channel. I do not see where the impact of this on other Port companies has been addressed. 1.) Have the other Port tenants been involved in the preparation of this section? Have they agreed to these limitations? The impact of these projects on other Port businesses must be adequately addressed.

Response GP534-1

The referenced applicant mitigation measure proposes that the applicant coordinate with the Port of Grays Harbor and other stakeholders. It does not and cannot require that priority be given to tank vessels.

Comment GP534-2

2.) These documents all refer to 2017-2037 estimates and calculations. Did they use a Port of Grays Harbor 20-year plan? Is there such a thing? Will this priority use limit or discourage future Port customers? This has happened with oil train priority usage and put other rail-dependent companies out of business. Deny these permits until the Port of Grays Harbor has presented their 20-year plan for a diversified port. No port company or industry should be allowed to dominate or monopolize the use of Grays Harbor. We need a diversified economy.

Response GP534-2

Draft EIS Chapter 3, Section 3.17.3, *How were impacts on vessel traffic evaluated?* provides information sources and methods used to evaluate the capacity of the channel. The Draft EIS presents an analysis of impacts related to construction and operation of the proposed action; it does not propose priority use of the port by a particular project or commodity.

GP535, **Penry, Marlene**

Comment GP535-1

Section 4.3.1.2 makes it obvious that so little is known about what will happen to diluted bitumen in water that it cannot be possible to model it or create an oil spill response and cleanup plan for it. It would "initially" float; it will submerge or sink in "hours or days." Oil that sinks is "harder to recover." Table 3.14-4 states it "floats, submerges and/or sinks". Well, what else could it do? It is certainly too heavy to evaporate, so it is a complete unknown. It is also stated that each shipment of dilbit can be different based on the diluents used, which make up 30% of the volume and are typically very toxic. All of these different shipments are mixed in the terminal tanks, and then put on a vessel. How is it possible to know what kind of hazardous chemicals (diluents) are involved in a dilbit spill, how to handle them safely, and if they can ever be recovered from the environment? What does "harder to recover" mean? Is there a recovery plan to clean up sunken dilbit? How is there any way of cleaning oil off the bottom without removing all living things with it? Sunken dilbit left in the environment will obviously have severe adverse impacts to all marine life that grows, lives, or eats on the bottom of the harbor. There are no mitigation measures to deal with sunken dilbit. Recovery time for the environment and fisheries is a complete unknown, but surely to be years or decades. How can this risk be justified?

Response GP535-1

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Modeling*, refer to the Master Response for Oil Spill Modeling Methods. To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill.

GP536, **Penry, Marlene**

Comment GP536-1

Westway and Imperium Terminal Services Expansion Projects EISs

According to the Washington State Department of Fish and Wildlife, "Grays Harbor is an area particularly sensitive to the adverse effects of oil spills." The environmental impacts are astounding.

The Grays Harbor National Wildlife Refuge is a stopover resting and feeding place for hundreds of thousands of shorebirds during spring and fall migration. It is also one of four Shorebird Sites of Hemispheric Importance.

In addition to the Refuge, Figure 3.4-2 shows the following preserved natural areas in Grays Harbor:

Natural Area Preserves (NAP)
- Chehalis River Surge Plain
- Goose Island
- North Bay
- Sand Island
- Whitcomb Flats

Wildlife and Recreation Areas
- Johns River
- Ocean Shores
- Oyhut

Additional Sites
- Damon Point
- Elk River Natural Resource Conservation Area

The Risk Assessment Appendix M grossly underestimates the likelihood of accidents and spills in Grays Harbor, but even at the once every 45 years stated, it is too much. There is still environmental damage left from the Exxon Valdez spill 26 years ago. It will take only one spill to have a severe impact on the harbor, and as stated 23 times in Chapters 4 through 7: "…nor are there any mitigation measures that will completely eliminate the adverse consequences of a large spill."

Oil transport through Grays Harbor is an unacceptable risk. There are no mitigation measures. How can you justify proceeding with these projects? The risks to life, property, livelihoods, and environment far outweigh the number of jobs, which in itself is a doubtful number, but significantly less than the jobs that will be lost.

Response GP536-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

GP537, **Penry, Marlene**

Comment GP537-1

Section 3.17 Vessel Traffic, section 3.17.4.4 states "The Port's tenants and vessel agents are responsible for providing safe and operationally reliable vessels" How often are inspections made? Who sets the parameters of the inspections? Who gets the results of inspections? Are the reports available to the public? Where is the accountability to the Port?

Response GP537-1

Draft EIS Chapter 3, Section 3.17.4.4, *Vessel Traffic Management*, describes the systems that are in place to manage vessel traffic in Grays Harbor safely. Final EIS Section 3.17.4.4 provides additional information.

GP538, **Penry, Marlene**

Comment GP538-1

Ocean Shores, and the ocean beach communities as a whole, are largely ignored in the DEISs. Although the DEISs mention the 1989 Nestucca spill at the bar and its impact on Ocean Shores, they do not model a spill outside the jetties. In Table 4.1-1, all vessel spills are wisely considered Large for the likelihood of environmental impact. Oiled beaches would have huge impacts on wildlife, environment, public health, tourism, real estate, property values, quality of life, and economy. Oil spills getting outside the harbor, under the influence of two tide cycles a day, will continue to bring oil and dead and dying wildlife back onto the beach. Historical efforts show the majority of oiled seabirds will die. A spill in the worst-case scenario of king tides and a winter storm would bring oil far enough onto land to reach dune vegetation, and it would take years for the environment to recover to its natural state. The DEISs must be updated to reflect all environmental and socioeconomic impacts to the ocean beach communities.

Response GP538-1

Draft EIS Appendix N, *Oil Spill Modeling*, acknowledges the limitations of the model to depict the movement of oil outside Grays Harbor. The appendix and Chapter 4, *Environmental Health and Safety*, state that depending on the circumstance of an incident, it is possible for oil to move outside the harbor and up or down the coast. Attachment A in Appendix M provides information about two historical vessel incidents, including the Nestucca spill referenced in the comment. For more information about the limitations of the model, refer to the Master Response for Oil Spill Modeling Methods.

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP539, **Penry, Marlene**

Comment GP539-1

Section 4.2.1.1 states that one step taken to prevent oil from reaching the environment during transfers is that facility operators are required to ensure that all personnel are appropriately trained. However, Section 3.17.4.2 states that vessel operators (owned, operated or chartered) contract with a stevedore (longshoreman) to handle the vessel side of the operations during vessel loading and unloading. What kind of training requirements can be imposed on a contract worker used by any vessel operator using the oil terminals? What good does it do to train the operator on one end of the pipe if the operator on the other end is untrained?

Response GP539-1

Draft EIS Chapter 4, Section 4.4.3, *What mitigation measures would reduce potential impacts related to terminal operations at the project site*? includes an applicant mitigation measure proposing that the facility person-in-charge (certified facility operator for oil transfers) verify that all connections are properly functioning for each oil transfer prior to the commencement of a transfer. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources,* describes the types of impacts that could occur in the event of an oil spill, fire, or explosion.

GP540, **Penry, Marlene**

Comment GP540-1

Humans and the Grays Harbor Environment

Section 3.3 Water States that surface waters provide natural beauty and sustain the health of human communities. Section 3.4 Plants states there are psychological benefits of the environment for humans.

Section 3.5 Animals states wildlife diversity supports various aspects of the local culture.

Many more of the sections of Chapter 3 make similar statements about the interrelationship between humans and the Grays Harbor environment.

The significance of this is that the quality of life, daily life, in Grays Harbor County, the reason people move here and live here, is significantly tied to the physical environment. The loss of this quality of life thus has a very significant negative impact, not just a “perception” as noted in Chapter 7.

With one significant spill, people who live here will lose this crucial, healthy connection to the environment, will lose their quality of life for years. How do you measure the cost of this psychological impact?

How do you measure the cost of the psychological impact of cleaning oiled birds and watching dead and dying oiled wildlife wash up on shore? How do you measure the psychological impact of

knowing that the lesser number of shorebirds migrating one year means hundreds of thousands of birds have died of starvation because they couldn't feed in Grays Harbor one spring?

Chapter 7 notes socioeconomic "perceptions" of increased risks could cause some individuals "concern" and that the projects could cause the "perception" that communities are unsafe or unhealthy. These are not perceptions, they are facts. How do you measure the cost of the psychological impact of worrying every day that your house or your child's school could burn down as every train passes, or your source of drinking water could be contaminated or the air you breathe could become toxic?

How do you measure the costs of these intangible, psychological impacts to the people of Grays Harbor County? Why aren't psychological concerns addressed as public health impacts? How can they be mitigated? They cannot be ignored.

Response GP540-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP541, **Penry, Marlene**

Comment GP541-1

In Section 3.17, the only mitigation measure for tsunamis is an emergency evacuation plan. Evacuation of whom, from where? All coastal communities are active in tsunami readiness activities, and with lessons learned from the nuclear plant disaster in the Japan tsunami, these terminals must be built to withstand a CSZ earthquake and tsunami. Why is there no mitigation for on-site loaded trains or docked laden ships spilling oil into the harbor due to earthquakes or tsunamis?

Response GP541-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

GP542, **Penry, Marlene**

Comment GP542-1

Chapter 4 Environmental Health and Safety (spills, fires, explosions) states economic and social factors will be addressed in Chapter 7. However, Chapter 7 states the socioeconomic study is

required by the City of Hoquiam and is focused primarily on their resources. The only Environmental Health and Safety cost in the Cost/Benefit Analysis (Table 7-13, p 7-40) is training the Hoquiam Fire Department, and even that does not have an estimated cost. The cost of spills, explosions, or fires is not included as a cost as they are unpredictable and depend on a variety of factors. They are not even listed as a line item with no estimated cost. The Appendix O economic study covers only benefits, not costs. The costs to all other communities in Grays Harbor are not addressed, not even the direct costs of first responder training. Why did the economic study not look at costs? Why did it not look at the entire study area of the projects? The DEIS does not contain an adequate or accurate economic study and thus is unacceptable.

Response GP542-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP543, **Penry, Marlene**

Comment GP543-1

Per Table 3.14-4, each shipment of dilbit can have a different diluent. How does the terminal operator know what hazardous materials are being handled, what safety measures to use, and what cleanup measures to employ if there is a spill onsite? How is it known if it is safe to mix the contents of multiple shipments with different diluents together in one tank? Could different diluents combine for different chemical reactions? Potential explosions?

Response GP543-1

Draft EIS Chapter 4, Section 4.2, *Applicable Regulations*, describes the regulatory requirements applicable to handling, storage, and transport of crude oil. Operation of the proposed facility would comply with these requirements to minimize the risk of incidents related to storage. Additionally, Section 4.5, *Environmental Health Risks—Rail Transport*, includes a mitigation measure to improve the safe transport of crude oils with different volatilities and sinking tendencies, which states the applicant will not accept crude oil by rail unless the applicant has received verification that a sample of the oil has been tested and properly classified and characterized.

GP544, **Penry, Marlene**

Comment GP544-1

Nothing in the DEIS oil spill scenarios indicates that due to the high volatility of Bakken crude, a vessel collision could be more than a spill, it could be an explosion. Does the response plan cover this possibility? Could the oil stay on fire on the water? Could it come ashore on fire? With its low flashpoint, could Bakken oil that reaches shore catch on fire, for example from cars driving on the beach, people tossing cigarette butts into oiled dune grass,etc.?

Response GP544-1

Draft EIS Chapter 4, Section 4.6.2.2, *Fires or Explosions*, acknowledges the potential for fires or explosions during vessel transport.

Comment GP544-2

Are first responders of all Grays Harbor communities going to be trained how to handle both Bakken and dilbit spills as they reach shore? Who pays for the necessary training and equipment?

Response GP544-2

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

GP545, **Penry, Marlene**

Comment GP545-1

Section 3.5 Animals, specifically Marine Mammals

1.) The DEIS fails to identify the Dall's Porpoises resident in the harbor. How does the increased number of vessels impact this species?

2.) The DEIS states the greatest potential for whale vessel strikes is outside state waters because most large whales migrate and forage in deeper waters. It is beyond belief that the DEIS does not mention and consider the annual Gray Whale migration. This migration is heaviest in March and April and consists of females and their young calves. They are generally within a mile or less of shore and can often be seen from the shore. There is also a fall migration, although it is not as concentrated and is further away from shore. How do these projects impact this migration and what mitigation will be enacted?

Response GP545-1

Final EIS Chapter 3, Section 3.5.4.3, *Grays Harbor,* reflects additional information to address the common porpoise and dolphin species found in Grays Harbor, including Dall's porpoise, and to clarify whale use of Grays Harbor, including frequent use by the gray whale. Draft EIS Section 3.5.5.2, *Proposed Action*, addresses potential vessel collisions with marine mammals. Final EIS Section 3.5.5.2 clarifies that marine mammals that are more common in Grays Harbor and nearshore coastal waters would be at a higher risk from vessel strikes. However, the potential for vessel strikes in the study area would be only slightly greater compared with the no-action alternative.

Comment GP545-2

3.) The DEIS states increased vessel traffic related to the proposed action would generate increased underwater noise that could affect aquatic animals, especially marine mammals. Figure 3.5.1 compares vessel noise frequency and marine animal hearing ranges. The text then has several sentences describing killer whale clicks, whistles and calls that are at a much higher range than the vessel noises and thus they will not be impacted. Since most of the marine mammals listed as present in the study area are baleen whales, with hearing frequencies that overlap the vessel noise range, why are they not discussed? What is the impact on those species? With such obvious omissions as these made, what other species and impacts on marine mammals might have been missed?

Response GP545-2

The potential underwater vessel noise impacts on marine organisms, which would include baleen whales, are found in the bulleted list of impacts after Draft EIS Chapter 3, Section 3.5, *Animals*, Figure 3.5-1. The range of physical and behavioral response impacts include behavioral reactions, masking, temporary threshold shifts, permanent threshold shifts, and nonauditory physiological effects.

GP546, **Penry, Marlene**

Comment GP546-1

This is an update of an earlier comment on this section, which I am not sure got through. Section 6.5.6.2 Navigation Channel Capacity Table 6-18 shows the number of estimated annual vessel trips in 2017 and 2037. It estimates growth from 2017-2037 only for commodity shipping in the harbor. It is unclear whether this is based only on the current tenants of the Port, or if it takes into consideration the growth of the Port with new tenants.

Response GP546-1

Draft EIS Chapter 3, Section 3.17.3, *How were impacts on vessel traffic evaluated?* provides information sources and methods used to evaluate the capacity of the channel.

Comment GP546-2

However, the estimates do not project any growth, any increase in throughput, of crude oil for Westway, Imperium, or Grays Harbor Rail Terminal for the next 20 years. Do these three companies truly have static 20-year business plans or are the DEISs written that way to minimize the cumulative impacts? Can we expect another application for more throughput, another SEPA, DEIS,

and permitting process in a few years? These DEIS's already state 23 times in Chapters 4-7: "However, no mitigation measures can be implemented that will completely eliminate the possibility of a large spill, fire, or explosion, nor are there any mitigation measures that will completely eliminate the adverse consequences of a large spill, fire, or explosion." These DEIS's already propose unacceptable levels of environmental and economic risks. Are we to believe that if these terminals are constructed that the oil companies will not push to increase throughput, continue to increase impacts and risks, until that devastating spill, fire, or explosion happens? It is clear that these projects and companies should not be permitted a foothold in Grays Harbor.

Response GP546-2

As noted in the Master Response for Project Objectives and Alternatives, the proposed action is a private project and the objectives and proposal are defined by the applicant. Draft EIS Chapter 2, *Proposed Action and Alternatives*, describes the type of material and approximate volumes to be transported based on this information. The City of Hoquiam will specify maximum throughput in the conditions of a shoreline development permit. The City of Hoquiam will specify maximum throughput in the conditions of a shoreline development permit. In addition, other permit approvals could identify the maximum allowable (permitted) throughput of the facility. Any increase in annual throughput capacity would require revised or new permits or plans.

GP547, **Penry, Marlene**

Comment GP547-1

STUDY AREA ISSUES

Study areas west of the terminal site are unclear, inconsistent, and inadequate throughout the DEISs.

There are three distinct study areas defined in Chapters 3 and 4. For purposes of illustration, I will call them A, B, and C.

A.) The most often used study area, it is described as "through Grays Harbor out to 3 nautical miles from the mouth of the harbor." (1) What does "through" mean? Is it just the navigation channel or the entire harbor including islands and shorelines? Some individual sections make that more clear in the details of the text, but it is not apparent to the reader in the answer to the "What is the study area?" question at the start of each section. Is "out to 3 nautical miles" just a box of sorts out from the mouth of the harbor? (See below for discussion of "mouth.")

B.) "Vessel transport through Grays Harbor." Again, what does "through" mean and (2) where does Grays Harbor end?

C.) "The entirety of Grays Harbor, including the navigation channel into and out of the harbor out to 3 nautical miles from the mouth of the harbor." (Section, 3.17 Vessel Traffic only)

Despite what the answer to the Study Area question is up front, some text, figures, and footnotes within the sections refer to areas that are outside of that stated study area. Some examples of this are shown below, but another issue must be addressed first.

The Mouth of the Harbor

(3) Where is the mouth of the harbor? There is no consistent definition of its location. One might suppose it is an imaginary line drawn between the western ends of the jetties, but that does not seem to be the case.

Section 2.1.1

"Tank vessels approach the project site via the Grays Harbor Navigation Channel (GHNC), which runs from the mouth of Grays Harbor to the Port docks." So, the mouth of the harbor is at the western extent of the GHNC, which per Figure 2-1 is approximately 5 miles WSW of the west end of the North Jetty, or 7 miles from the nearest shoreline?

Response GP547-1

The mouth of the harbor, while not delineated in the Draft EIS or in standard nautical navigation charts, can be considered the area between the north jetty at Point Brown and the south jetty at Point Chehalis.

Comment GP547-2

Section 3.4, Plants

"The 683-acre Oyhut Wildlife Recreation Area and adjacent Damon Point are located at the south end of the Ocean Shores Peninsula at the mouth of Grays Harbor." So, some point of the mouth is located at some point at the south end of Ocean Shores?

Response GP547-2

The question in the comment is unclear. However, the locations of the Oyhut Wildlife Recreation Area and Damon Point are shown on Draft EIS Figure 3.4-2, *High-Quality Vegetation Communities in and along the Shoreline of Grays Harbor*.

Comment GP547-3

Section 3.10, Recreation, p 3.10-10

Razor clam harvests are managed from "the north jetty at the mouth of Grays Harbor" … and … "to the south jetty at the mouth of Grays Harbor", which brings us back to the original supposition of jetty end to jetty end?

Response GP547-3

The mouth of the harbor, while not delineated in the Draft EIS or in standard nautical navigation charts, can be considered the area between the north jetty at Point Brown and the south jetty at Point Chehalis.

Comment GP547-4

Issues in Executive Summary

The Executive Summary states that each section has a specific study area, but for vessel traffic the study area is basically "Resources in and around Grays Harbor that could be affected by vessel

transport." (4) So why do the DEISs exclude the ocean beaches from all Study Areas? Why are they not considered an area "around" Grays Harbor that could be affected?

Issues in Chapter 3, Affected Environment, Impacts, and Mitigation:

Study Area A is stated for the following sections in Chapter 3. Some inconsistencies within the text are pointed out below. There are likely more within the approximately 300 pages in the chapter.

3.2 Air, 3.3 Water, 3.4 Plants, 3.5 Animals, 3.7 Noise

Assuming for a moment that the mouth of Grays Harbor is that imaginary line between the ends of the jetties, Study Area A does not include the entire Grays Harbor Navigation Channel, therefore does not include all vessel traffic. (5) How can Section 3.5 Animals, which discusses marine mammals and the potential for vessel strikes considered adequately studied if it does not cover the entire GHNC? (6) How can any of the above sections which involve vessels be confined to Study Area A as opposed to something similar to Study Area C?

While Section 3.4 Plants is stated as Study Area A, Figure 3.4-2 shows otherwise. What the figure is showing might be similar to what is described in Study Area C. (7) What is the correct study area?

Response GP547-4

The study area is not identified with letter identifiers (i.e., "A" or "C," as the commenter states). The study area for plants is described generally in Draft EIS Chapter 3, Section 3.4, *Plants*, and specifically in Section 3.4.3.2, *Impact Analysis*. The description is consistent with that shown in Figure 3.4-2, *High-Quality Vegetation Communities in and along the Shoreline of Grays Harbor*.

Comment GP547-5

Section 3.10 Recreation is also stated as Study Area A, but discusses chartered ocean fishing, whale watching, and razor clam harvest areas from Copalis Beach to Willapa Bay on the Pacific Ocean beaches. (8) Isn't this a much more reasonable place to start to define an accurate study area for all sections of the DEISs that extend into the ocean and affect the ocean beaches?

Response GP547-5

Draft EIS Chapter 3, Section 3.17, *Vessel Traffic*, presents an analysis of potential impacts on channel capacity, Terminal 1 berth occupancy, and other vessels related to routine vessel transport through the Grays Harbor Navigation Channel.

Comment GP547-6

Study Area C is stated for 3.17 Vessel Traffic, which leads to additional questions about the relationship between Study Areas and the Grays Harbor Navigation Channel. (GHNC)
The Entrance Channel Reach and Bar Channel Reach are the most dangerous areas of the GHNC and the most likely areas for accidents. (9) Why should any Study Area that extends outside the mouth of the harbor and includes the entire GHNC exclude the area between the channel and the ocean shoreline?

Footnote 2 on page 3.17-1 describes the GHNC as "Nearly 23 nautical miles long, it begins approximately 4 miles offshore, runs in a predominantly easterly direction past Westport, Hoquiam, and Aberdeen, and ends at Cosmopolis near the mouth of the Chehalis River." (10) Four miles

offshore from where? The map on the next page, Figure 3.17-1, when measured to scale straight to the shoreline is closer to 7 miles.

Response GP547-6

Draft EIS Chapter 3, Section 3.17.1, *What is the study area for vessel traffic*? Defines the study area as the Terminal 1 berth and the entirety of Grays Harbor, including the navigation channel into and out of the harbor out to 3 nautical miles from the mouth of the harbor. Chart 18502 refers to the length of the Bar Channel as 4.6 nautical miles. The Bar Channel extends in a southwesterly direction from the Grays Harbor entrance channel.

Comment GP547-7

Issues in Chapter 4, Environmental Health and Safety

The Study Area defined in this chapter is simply unacceptable. I shouldn't have to say anything else.

Grays Harbor County

The Study Area for this Chapter is, unbelievably, area B. It stops wherever the end of Grays Harbor is going to be defined. It does not even go the 3 nautical miles out as in Study Area A, much less out to the end of the navigation channel as in Study Area C, or up and down the ocean beaches of Grays Harbor County, which history shows will be impacted by a spill. The explanation is that anything outside of the harbor is considered in the extended vessel transport area covered in Chapter 5, which describes its vessel study area as the entire west coast of the United States.

How is it possible to even consider stopping the study area for vessel spills prior to the end of the Grays Harbor Navigation Channel? The Entrance Reach Channel and Bar Reach Channel are the most dangerous sections of the channel, thus the most likely places for an accident and a spill. (11) How can the DEISs exclude any portion of the Grays Harbor Navigation Channel from the vessel spill study area? (12) How can they not go 3 nautical miles out as almost all other section study areas do?

(13) Does this let the oil companies off the hook for things like contingency plans, spill response plans, training, drills, or financial responsibility for cleanup, restoration, and reimbursement?

(14) The ocean beaches are included in the Grays Harbor Geographic Response Plan, which is part of the Section 4.2.2 framework to deal with an incident, so why aren't they in the Chapter 4 DEIS study area?

(15) Can you say Nestucca? It is certainly mentioned several times in the DEISs. Why was the information documented about its oil spill not used in any part of the analysis? The bar, the weather, human error, extent of damage with only 231,000 gallons spilled.

[large text: This is simply unacceptable. The ocean beaches of Grays Harbor County are not a "throwaway" into Chapter 5.]

Western Washington Coast

The ocean beaches of the entire Washington coast should be part of the study area for these DEISs.

(16) Nestucca, Tenyo Maru, New Carissa, Paula Lee (the DEISs missed that one because it didn't spill anything.) The information about these vessels seem to simply be printed in the DEISs, but the

information about what happens in weather on the northwest coast is not used to do any analysis or come to any conclusions. Why not?

Response GP547-7

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

GP548, **Penry, Marlene**

Comment GP548-1

Why aren't the Oyhut Wildlife Area, John's River Wildlife Area, and Elk River NRCA included in the discussion in Section 4.7.1.2 Plants impacted by an oil spill? Although the entire Grays Harbor Shoreline is included in general, these areas are all shown as High Quality Vegetation Communities on Figure 3.4-2. Since the Wildlife Refuge and Surge Plain are specifically noted from that figure, shouldn't the other three areas also be brought to specific attention in this section?

Response GP548-1

Final EIS Chapter 4, Section 4.7.1.2, *Plants*, has been revised to recognize these areas as sensitive areas.

GP549, **Penry, Marlene**

Comment GP549-1

Issues Regarding Risk Assessment of Vessel Oil Spills

No matter how many statistics the DEISs present in Appendix M, and no matter how many probabilities of incidents are presented there from reports from Canada (.0039), International Maritime (.0017), or Glosten, the lowest, which ICF chose to use (.00015), doesn't the concern of risk in Grays Harbor really come down to the following, real, information provided within the DEIS chapters?

Section 4.1.2 The Study Area for Chapter 4 vessel traffic incidents is Grays Harbor, not the west coast, not Puget Sound, not Canada, not international.

(2) Navigating through Grays Harbor is dangerous (sorry – "challenging"):

Section 3.17.4.1 Vessel Traffic, Grays Harbor

"Offshore, extending approximately 2 miles from the mouth of the bay is an entrance bar composed of sand and silt, which is subject to the effects of tide, current, and ocean forces. The bay enclosed in

Grays Harbor is filled by many shoals and flats, some of which are bare at low water and are cut by numerous channels" …. "The entrance bar, coupled with strong and sometimes erratic currents, can present a navigational challenge to vessels entering or leaving Grays Harbor. Periods of limited visibility due to fog, rain, or darkness can add to this challenge. Submerged sections of the north and south jetties at the harbor entrance extend seaward about 0.2 and 0.9 mile, respectively. Hazardous breakers can occasionally be present near these jetties, especially during periods of heavy weather."

Section 4.3.2.3 Environmental factors contributing to incidents

"In addition to fog and swells caused by high winds, water flow conditions in the Bar Channel Reach of the Grays Harbor Navigation Channel (at the entrance of the harbor) vary depending on ebb or flood tidal currents, speed of the Chehalis River runoff, wind, and ocean swells just outside the entrance. Average current velocity is about 1.9 knots on the flood and 2.8 knots on the ebb but velocities have been known to reach 5 knots. The direction of the current near the bar can be erratic, running north close inshore and south offshore."

Section 4.6.2.1 Oil Spill Risk

"Grays Harbor has navigational challenges, including a bar at the entrance to the harbor, a constrained navigation channel for deep-draft vessels, and sharp turns in the channel."

(3) "Incidents" occur in the harbor somewhat regularly:

Section 4.6.2.1 Oil Spill Risk

"From 2008 to 2014, several vessel incidents occurred in Grays Harbor, including one methanol spill from a vessel. Five incidents were caused by loss or reduction in propulsion. One of these resulted in a vessel grounding with no damage or spill and one resulted in an allision with a buoy with no damage or spill. In 2011, a ship spilled 200 gallons of methanol to water because of human error in connecting a hose to a flange for a transfer."

Number of Oil-Laden Vessels in Grays Harbor:

Section 6.5.6.2 Cumulative Impacts, Table 6.18 Vessel Trips:

Total Large Commercial Vessels Trips in 2017 without proposed projects: 324

Total proposed Vessel Trips in 2017 carrying crude oil: 758

Every large commercial vessel carries some significant amount of bunker fuel for propulsion. With the proposed projects, 70% of those vessels will also be carrying crude oil.

So, how are we supposed to believe that it will be 120-360 years (page 4.6-5) before an oil spill occurs? Should the DEISs base spill risks on mind-numbing statistics from an Appendix or on the simple reality of Grays Harbor that has already been presented in the Chapters?

A spill will happen, and per the Washington Department of Fish and Wildlife "Grays Harbor is an area particularly sensitive to the adverse effects of oil spills." Their scoping comments concluded these projects to be an "unacceptable risk." The promise of new jobs pales in comparison to the jobs and industries that will be impacted by an oil spill for years and possibly decades.

Grays Harbor is no place for oil terminals and oil vessels. The risk is too high. The risk is unacceptable.

Response GP549-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Refer to the Master Response for Risk Assessment Methods for a discussion of the assumptions, data sources, and methods used in the analysis of risks.

GP550, **Penry, Marlene**

Comment GP550-1

Small on-site spills P. 4.4-5 and Figure 4.4-2 The small vessel-loading spill scenario with a high likelihood of occurring and a high likelihood of reaching water is of considerable concern. However, what about the scenarios not shown, with even smaller amounts that reach the water that are likely to happen much more frequently? Five or ten barrels now and then, leaked into the waters that go unnoticed. Oil that is likely to be dispersed out into the harbor before any response could be taken. However, wouldn't these frequent smaller spills have significant cumulative impacts on the harbor areas close to the terminals, for example the Fry Creek salmon runs, the National Wildlife Refuge, and tribal fishing areas? Slow accumulation of oil into the mudflats and salt marshes is just as deadly as one significant spill. How do you protect the harbor from the cumulative impacts of very small spills?

Response GP550-1

The small spill scenarios addressed in Draft EIS Appendix M, *Risk Assessment Technical Report*, and Appendix N, *Oil Spill Modeling*; and summarized in Draft EIS Chapter 4, *Environmental Health and Safety,* include any volume up to the specified amount. As noted in Chapter 4, existing regulations and proposed mitigation cannot completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

GP551, **Penry, Marlene**

Comment GP551-1

This sentence occurs TWENTY-THREE times in Chapters 4 through 7: "However, no mitigation measures can be implemented that will completely eliminate the possibility of a large spill, fire, or explosion, nor are there any mitigation measures that will completely eliminate the adverse consequences of a large spill, fire, or explosion." So, the DEISs say this is a bad place for oil terminals. It will take only one of these spills in the harbor to ruin the economy and environment of Grays Harbor and its shoreline communities. It will take only one of these train spills and explosions to risk lives, destroy homes and businesses, and create enough air and water pollution to cause short-

term and long-term health problems. The risks and costs of crude oil-by-rail in Grays Harbor County far outweigh the benefits. Every community from the oil fields to Grays Harbor takes all the risks, the oil companies reap all the profits. The number of lost jobs and livelihoods, and possibly lost lives and homes, will far outnumber any new jobs being promised. The new jobs benefit the Hoquiam/Aberdeen area, the losses could affect any of the hundreds of communities between the oil fields and the ocean. How can the you justify imposing this risk on the communities of Grays Harbor, most of which have passed resolutions against crude oil-by-rail? How can you risk building these projects in an extremely environmentally sensitive area, which we all know, but has been officially stated as unacceptable by the Washington Department of Fish and Wildlife? Our county has a low-income population. This makes it a typical target of dirty industries like coal and oil, promising jobs. Why does your Appendix O Economic Impact Analysis show only the benefits of those jobs and not the costs of all the potential losses of jobs and livelihoods that depend on a clean Grays Harbor? Where, in 3000 pages, do you actually justify the merits of these projects?

Response GP551-1

For more information about the development, implementation, and enforcement of mitigation measures, refer to the Master Response for Mitigation Framework. Refer to the Master Response for Risk Assessment Methods for a discussion of the assumptions, data sources, and methods used in the analysis of risks.

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP552, **Penry, Marlene**

Comment GP552-1

As I work to get my final comments submitted, and as I select Comment Type “Westway and Imperium EISs (Default)” one more time, I have to wonder again about the possible illegality of the manner in which these DEISs were prepared and presented. Obviously one DEIS was written and copied, then a few changes were made in the second one, then we were presented with two projects and two DEIS documents and about 3000 pages to read and comment on. So the two DEISs are virtually the same. The DEIS scoping, hearings, comment periods, comment forms. and addresses to send comments to have been the same. The answer to any question will be the same for both. So how could there ever be a possible outcome that one project would be accepted and the other denied? It’s both or neither. Is this legal? I would guess that Grays Harbor Rail Terminal is going to be another duplicate DEIS with just a few numbers changed. So, whatever happens with these first two DEISs, there is a precedent set for the same outcome for the third one. So any scoping or commenting for GHRT will just be a sham. There is another problem with these two DEISs. Reading

the impacts of either one of them individually, as if the other wouldn't happen, is virtually a lie. The way this is being handled, nothing really tells the true picture of what will happen until you get to Chapter 6, Cumulative Impacts, but that Chapter does not report on all the resources covered in Chapter 3. So you never do truly get the whole picture of the two projects together even though they will be decided together. I have been told the word for this is "segmentation" to make the two projects seem to have less impact. I have also been told that is illegal. Please explain how this is all legal and above board. How would it be possible to accept just one project based on how you have handled this process?

Response GP552-1

The Draft EIS reflects the analysis of impacts and proposal of mitigation measures specific to the proposed action. Similarities in the Draft EIS for the proposed action and the Draft EIS for the REG (formerly Imperium Terminal Services) Expansion Project accurately reflect the similarities between the proposals. Refer to the Master Response for Cumulative Impacts Analysis for an explanation of the scope of resources considered.

GP553, **Penry, Marlene**

Comment GP553-1

Weather concerns The harbor entrance has the most severe weather and seas, thus is the most likely place for a serious oil vessel incident. Several mitigation measures state that to reduce risks of incidents, specific procedures will be put in place for extra tug support in bad weather conditions. Why aren't there parameters for weather conditions when oil-laden vessels are not allowed to move through the harbor at all? It takes two hours for a vessel to transit the harbor. The weather can change in that time. During winter storms, weather at the bar can be much worse than at the terminal. In some places the DEISs state a vessel might weigh anchor in the designated anchorage area to wait for weather conditions to change. Who makes the on-the-spot decision as a vessel approaches the mouth of the harbor whether it should stay or go? If the vessel weighs anchor, what are the parameters and who makes the decision when it can depart? I am concerned that only experienced Grays Harbor pilots and the USCG are able to make these decisions, but that ships' captains will be allowed to make them.

Response GP553-1

Draft EIS Chapter 3, Section 3.17.4.4, *Vessel Traffic Management*, describes the systems in place to manage vessel traffic in Grays Harbor safely. Final EIS Section 3.17.4.4 provides additional information.

GP554, **Penry, Marlene**

Comment GP554-1

The designated anchorage area in the harbor can hold only three vessels. With two or three oil terminal companies and multiple other port tenants, who decides which vessels can use the anchorage area, which outgoing vessels must stay at the terminals, and which incoming vessels must wait outside the harbor? The DEISs Section 3.17 Vessel Management and Chapter 4 Environmental Health and Safety do not address the increased risks of having multiple vessels anchored inside and

outside the harbor, some of which could be oil-laden, at the same time as an oil-laden vessel is transiting the navigation channel. In the worst case scenario, there could be four oil-laden ships near the mouth of the harbor at the same time. Why was the possibility of another nearby oil-laden vessel not considered a factor in the spill risk scenarios?

Response GP554-1

Draft EIS Chapter 3, Section 3.17.4.4, *Vessel Traffic Management*, describes the systems in place to manage vessel traffic in Grays Harbor safely. Final EIS Section 3.17.4.4 provides additional information.

The risk assessment does not differentiate between different causal events, but does consider the possibility of vessel collisions. As noted in the Master Response for Environmental Health and Safety Analysis, the scenarios were chosen using expert opinion on locations where spills could typically occur, such as during fuel transfers, or where worst-case spills might occur, such as a vessel incident at the entrance to Grays Harbor. The quantity of oil spilled for these scenarios was based upon the definition of worst-case spill for an onshore facility, a vessel, and for rail transport (WAC 173-182-030 and 480-62-300). The largest tankers would be Panamax class with the capacity to hold up to 15.1 million gallons (360,000 barrels). An additional 420,000 gallons (10,000 barrels) was added to represent the fuel onboard the vessel.

GP555, **Penry, Marlene**

Comment GP555-1

The DEISs do not take the economies of all of the communities of Grays Harbor into consideration, especially not the ocean beach communities. They do not consider that oiled beaches, that per Section 4.7.1.5 Recreation, could take months to years to clean up and recover, would destroy the economy and quality of life in places like Ocean Shores. Chapter 4 indicates the owners/operators/charterers of the oil vessels are financially responsible for vessel spills. How many companies could be involved? Who manages and oversees that each of these companies has the required financial backing before they bring a vessel into our harbor? Are they required to reimburse communities for lost tourism, therefore lost revenues, lost jobs, closed businesses? The kill-off of razor clams would also result in the loss of critical off-season tourism revenue that helps our businesses survive the winter. Are they liable for destroyed homes, lowered property values, the inability to sell houses? What about health problems that oiled beaches and the resulting air pollution can cause? How do you put a monetary value on the lost quality of life which is why people move and live here? As an oil spill cleanup spreads over the months and years, nothing stops these companies from declaring bankruptcy and leaving us with the mess. Even without that happening, how likely is the money to be forthcoming when we need it? Insurance payments take time. Court proceedings take even more time. Meanwhile, our economies fail. There is simply no way that the few benefits of these projects can ever outweigh the risks. There is no rational response to these proposed projects other than to deny the permits.

Response GP555-1

Refer to the Master Response for Purpose and Focus of the EIS.

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*. Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS.

GP556, **Penry, Marlene**

Comment GP556-1

Oil Modeling Concerns

There might be 3000 or so pages of DEISs that we are dealing with, but the bottom line to most of us who live on the shores of Grays Harbor is oil spills. The Oil Spill Modeling in Appendix N is so inaccurate and inadequate that it makes one wonder how much of the rest of the DEISs was worth reading and should be believed.

The GNOME software cannot model Bakken or Diluted Bitumen. The text goes into great detail to assure the reader that each has heavier and lighter properties, so it is perfectly logical and accurate to model them as medium crude oil, but in the end, oh, by the way, medium crude oil is the only crude oil that GNOME can model. However, if you stick with the appendix to the end, Table 3 on page 13 tells a completely different story about how different their properties are after 48 hours. Also, you have to make it to Attachment B before you learn that Bakken is much less viscous than medium crude so it will spread out thinner (further?) on the water. (The Imperium DEIS does not model, or even have so much as a footnote about, any of the other types of oil being proposed for that project.)

GNOME cannot model outside the harbor, so once again, the ocean beach communities are left with no information, even though the purpose of this appendix is “to allow planners and decision makers to understand the range of consequences” of an oil spill.

One of the model’s inadequacies is very apparent when looking at the 24 and 48 hour Figures. It seems the ebb and flow of the ocean tides has no influence on where the oil moves.

Lacking reliable discharge data for the Chehalis River, an “informed estimate from a similar river” was used in the model. Just one more “made up” piece of the model, more to come. The Grays Harbor GRP has discharge data for the Chehalis River from the USGS. Could that have been used? The GRP also contains input for the Humptulips River which has significantly different flows directly into the North Bay summer and winter, but was not included in the model.

An “instantaneous release” was modeled to provide “an extreme representation.” No, an extreme representation would model the most likely scenario, a spill at the mouth of the harbor in a winter storm, not in 10 mph winds.

At Table 1, things get absurd. I am not a scientist. I am a resident of Ocean Shores. I have lived on the southwest end of the Ocean Shores Peninsula for 15 years. Our winter winds do not prevail from the ENE. Quite the opposite, they come from the WSW. With ENE winds as input, none of the winter modeling can be correct. I also doubt our average winter winds are only 10mph. Weather from Bowerman Basin, almost 20 miles inland, can be significantly different than weather at the entrance to the harbor. And, once more, there is no input parameter for the ebb and flow of tides, which are considerable, and often extreme.

If you make it past all of this and get to page 12 and Table 2, you find alarming figures of a minimum of 45%-75% of oil beached within 24 hours. On the Figures, with all of the yellow and green and gray out in the water, the little red dots along the shore do not represent that level of significance well. These percentages should be printed on the Figures.

In conclusion, the DEISs oil models provide inaccurate, incomplete, inadequate, and misleading information on the consequences of oil spills in Grays Harbor. With virtually no information on the biggest risk of these projects, how is it possible to permit them to move forward?

Response GP556-1

Wind data reflected in Table 1, Four Sets of Hydrodynamic Conditions, of Draft EIS Appendix N, *Oil Spill Modeling*, are correctly identified as coming "from" the direction indicated.

Draft EIS Appendix N, *Oil Spill Modeling*, presents data from ADIOS at the 48-hour mark to easily compare with the GNOME mass balance estimates at that same period. This comparison provides a better representation of the behavior of Bakken crude oil or diluted bitumen (dilbit), which can be modeled using ADIOS but not GNOME, in the environment.

Refer to the Master Response for Oil Spill Modeling Methods, which addresses the applicability and selection of the three models used as part of the oil spill modeling effort: GNOME, ADIOS, and Hydrologic Engineering Centers River Analysis System (HEC-RAS). It was determined that these models provided sufficient analytical capabilities for the purposes of evaluating spill scenarios for the Draft EIS. GNOME, specifically, was selected to complete the oil spill trajectory analyses because it is a commonly accepted industry standard for contingency planning, scenario analysis, and oil spill response used by the National Oceanic and Atmospheric Administration, the U.S. Coast Guard, and the Washington State Department of Ecology.

GP557, **Penry, Marlene**

Comment GP557-1

November 30, 2015 Mr. Brian Shay City Administrator City of Hoquiam 609 8th Street Hoquiam, Washington 98550 bshay@cityofhoquiam.com Sally Toteff Director, Southwest Region Office Washington State Department of Ecology 300 Desmond Drive SE Lacey, Washington 98503 sally.toteff@ecy.wa.gov Paula Ehlers Shorelands and Environmental Assistance Washington State Department of Ecology 300 Desmond Drive SE Lacey, Washington, 98503 paula.ehlers@ecy.wa.go Westway and Imperium DEIS c/o ICF International 710 Second Avenue. Suite 550 Seattle, Washington 98104 Re: Westway/Imperium Draft Environmental Impact Statements

Thank you for the opportunity to review and comment on these documents. I have lived in Ocean Shores, Grays Harbor County for fifteen years and it is a beautiful place to live and play. I want to

keep it that way, so I regularly volunteer to work on Department of Ecology projects in Ocean Shores. I have worked on the Critical Areas Ordinance, I have spent several years working on a Wetland Mitigation Banking project, and I am currently working on the Shoreline Management Plan.

I have spent a considerable amount of time reviewing these documents, and have worked in my community to help organize and assist others in this process. This is actually just my final summary comment. I started submitting individual comments online before I determined I had so much to say! I hope there is some way you can review all of my comments in total, as fragmented as they might be. I am concerned that the process for submitting comments online was inherently flawed. Besides a five day period in November when no comments were being accepted, the online comment process as a whole was unclear, and it is impossible to know how many comments never made it through the submission process.

Response GP557-1

The issue was fixed and a phone support line was established to provide assistance 24/7 through the end of the comment period.

Comment GP557-2

The DEISs themselves prove, by stating dozens of times, there is no way to ensure a major spill or explosion will not happen, and there is no mitigation for the impacts on the environment should one happen, that these projects do not belong in Grays Harbor and the permits should be denied.

Response GP557-2

The commenter does not provide sufficient details to allow for a response.

Comment GP557-3

However, despite those conclusions in almost every section of the documents, the detailed information is presented in a manner that is biased towards the projects, not neutral. When not biased, they often have glaring errors or omissions.

Response GP557-3

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP557-4

The concern of “who will pay” echoes loudly through our communities. Allowing the oil terminal applicant to wait to provide financial assurances until just before operations begin, thus after permitting and construction is complete, is irrational. There is no reason to permit and allow construction if the applicant does not prove up front that they have the money to pay for all of the potential risks involved in the project.

Response GP557-4

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel

transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP557-5

Transporting Bakken crude by rail continues to frequently result in accidents and explosions, and there is little known how to clean up Diluted Bitumen crude when it sinks in water, if it can be cleaned up at all. This means nobody is able to safely transport one type of crude proposed, and no oil response plans are adequate to clean up the other type. The risks of these projects to the people of Grays Harbor, to our local economies including commercial fishing and tourism, to the beautiful environment and wildlife that make our area so special, these risks so outweigh the small potential benefits, that your decision should be easy and obvious. These permits must be denied. Sincerely, Marlene Penry Ocean Shores, Washington

Response GP557-5

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP558, **Penry, Marlene**

Comment GP558-1

Good afternoon. I'm Marlene Penny from Ocean Shores. Grays Harbor is a beautiful place to live. Mitigation means that you have chosen to do a project that cannot avoid making a negative impact on the environment. Even though there are mitigation measures, there are hundreds of instances that cannot be mitigated for.

Mitigation costs money. So what do unmitigatable measures cost? What are the costs for handling these unmitigatable instances? The analysis lists the only environmental safety cost as training the Hoquiam Fire Department. Where are the costs of just one incident? And it will happen, ruining our local communities' economy and environment. If these permits are recommended, it will be obvious that the risks and costs far outweigh the benefits of these projects. Make the right choice, deny these permits.

Thank you.

Response GP558-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP559, **Perk, David**

Comment GP559-1

Grays Harbor is not an appropriate location for an oil terminal. The shipping channel is narrow and shallow. The proposed volume of tanker traffic would put the marine environment, fisheries and recreational boating at risk of an oil spill. Panamax tankers servicing the proposed facility would carry tremendous amounts of oil, enough to ruin the local maritime and recreational economy for decades with a single spill. In their letter of May 27, 2014 (1), the Department of Fish and Wildlife noted that Grays Harbor would be "particularly sensitive" to spilled oil and detailed many species that would be effected, including some listed as endangered. The mitigations contained in the Westway and Imperium Expansion Projects Draft Environmental Impact Statements do not sufficiently address these impacts. (1) http://www.fogh.org/pdf/WDFWcommentsWestway-ImperiumProposals.pdf

Response GP559-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Section 4.6.3, *What mitigation measures would reduce impacts related to vessel transport?* to reduce the likelihood of a spill reaching the environment and the potential impacts if an incident were to occur in Grays Harbor. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. For more information about the data, assumptions and methods used in the risk analysis, refer to the Master Response for Risk Assessment Methods and the Master Response for Environmental Health and Safety Analysis.

GP560, **Perk, David**

Comment GP560-1

The economic impacts of a spill in or near Grays Harbor have been extensively documented:

1. http://www.sightline.org/2015/09/17/the-impacts-of-a-grays-harbor-oil-spill-in-13-slides/

2. http://www.sightline.org/2015/11/09/the-high-costs-of-a-grays-harbor-oil-spill-part-2/

3. http://earthjustice.org/sites/default/files/files/Letter%20Maia%20Bellon%20at%20Ecology%20re%20Economic%20Report%20Attachment.pdf

A spill would be devastating to the local economy, but even the uneventful operation of the proposed expansions would affect the quality of life of the local community, and could lead to the loss of fishery, recreational and tourism revenue. The Westway and Imperium Expansion Projects Draft Environmental Impact Statements fails to provide adequate mitigations for these economic impacts.

Response GP560-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP561, **Perk, David**

Comment GP561-1

The proposed Westway and Imperium Expansion Projects would put the Quinault Nation at risk to an unacceptable degree. In the event of even a moderate oil vessel spill their marine economy could suffer disproportionate financial loss; the impact to their quality of life and cultural wellbeing could be irreparable. Subjecting their community to the possibility of that risk is itself injurious. The Draft Environmental Impact Statements do not sufficiently address these concerns. Moreover, oil recovery offshore has proven to be extremely difficult and expensive in the past, as detailed by the Sightline Institute's examination of past spills and the state's response: http://www.sightline.org/2015/10/21/washington-is-still-unprepared-for-a-grays-harbor-oil-spill/ Given the risks of spills within or near Grays Harbor, the economic and cultural impacts to Grays Harbor County and the Quinault Nation, and since our State lacks the resources to adequately address marine oil spills and related restoration efforts, the proposed terminal expansions are inappropriate and should be rejected.

Response GP561-1

Final EIS Section 4.7.1.7, *Tribal Resources*, has been revised to address impacts on the tribal resources specific to the cultural, economic and subsistence significance of these resources. The assessment addresses impacts on treaty-reserved access to these resources and potential impacts of a spill on Quinault Indian Nation fishing seasons and harvest. That section references Section 3.12, *Tribal Resources,* where the Quinault Indian Nation study on the number of fishers and number of fish harvested are reports.

GP562, **Perk, David**

Comment GP562-1

The Westway and Imperium Expansion Projects Draft Environmental Impact Statements do not consider tsunami risks resulting from a subduction zone earthquake. This omission from state design standards is clear evidence of a regulatory failure. Until an appropriate mitigation is proposed that would protect the oil tanks from the resulting 20 to 100 foot tsunami waves, the review process should be suspended. Preparing the oil tanks against earthquakes by means of pilings that do not reach bedrock seems inadequate at best and grounds for denying the proposed expansion.

Response GP562-1

To inform the risk of tsunamis at the project site, an updated tsunami model was completed and an updated assessment of tsunami risks specific to the project site, which accounts for sea-level rise, is presented in Draft EIS Appendix C, *Tsunami Impact Modeling and Analysis.* Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

GP563, **Perk, David**

Comment GP563-1

By limiting the calculation of probability of harm to the last 60 miles of the rail route, the Westway and Imperium Expansion Projects Draft Environmental Impact Statements does not adequately calculate the impact of oil train spills and derailments. The calculation should be for the entire route. The DEIS suggests that medium to large spills during rail transport are moderately to highly likely. This is an unacceptable impact. In the nearly 1,200 oil spills that occurred on the west coast last year, human error was a factor in one third of them. When it claims that a medium spill will occur once every 1,100 years and a large spill once every 22,000 years DEIS greatly underestimates the likelihood of an accidental spill. These estimates should be recalculated. Oil spills have skyrocketed in recent years. This is unacceptable. A moratorium on oil transport by rail is needed until the railroads are able to securely transport crude oil.

Response GP563-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the

reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

It should also be noted that the results presented in the Draft EIS are not directly comparable with studies that evaluate risks outside this area (e.g., the BNSF main line). This is mainly because detailed risk analysis presented in the Draft EIS is specific to the PS&P rail line. There are substantial differences between the study area (PS&P rail line) and the extended study area (e.g., BNSF main line) with respect to rail transport conditions. The scale of the nationwide rail system is more than a 1,000 times the length of the 59-mile-long segment of the PS&P rail line in the study area and different classes of rail travel at different speeds and under different regulatory requirements. Many more trains travel each day on the main lines. For these reasons, the likelihood of an incident occurring in the study area is lower than the likelihood of an incident occurring on the entire mainline rail system.

Refer to the Master Response for Risk Assessment Methods for a discussion of the assumptions, data sources, and methods used in the analysis of risks.

GP564, **Perk, David**

Comment GP564-1

The Puget Sound and Pacific railway is inadequately insured to convey oil to the proposed Westway and Imperium Expansion Projects. As documented by the Sightline Institute (1), their insurance of $500 million or less is only one sixth of the potential cost of a catastrophic derailment. This leaves Washington taxpayers in an unacceptable position of risk. Even larger more well insured railroads are insufficiently insured when it comes to moving oil trains through populated areas. Moving oil by rail in the volumes currently practiced is unacceptable; until federal regulators wake up to their responsibilities, communities such as Hoquiam and Grays Harbor County should not allow facilities to receive oil by rail. (1) http://www.sightline.org/2015/10/19/grays-harbor-oil-trains-would-be-severely-under-insured/

Response GP564-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents

for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP565, **Perk, David**

Comment GP565-1

The proposed Westway and Imperium Expansion Projects will facilitate the consumption of oil resulting in about 74,000 metric tons of CO2. The Draft EIS fails to provide adequate mitigations for this greenhouse gas pollution. The Draft EIS fails to use the Social Cost of Carbon(1) to estimate the cost of mitigating the release of these greenhouse gases, or the source of those mitigation funds. (1) http://www3.epa.gov/climatechange/EPAactivities/economics/scc.html

Response GP565-1

Refer to Chapter 3, Section 3.2.7.1, *Applicant Mitigation*, for proposed mitigation measures to reduce emissions related to onsite operations. Refer to the Master Responses for Mitigation Framework and the Purpose and Focus of the EIS.

GP566, **Perrotti, Edward**

Comment GP566-1

Only wish to say that we also need to have a look at the frequency of vessels that enter here to take the crude to the refiners. What type and hull structure and how many and how do we stack up against other Ports in terms of having a ship or barge run aground. There may be tides but we have to come in by way of that narrow gap and then back again. That would be my only concern. They can mitigate the rails by moving slow and not having long trains but shorter ones.

Response GP566-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations, including requirements for vessel design, and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

GP567, **Perrotti, Edward**

Comment GP567-1

These two sites are crude oil storage terminals. First and foremost, hard to see how any Bakken Crude or Canadian Tar Sands can be shipped when we see this free fall in price. So much for the short term. In warfare we like to have a shakedown cruise, maybe do it at a smaller scale and see the

risks. In moving any type of product, trains that arrive have to go slowly and best to have shorter trains, less likely to tip over, what some call a derailment.

Response GP567-1

Comment acknowledged.

Comment GP567-2

The main reason that I write today (please see the attached CV) is we do need a robust Port and jobs and we have to do what we can to try hard to remove risks. The crude has to be refined and that means it eventually has to be shipped from here. The off loading into the terminal and then at some point taken or lifted to barges or tankers. The fact is we have a small opening between Ocean Shores point and the tip of Westport and that could be the major or type of bottle neck which has to be addressed. The Straits are narrow passages. If we can please try to address that and have the USGS as well as the Army Corps assure safe passage.

Response GP567-2

Draft EIS Chapter 3, Section 3.17, *Vessel Traffic,* describes the roles and responsibilities of the U.S. Coast Guard and U.S. Army Corps of Engineers and discusses the considerations for vessel traffic in Grays Harbor. Draft EIS Chapter 4, Section 4.2, *Applicable Regulations*, discusses the regulatory framework that prevents vessel incidents from happening; prepares for vessel incidents; and provides for response to vessel incidents. Section 4.6, *Environmental Health Risks—Vessel Transport,* discusses risks related to vessel transport and proposes mitigation to coordinate with the U.S. Coast Guard to reduce potential risks associated with a potential vessel incident.

Comment GP567-3

The risk of a major earthquake could cause that passage to be damaged as ground here turns to quick sand and of course we then would have to deal with a wave that could well destroy our infrastructure. Do we need some sort of canal and locks to protect shipping here from that risk of a Cascadia, a 9.0 and then the subsequent wave?

[Attachments: "A Proposal to the US Energy Department for a New Composit Fabrication Plant to be Located in Grays Harbor County." July 11. Edward Perrotti, CV]

Response GP567-3

Refer to the Master Response for Purpose and Focus of the EIS. All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP568, **Perrotti, Edward**

Comment GP568-1

As we approach the upcoming meetings here on the two oil storage terminals, I am reminded of the work done on the Pontoons. The Aberdeen library has the seven volumes and you can read them online as well. As with any project there are pros and cons. The pros suggest that we need investment and jobs and the cons say is oil the best way forward. The other path is the one that also

says that perhaps the trains do not have to be that long and why not de couple them before entry here and have a spare locomotive or two before the trains pass along the side of the road. Would this help find a use for the now vacant Pontoon site? Where the barges could be repaired? Does this help the Seaport? Maybe those that invest here may then want to use that as a facility, bringing much needed income to that site. The other factor is they have a section on vessels. They do expect to use oil tankers and barges and to offlift to the refineries that we have in this state. Washington state is number five in the USA in refining and we stiil have to use petroleum products maybe until there is a cold fusion break through. And of course refined product from here will be exported to Asia and that helps the state economy immensely in order to pay for schools. MIT did discover Graphene and that makes solar and computers more effective, moves those technologies off the less efficient silicone resistors.

Response GP568-1

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

Comment GP568-2

The only other thing is that gap we have here, the channel where vessels have to pass. Perhaps the USGS and Corps should address that as it could well be a bottleneck and possible hazard to traffic flows. I know some say not here and will voice that opinion. Respect that right but try to not disrupt. Please at least try to see both sides, the pros and cons. But with all of this, some do weight these factors quite differently.

Very sincerely and respectfully yours,

Edward D Perrotti

[Attachments: “A Proposal to the US Energy Department for a New Composit Fabrication Plant to be Located in Grays Harbor County.” July 11. Edward Perrotti, CV]

Response GP568-2

Draft EIS Chapter 3, Section 3.17.4.4, *Vessel Traffic Management*, describes the movement of vessel traffic into and out of Grays Harbor. Final EIS Section 4.6, *Environmental Health Risks—Vessel Transport*, addresses the risks of an oil spill, fire, and explosion and includes mitigation measures to reduce these risks during vessel transport. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP569, **Perrotti, Edward**

Comment GP569-1

My name is Edward Perrotti. I have an engineering degree from MIT. And I've been -- I'm retired and I used to work for Texaco in London.

The only real comment -- I actually read all six volumes. How many people have actually read all six volumes? The study is done very, very well; okay? So number one, people should read it and recognize that the information that was provided, the expert, the data, it was very well done. So thank you for doing a very good study, whoever did that, the State of Washington.

Response GP569-1

Comment acknowledged.

Comment GP569-2

If they're going to do it, they have to do it safely; okay? The only problem in the state of Washington, if you've lived here a long time, is we built a lot of this stuff here in the early 1900s.

Now, this particular bridge here is 1903. Some of these supports, which are down below the riverbed, don't support anymore. We have this problem here in Hoquiam.

So what we have to do as a state -- and I don't know how we're going to ever do this. They have a system where they use an endoscope. They can go 200 feet below the riverbed. They can inspect the pilings. And if they find there's wear and there's deterioration, they can inject concrete. And it provides this massive foundation of support so the bridge won't collapse on a load.

Number two, they could shorten the trains. They could also look at a system where they shorten the trains. They could keep spare locomotives and then basically have a long train coming in, carve it up into parts, and then bring in a shorter train.

Spills occur at transfer points; okay? Transfer points are where you're loading them on vessels. And when they do loading -- if you ever go to Ras Tanura, they have systems over there that they phased in over years and years. And they're spill-proof. They just don't spill a drop of this stuff. But that's the concern I have. If we're going to do it, we better do it right.

Mitigation of risks. There's a catastrophic risk. It's very hard today to quantify how to repair it, how to correct it. If damage is done, how do you fix it? In a building like this, which is maybe a historic landmark, if it's damaged, it's gone. You're never going to get it back.

But in the case of petroleum products, crude oil, if there is some damage, I think the question is, how do you repair it? The studies looked at some of that. You can't quantify it. So they basically said -- and it's very difficult to come up with numbers. How do you repair the damage if there is damage?

But if they're going to do it, do it safely. And tell them the study was really good.

The only thing with the six volumes, you have two projects. And I was looking for -- I was looking for three more volumes. I was looking to take the combined -- the two projects, combine them, and do a third set where I looked at the impacts of the combined. And I didn't see that, but the final will get done.

And the only thing is everything has to be reviewed by the EPA. And what they did in Vancouver, Washington, was they said, We're not going to allow it. And they told the Army Corps of Engineers, You can't dredge. And that's the system here. They have to dredge this. So it's going to get decided eventually, next year or the year after.

On the other side of the coin, look at Syria. We don't need to match their production? Oh my God. How do we get our military plans in the air if those supplies are cut off? And the only reason we did the Bakken and the tar sands is domestic production. Because we are at risk today because of Syria, because of The Gulf, because of the Saudis, because of the Iranians.

And that's the other side of it. Do you want the production? Do you want to be able to get your military to respond to a threat anywhere in the world? And you have to have petroleum. You have to have diesel. You have to have jet fuel. So you look at Syria and you say, Well, why don't we have domestic production?

So that's pretty much it. I have several degrees. One is from MIT, a doctorate in engineering, class of '75 -- no. '73. But I worked for Texaco and we built a refinery here in Anacortes. And we had a beautiful safety record. Then we got bought out by Chevron.

We did things very safely and we would phase things in. We had redundant systems and we always protected the environment. Believe me, we were very conscious of the environment.

So Texaco was a model oil company for many, many, many years. And then they kind of lost it in the '70s or the '80s. They kind of just fell short.

But if you looked at those companies '40s, '50s, and '60s, they did things properly. They did things very safely. They spent a lot of money.

Genesee & Wyoming is a very, very good company. They're in Darien, Connecticut. They have a very good safety record. They bought RailAmerica, who bought Puget Sound.

Now, Genesee & Wyoming is very proud of their record. It's the Fuller family. They're publicly listed. And I don't think they want to do any damage. I really don't.

And I think if we work with them, secure the bridges with these systems where you can pump in that gunk, it sticks good -- concrete, I think we can do a lot of things.

Well, my big concern is long trains. Cut them. You can shorten those and you don't have to risk that. You can mitigate that a little bit.

Well, thank you very much.

Response GP569-2

Refer to the Master Response for Purpose and Focus of the EIS.

Chapter 6, *Cumulative Impacts*, addresses the potential impacts of the proposed action in combination with other past, present, and reasonably foreseeable future actions.

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is

implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports.

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant.

GP570, **Perry, C.E.**

Comment GP570-1

The Native Americans got it right a long time ago - we must make decisions with the knowledge that there will be repercussions for 7 generations and more. We can do better than rubber stamping these permits in the name of economic development. They are far more insidious than they portray.

Response GP570-1

Comment acknowledged.

GP571, **Pfeiler, Ben**

Comment GP571-1

I support protection of Grays Harbor and its people and urge you to reject the proposed Westway and Imperium oil terminals.

According to the DEIS, "The study area for greenhouse gas (GHG) emissions information includes the project site and emissions related to rail and vessel emissions in Washington State." [p. 3.2-1] This ignores the global effects of the project on global GHG emissions facilitated by the project. If this project facilitated an expansion of the use of chlorofluorocarbon emissions would you only consider the releases of CFCs in their transport? If the project facilitated an increase in global emissions of plutonium 235, would the impact of those emissions outside the state not be pertinent? To ignore the global effects of the terminal's facilitation of global increases in greenhouse gases is to ignore the elephant in the room. According to the DEIS, "The first target statutory reduction is to achieve 1990 level GHG emissions by 2020 and 50% below 1990 levels by 2050 (or 70% below the State's expected emissions that year)." [p. 3.2-2] The proper comparison is the level of reductions needed to achieve global warming of no more than 2 degrees Centigrade. The U.S. is responsible for about 26 percent of the greenhouse gas emissions currently in the atmosphere though our population is just 4.4 percent of the world's population. Washington State's fair share of future emissions is nil—far less surely than the proposed project's estimated in-state emissions indicated in the DEIS. Washington State and the nation is committed to dramatic decreases in greenhouse gas emissions,

yet these emissions are increasing. The Environmental Impact Statement must indicate options for mitigating project greenhouse gas emissions that reduce total greenhouse gas emissions. Appendix D, indicates that total throughput of petroleum enabled by completion of the three facilities would represent throughput equivalent to 1.2 percent of the nation's throughput of petroleum. To facilitate an expansion of the throughput of petroleum equal to 1.2% of the nation's throughput of petroleum represents a huge increase in greenhouse gas emissions. The carbon dioxide emissions from that quantity of petroleum are equivalent to about 30 percent of current annual Washington State greenhouse gas emissions. The draft Environmental Impact Statement falls far short of an adequate assessment of the impact of the proposed project on greenhouse gas emissions. At a minimum the final statement must address the local and global impact of all greenhouse gas emissions (including the impact of combustion of petroleum products in Washington State and elsewhere) on:

- the water cycle;
- the sea level;
- landslides, erosion, and sediment transport;
- Puget Sound and ocean currents and circulation;
- water quality;
- agriculture;
- terrestrial ecosystems;
- freshwater ecosystems;
- marine ecosystems;
- the built environment; and
- human health.

Thank you for your consideration of these comments.

Sincerely, Ben Pfeiffer

Response GP571-1

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively, in the context of emission inventories and reduction goals. The Final EIS has been updated to include estimated emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources. Final EIS Section 4.7, *Impacts on Resources*, has been revised to more fully describe the potential human health impacts of an oil spill, fire, and explosion.

GP572, **Pfeiler, Nancy**

Comment GP572-1

Dangerous crude oil would travel on mile-long trains through the Columbia Gorge and out over the Olympic Peninsula to Grays Harbor. Building more fossil fuel capacity will only delay the transition to the clean, renewable energy economy we need to safeguard the climate. I am totally opposed to this project. Thank you for your attention.

Response GP572-1

Comment acknowledged.

GP573, **Pickering, Karen**

Comment GP573-1

Dear Washington Dept. of Ecology & City of Hoquiam: The DEISs for Westway & Imperium oil terminal proposals must be substantially revised to fully disclose the risks of oil spills, train accidents, increased train & oil tanker traffic, air pollution, noise, harmful impacts on tribal culture & resources, vehicle delay at railroad crossings, & negative impacts on the Columbia River Gorge National Scenic Area. It is highly likely that the indirect & cumulative environmental impacts would be significant & impossible to mitigate.

The DEIS failed to substantively address the concerns raised by many environmental groups & individuals. In particular the specific concerns related to the Columbia River Gorge National Scenic Area. This is inconsistent with the scenic area act, & it is illegal under the State Environmental Policy Act to ignore these impacts.

Some specific examples include: · The DEIS fails to:

1) Analyze the indirect project impacts to grade crossings in the Gorge, the extent that the increase in oil trains would impact the level of service for local traffic, and any necessary mitigation measures, such as new overpasses.

2) Analyze the cumulative impacts to grade crossings from the proposal and other oil and coal export proposals, the likely need to construct additional sidings, overpasses, and second tracks, and the need for additional emergency response capacity along the entire rail route.

3) List the Columbia River Gorge National Scenic Area Act & Management Plan as an applicable regulation, despite the fact that the cumulative impact of additional oil train traffic would require new construction in the Nt'l Scenic Area.

4) Disclose the actual risk of an oil spill or explosive accident in the Gorge. The DEIS provided analysis of the risk of a spill or explosion near the facility where maximum speeds are limited to 25 mph. The DEIS fails to disclose the risk of spills & explosions in the Gorge, where the max. speed is 50 mph for unit trains of oil & 60 mph for mixed-commodity trains with up to 34 oil tank cars dispersed throughout the train. - Analyze the likelihood of a spill in the Columbia River along hundreds of miles of the BNSF rail line. Along with failing to analyze the likelihood of a spill, the DEIS fails to analyze safety impacts to local communities, environmental impacts to threatened &

endangered salmon species in the Columbia River & operational impacts on Columbia River Dams. There is too much risk & little reward from these proposals: Grays Harbor & rail-line communities would take on the risk & oil companies would reap the profits, while Grays Harbor & the Columbia River Gorge would become a through-way for oil going elsewhere. Much of what makes these regions special would be put at risk. A single major oil spill could devastate the area's maritime economy, productive fisheries, tribal cultures & economies, spectacular coastal waters, sensitive habitats & protected lands & waters in the Columbia River Gorge. The safety record of oil trains means an explosive oil train derailment is a question of when, not if. Equally concerning is the air pollution, spill risks, & traffic delays oil trains would bring to communities along the rail line from Aberdeen to Chehalis, through the Columbia River Gorge & all the way to the source of the oil in ND & elsewhere.

There are better ways to meet our energy demands. WA State is moving away from fossil fuels & towards clean, renewable sources to meet electricity needs & respond to global warming. Building more, large infrastructure for yesterday's energy is the wrong path to meet today's energy needs & an economic gamble for Grays Harbor. WA should lead on safe, renewable, clean energy & say no to more oil & coal. I urge you to do everything in your power to stop these dirty & dangerous projects. I urge you to protect Grays Harbor, the Columbia River Gorge & communities by rejecting the proposed Westway & Imperium oil terminals. Sincerely, Karen Pickering

Response GP573-1

The proposed action does not involve construction in the Columbia River Gorge National Scenic Area.

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

Refer to the Master Response for Connected and Similar Actions for information about the consideration of other projects in this EIS.

GP574, **Plackett, Mark**

Comment GP574-1

Experience with crude by rail tells us that when we have a problem, it will be a really substantial problem. Unit trains going even 5 mph through wetlands with no solid roadway (which is the case with the trains going to Aberdeen, WA) is an invitation to disaster. Finally, the science tells us that when the spill or explosions occur, life as we know it will change a lot and in the negative. We need to protect people, our environment, and the marine resources we are here to steward, not put them at risk.

Response GP574-1

Comment acknowledged.

GP575, **Plunkett, Jim**

Comment GP575-1

Thanks for lending me the opportunity to express myself. My name is Jim Plunkett of Portland. Big project like an oil terminal, risks are quantified and then sold off in bonds. Risks that can be quantified are judged to be too small and outweighed by the public good.

Well, I'm a member of the public, and I don't believe that these oil terminals are worth the risk to my Columbia River, my salmon, my water, my future economy. As you travel on the tracks of the Grays Harbor tax base, the value of taking risks decreases rapidly. So I'd like to look at this document and note that an oil spill in the Columbia Gorge and your own river, the risk isn't quantified, and there's no mitigation for it, and the risk is not justifiable.

Grays Harbor doesn't have the right to put these risks off on the rest of the Pacific Northwest. Please deny the permits.

Response GP575-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP576, **Pokorny, Tamara**

Comment GP576-1

Dear ICF and Co-Leads, Grays Harbor isn't an appropriate location for these oil terminal projects, Westway and Imperium. The risks are far too great and the "rewards" are much, much too small. These projects would wager existing jobs, vibrant habitats, iconic wildlife and innocent children's

lives here for the sake of corporate profits elsewhere. As others have remarked, worse projects for this location are difficult to imagine. City of Hoquiam and Co-Leads, take to the high ground and deny these permits. Let's not conspire against the Harbor, the Coast and the people of Washington State by allowing these projects to go forward and inevitably exacerbate climate change, degrade air and water pollution, undermine existing jobs, and recklessly expose oil storage and transfer facilities to earthquakes and tsunamis. The scale of potential catastrophe is truly breathtaking, but the EISs irresponsibly and consistently downplay the risks. These project proposals should already be dead in the water. Thank you.

Response GP576-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP577, **Pout, Rozanne**

Comment GP577-1

I have lived in the Pacific Northwest all my life. I love it. Aberdeen is one of the two major access points to the Olympic Peninsula. Last week I made a trip around the entire Peninsula on focal buses, beginning and ending at Olympia.

Aberdeen is already a bottleneck area for cars and trucks and buses passing through the town and its sister1 Hoquiam. I would hate to experience the stalled traffic if the proposed terminals are construct6ed along the harbor edging these towns.

I have stood on the shore of Grays Harbor when a migration of shore birds made a stop to rest and feed on their trip north in the spring. Will these birds find a place to land when the beach is covered with crude oil?

Response GP577-1

Comment acknowledged.

GP578, **Powell, Mark**

Comment GP578-1

Hello, thanks for having this meeting. It's important to let everybody give their view. My name is Mark Powell. I'm a shoreline owner, an oyster farmer, and president of the Grays Harbor Oyster Association.

I think that we all agree that if somebody only washed 85 to 90 percent of your car, you would not call that clean. So I guess my point is that we shouldn't really call this cleanup because you're effectively not cleaning up.

Ninety percent, 80 percent, 50 percent is enough to put shellfish growers out of business. Tar sands crude doesn't float, can't be boomed. It will roll around in the tides for eternity.

In the EIS I did not notice anything that said anything about the proximity of the rails to the several schools just in our county, let alone all the other counties these rails have to go through that are within these blast zones. I think it's a huge oversight not taking into account our children.

Response GP578-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including impacts on public services.

Comment GP578-2

My last point I'll make is DEIS project initially created waterways. If we dig any further, they will want to bring in more boats, even bigger boats and their wakes will erode our shorelines.

Thank you.

Response GP578-2

The proposed action would not require dredging or deepening of the navigation channel to accommodate proposed vessel traffic.

GP579, **Prentiss, Alex**

Comment GP579-1

If these terminals are approved, about 25 million gallons of volatile Bakken crude oil would be transported in unsafe rail cars every day through the Columbia River Gorge. ... Several oil trains have derailed and exploded in 2015 alone. In 1988, one year before the Exxon Valdez, an oil barge spilled 231,000-gallons of oil near Grays Harbor, fouling beaches from Oregon to Vancouver Island and killing 56,000 sea birds." -Friends of the Columbia Gorge Are we out of our minds? Do NOT allow trains to travel through the Gorge under any conditions. The Columbia River Gorge National Scenic Area deserves to be protected as the national treasure it is.

Response GP579-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP580, **Prentiss, Geoff**

Comment GP580-1

I ask that the FEISs thoroughly address all of the projects' potentially adverse impacts to San Juan County's water environment, economy, and all of its species (human and otherwise). I ask that the FEISs address all potential adverse impacts to all the 119 species-at-risk in the Salish Sea, their migratory pathways and their critical habitats.

I ask that the FEISs thoroughly address oil spill risk and associated adverse impacts to tribal treaty protected rights in the Salish Sea, and all adverse impacts to tribal, commercial, and recreational fishing and shell fishing.

Response GP580-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

Comment GP580-2

I ask that the FEISs require oil spill contingency plans to include the proper equipment and personnel to respond to a spill of the especially volatile, sinkable, and toxic Canadian oil sands/bitumen crude. Please study the impacts of a spill of this particular type of oil. Please identify worst-case spill scenarios and the associated cleanup costs of this particular type of oil.

Response GP580-2

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for

Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Modeling*, refer to the Master Response for Oil Spill Modeling Methods. To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill.

Comment GP580-3

I ask that the FEISs include cost-benefit analyses for all the cities and counties that would be affected by the proposed projects, including the costs associated with oil spills, and Canadian oil sands/diluted bitumen spills in particular. I ask the FEISs to include a cumulative impacts analysis of all existing, new, and "reasonably foreseeable" (proposed) vessel traffic in the Salish Sea. PLEASE CONSIDER THE LONG TERM IMPACTS NOT JUST ECONOMIC PRESSURES/INCENTIVES>>> cleaning up the messes made always outweigh the short term gains. Thanks.

Response GP580-3

Refer to Response to Comment GP580-1 regarding the scope of analysis in the extended study area.

Final EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns*, reflects additional information on the economic and social costs of oil spills. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP581, **Proctor, Gary**

Comment GP581-1

I am opposed to building these oil terminals that will drastically increase oil train traffic in Washington. The federal government predicts trains with crude oil or ethanol will derail an average of 10 times per year. In 2013, 462 million barrels of oil was spilled from trains in the U.S. North Dakota oil & Canadian tar sand oil is more unstable and dangerous than regular crude & should have special handling. These projects threaten our coastal water ways and marine resource dependent jobs. This is not the way to reduce our carbon impact.

Response GP581-1

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Modeling*, refer to the Master Response for Oil Spill Modeling Methods. To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections

4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill.

GP582, **Quigg, John**

Comment GP582-1

I AM IN FAVOR OF THE PROJECTS ASSUMING THE RAILROAD FOLLOWS THROUGH WITH TRAFFIC ISSUES. THE RAILROAD MUST IMPROVE THE SPEED THROUGH TOWN AND USE OFF HOURS FOR SWITCHING. BREAKING THE UNIT TRAINS IN HALF WOULD LIMIT BLOCKAGES.

Response GP582-1

Comment acknowledged.

GP583, **Rabaglia, Melanie**

Comment GP583-1

Thank you, folks, for letting us speak to you. My name is Melanie Rabaglia. I live here in Elma. Matter of fact, if I step out on my back porch up on the hill I can see the top of the towers.

To get here I have to go across the train tracks that you think that this is going to happen on, and across the lovely Chehalis River that this will all go right past, where I fish all the time.

Right now it's fishing season for silvers. And we have to kick back our kings because we haven't been able to meet the escapement rate. So the kings are in danger. And now I hear that you think you want to run trains down the river, more of them.

If you want to increase the facility you're going to increase train traffic. You're also going to increase boat traffic. You increase the risk. More than likely things are going to happen. Spills. The possibility of explosions, quote/unquote, accidents, things that the company says that they control that have good reference. Yeah, right. Things happen.

Response GP583-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP583-2

Earthquakes, tsunamis, things they can't control. What happens when an earthquake happens and a tsunami takes out all of those facilities? More chances bad things are going to happen to our river, which is our economy.

Response GP583-2

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP583-3

What's going to to happen to all of the jobs that happen here? This may increase jobs, but what happens to all the jobs that get wiped out when all of the oil hits and the fire hits and the fire hits the schools that go right by here in Elma, you know, not even more than ten miles from where the facility is? They can blow up our town.

Response GP583-3

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP583-4

Once again, it's not if, it's when. The odds are it's going to happen. Each time another train goes by and I sit there at the track and watch these oil trains go by. And I sit there and I go, when is it going to happen? When am I going to have to get up in the middle of the night and evacuate, and cannot because the train will be blocking the way.

Response GP583-4

Comment acknowledged.

GP584, **Ramos, Jean (Quinault Indian Nation)**

Comment GP584-1

I'm Jean Ramos. I'm an enrolled Quinault tribal member from Queets. It's in Jefferson County, but I'm against oil in Grays Harbor County because Quinault Reservation is on Grays Harbor.

And how I feel is that our ocean, and our land, and our rivers, and our lake don't belong to the Quinault Indian people. The Quinaults belong to the rivers, and to the lake, and to the ocean. We've lived in harmony with nature from time immemorial. We haven't had oil here before and we don't need it here now.

This land was gifted to us and it's greed that's taking it away from us. And we can't let big oil -- the infrastructure at Grays Harbor is crazy. I mean, the bridge is already falling down in Hoquiam. And we can't be bringing massive trains across those old trestles ruining our clams and our fish. They're already getting wiped out from greed.

We need to protect our land. And that's what I believe. We're the caretakers of the land and so we should take care of it.

Response GP584-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP585, **Rapp, Fred**

Comment GP585-1

RECEIVED NOV 2 4 2015

To: Westway and lmperium Terminal Services Expansion Projects EISs I live in Elma, WA and have trains going through every day.I understand the heaviest cars are those with grain. Hundreds of cars loaded for export go through daily. WE have lived through the fear mongers who killed the Nuclear power plants at Satsop. Now the anti people are trying to sell us on the idea that because there have been spills in Canada and Georgia, we should live with the fear that it will happen here. I secured the report from the State of Washington about spills that have occurred in our state the last three years. The largest spill I saw on the report appeared to be at a refinery in Skagit county.It appeared that most of the spills were with either commercial or recreational boats. Of the spills on land, trucks seemed to have the most. Our Railroad, Puget Sound and Pacific, has spent millions of dollars to be sure they don’t spill and can run safely and efficiently. Our EPA has been very effective in keeping us safe and clean. This review is trying to determine if we can safely process more oil, it appears to me that we are doing an excellent job.

The anti-people were successful in stopping the Nuclear plants at Satsop. This same plant was built in Texas, safely and within the budget. We have heard no problems from it. 90% of the power in France is Nuclear. How long has it been since we have heard any problem with them? These two companies have proven over many years they know how to handle the cargo they store and ship. Washington is far ahead of many of the states in protecting our environment.I believe that fear mongers are simply trying to make it impossible for our industries to expand. Than. you for listening. Fred Rapp P.O. Box 270 Elma, WA 98541 360 4812842

Response GP585-1

Comment acknowledged.

GP586, **Rast, Darrel**

Comment GP586-1

Dear Consultants, Ecology and City of Hoquiam. The residents of the State of Washington have the collective right to decide which risks they are willing to accept and which they are not, and just because some dangerous projects have been permitted in the past doesn't mean we should approve of more of them.

I urge you to reject the oil terminals proposed in Grays Harbor because one single spill is unacceptable. It really doesn't matter how much preparedness goes into a project. Sooner or later, oil from these projects will make a mess of our beaches. Once a spill occurs, the damage is done and any attempts to fix it are just bandaids. Why would we sign up for this?

The amount of money that would come into the economy is simply not enough compared to the risks to our quality of life. Please do not approve these terminals. Thank you. Darrel Rast Vancouver, WA 98682 robert61285@yahoo.com

Response GP586-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP587, **Rathbone, Lora**

Comment GP587-1

I live in the Tri-Cities through which the oil trains travel, and am concerned about their safety.

Response GP587-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 further describes the potential risks associated with rail transport in this area.

Comment GP587-2

I also think that we need to slow global warming and save our oil for future generations, and not export it.

Response GP587-2

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

Comment GP587-3

I agree with the League of Women Voters that expanding oil storage, as well as transport of oil by train, creates unacceptable risks to public health and safety due to

-the unpreparedness of first responders in case of an accident

-the inability of the railroads to pay clean-up and mitigation costs, and

-the impossibility of remediation at any price while increasing carbon pollution, worsening climate change and delaying the needed switch to clean renewables.

Response GP587-3

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS.

GP588, **Rattie, Marcella**

Comment GP588-1

Marcella M. Rattie Elma WA 98541

My comments relate to both the Westway and Imperium Draft EISs

Kindly see enclosed copy. Marcella Rattie

October 25, 2015 Elma, Wash. 98541
Westway and Imperium Expansion Projects Draft EISs, c/o ICF International 710 Second Ave, Ste. 550 Seattle, Washington 98104

We are 5 generations living in Grays Harbor----Elma to be exactly. We have survived floods earthquakes, eruption of Mt. St. Helens, and fires which can be very devastating. But nothing like a train carrying crude oil into our city could do with a spillage and subsequent fire. We live on a dead end street in Elma. The train tracks go through the town and completely isolate the north side of town as it travels through and when it stops----there is NO way out for some 800 or so people on this north side of town. That would include us. We are literally trapped. The train travels within 1 block of the Elementary school and 3 blocks from the middle school and High School. A spill and fire would subsequently risk many lives with devastating results.

Our property value will most certainly depreciate as well as others near the tracks or on the North side of the tracks. This is a country town where the train travels through all residential area. The toxins and pollutants emitted from the crude oil is not without health risks Persons with asthma, copd any lung disease-----the children out at recess while the train passes----all a health risk. Do we have First Responders trained for such a disaster that could happen? I know with the other many rail accidents in the United States and the deadly Canadian accident---they were not prepared and had to let it burn out by itself. It was unsafe even for the First Responders. Actually we all know that there are NOT trained personnel that could handle such a disaster. In case of a spill-------well, it took weeks and weeks for them to clean up the grain spillage on Devonshire Road in Montesano, Washington and also, the Aberdeen 2014 spillage-------that too, took days.

This will in no way improve our own economy. Westway and Imperium will certainly have a lock on that and bring their own people, like all big corporations do.

An oil spill here on Grays Harbor would devastate our streams and our wildlife. With all the recent disasters in the U.S. And Canada----the risk is just too much and our emergency services are not prepared for such an event. It might be noted the trains are 1 to 112 miles in length which is our case would completely impact our whole town and cuts it in half.

I have always said "It is not a matter of IF a Crude Oil spill should happen-its a matter of WHEN."

Sincerely, Marcella M. Rattie' Box 523 Elma, Washington 98541

Response GP588-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP589, **Ray**

Comment GP589-1

Yes, good afternoon. My name is Ray (Inaudible), I live in Seattle, but I am going to read a letter on behalf of City Council President from Spokane, Ben Stuckart, who is unable to be here today.

Dear Officials: We are deeply concerned about the potential danger of these proposed terminals proposed to the City of Spokane. This is an issue our City Council takes very seriously. In fact, the Council unanimously supported and adopted the resolution calling for stronger oil transportation regulations and protections.

This unanimous public stance by Council came on the heels of multiple explosion and derailments across North Carolina. We are aware that Spokane as a regional hub could be impacted significantly by these terminal proposals.

Our city understands and values our nation's rail transportation system, we support our friends and colleagues utilizing our state harbor system and their effort to provide good quality jobs for the citizens.

We also support a business's right to conduct legal commerce to seek a profit.

The bottom line is that we just want to know how it affects the citizens of our city. We urge that you include the impacts to the city of Spokane in your Environmental Impact Statements for Westway and Imperium Terminal projects.

Thanks for considering our input on this matter. Sincerely, Ben Stuckart, President, Spokane City Council. Thank you.

Response GP589-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP590, **Ray, Barbara**

Comment GP590-1

Dangerous crude oil would travel on mile-long trains through the Columbia Gorge and out over the Olympic Peninsula to Grays Harbor.

Building more fossil fuel capacity will only delay the transition to the clean, renewable energy economy we need to safeguard the climate.

Response GP590-1

Comment acknowledged.

GP591, **Reames, S & J**

Comment GP591-1

Please don't allow these oil storage facilities in our town. This will destroy our environment, property values, and put us in great danger.

Response GP591-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP592, **Regan, Danna**

Comment GP592-1

I am submitting the following attachment on behalf of Danna Regan who told me her story at a community event in August. She wanted the experience of Skykomish to serve as a warning to Grays Harbor. Robin Moore, Hoquiam

ATTACHMENT #1

From Danna Regan, as told to Robin Moore:

I used to visit my sister in Skykomish, in the late 80's. There was bad contamination with grease and oil from whatever the trains were hauling. You couldn't breathe outside. I had to walk uphill on tar-like deposits to get to my sister's house. There was hardly any vegetation, even the trees were dying.

My sister was afraid for her unborn child, so moved away. Most of her friends moved too. The whole town had to be torn down and moved because of the contamination.

Just think what would happen here, to fisheries and seafood. Tourists would not want to come. The entire coast would be a ghost town.

Response GP592-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP593, **Rhodes, Dusty**

Comment GP593-1

My name is Dusty Rhodes.

Thank you for this opportunity to testify on such a vital issue that affects not just the Chehalis River basin or the State of Washington, **but ultimately the entire Earth.**

I was born in Spokane, raised as an Air Force brat, and served five years as an Army officer during the 1960s. I have lived most of my life in Olympia, and I retired 15 years ago following 32 years of service in state government.

My home sits about a 1/4 mile from the main north-south rail lines that serve the West Coast corridor. From my house I can see the train-trestle that crosses Pattison Lake, and, while walking my dog by the grade-level crossing, I frequently encounter oil-trains of 100-plus cars. My wife and I live well within the blast zone and it is terrifying to imagine the consequences should we and our neighbors become the victims of an explosion from one of these trains like the July 2013 oil-train explosion and fire in Quebec that killed 47 people and incinerated the town of Lac Megantic.

However, rather than testifying on the inadequacies of the Draft Environmental Impact Statement (DEIS) for these projects, which address primarily local and regional concerns, I want to tell you why I believe that this DEIS, as well as EVERY DEIS for EVERY project EVERYWHERE, needs to have a GLOBAL PERSPECTIVE as its primary focus, and that regional and local concerns should be treated as secondary issues.

Ours is the first generation to experience the growing consequences of global climate change. From the very beginning of the Industrial Revolution until the last few decades we failed to recognize the gradual, but ultimately lethal, impacts that industrialization was having on the Earth's Biosphere. Had human population remained near pre-industrial levels, the Biosphere, like the proverbial Timex watch, might have been able to tolerate the environmental damage we have inflicted and kept on ticking. But, with the synergistic effects of industrial growth combined with exponential population growth and rising per-capita consumption-we have unwittingly created a toxic recipe for spinning the Earth's climate out of control. Indeed, we are plunging all future generations into a hell on earth, unless we begin making more sustainable choices.

Our current plight results, in part, from our own complacency. But it is also a part of the fallout of the US Supreme Court's "Citizen's United" ruling, which allows virtually unlimited amounts of individual and corporate political campaign spending. This means that, to be elected, far too many of the politicians now in control of the US Congress are compelled to seek massive campaign contributions from deep-pocket billionaires and corporate donors. These politicians are, therefore, beholden to their big-money backers, often to the detriment of ordinary citizens and the country as a whole.

Therefore, it falls to us, as citizens who recognize the seriousness of the situation facing the world, and who are not corrupted by big-money billionaire and corporate handouts, to take action at the local and regional level to force intelligent decision making from the bottom up! This brings me back to the reason so many of us are here tonight- urging you to see the bigger picture and to act accordingly.

The only question we should be asking about this DEIS and about every DEIS for all new projects everywhere on the planet is: *"Will this project further burden the Earth's ability to sustain the ecosystem upon which we and all other life depend?"* If the answer is "NO" then the project should be considered for approval. If the answer is "YES" then it should be denied outright. Period!

This is the last decade in which humanity still has a chance to avoid the ever-increasing and dire consequences of catastrophic climate change. All of us, but especially you, as our elected and appointed public servants, must step up and take responsibility for safeguarding our collective future. Ours is the first generation of humanity to experience the consequences of human-caused

climate change, and the last generation that can do anything about it. If we act now, we may just have a chance to minimize or perhaps even reverse some of those consequences. Otherwise, future generations will forever curse us for having had the knowledge to foresee the perils that lay ahead, but lacking the willpower to stem our own greed. Will we condemn them to live in a hell of our making that we could have prevented? I seriously hope not!

If you have any doubts about what I have said thus far, or any reservations about what actions to take, or how to explain those actions to your constituents, I urge you to read three, newly published, best-selling books. The first is:

1) This Changes Everything - Capitalism versus The Climate by Naomi Klein. This book, which is also being released this month as a documentary film, exposes the myths that are clouding the climate debate and explains why our addiction to profit and growth are digging us in deeper every day. The second book is:

2) Countdown by Alan Weisman, which addresses four critical questions aimed at determining how many people our planet can hold. And the third book is:

3) Merchants of Doubt by Naomi Oreskes and Erik M. Conway. This book, also released as a documentary film earlier this year, shows how a handful of scientists obscured the truth on issues from Tobacco smoke to global warming.

These three scholarly works are timely gifts to humanity and, in my view, they should be required reading by every literate person on the planet, especially those holding leadership positions, such as yourselves, and those in the media. If, after reading these books, you are not perfectly clear on what actions you must take, then you will at least be more aware of what is at stake and what additional answers you must seek.

Just last week, as two major news disclosures were made, we learned, yet again, that big corporations cannot be trusted. First, ExxonMobil's own scientists revealed that scientific research they conducted for Exxon during the 1970s and 80s proved that fossil fuels were warming the planet. So what did Exxon Mobil do? They proceeded to bury their own research and began funding climate change denial front groups. Second, Volkswagen, once the world's most trusted automaker, admitted that they intentionally installed, into 11 million vehicles, software that was designed to fool the regulators and hide the fact that those vehicles were generating up to 40 times the amount of pollution claimed by Volkswagen.

Each of the various oil and gas infrastructure projects that are currently being proposed on Earth simply adds to the burden that humanity is forcing the Earth's Biosphere to bear. The May 6, 2014, National Climate Assessment tells an unambiguous story: The planet is warming, and over the last half-century this warming has been driven predominantly by the burning of fossil fuels like oil and gas. If we are serious about avoiding the most catastrophic impacts of climate change, then we must keep dirty fuels like oil and gas in the ground. And we must protect fragile areas like Grays Harbor and the Chehalis River Basin, that are each vital parts of the Biosphere's web of life.

The massive oil spill in the Gulf of Mexico devastated, and continues to haunt, that region. Don't risk the same fate, and worse, for Grays Harbor and the Chehalis River Basin by opening these regions to even more unsafe oil and gas transportation. The push to allow more oil and gas infrastructure development only perpetuates our dependence on harmful fossil fuels, and it makes no sense whatsoever. Instead, we need to invest our efforts and resources into green-energy research, development and deployment.

Just as one swing of an axe ultimately weakens even the strongest tree, we must view this project as if it is just one more swing of an axe aimed at the Earth - the ultimate Tree of Life.

I ask you to do the responsible thing and say "NO" to these applications.

Thank you.

Dennis "Dusty" Rhodes
5113 Atchinson Drive SE
Olympia, WA 98513-4528

Response GP593-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP594, **Rhodes, Dusty**

Comment GP594-1

Thank you for this opportunity to testify on such a vital issue. My name is Dusty Rhodes. I was born in Spokane and have lived most of my life in Olympia after serving five years in the Army.

My home is less than a quarter mile from the main north/south rail lines that serve the West Coast. I can see the dual track trestle that crosses the narrow part of Pattison Lake from my home, so my wife and I live well within the blast zone.

I frequently see 100-plus oil-car trains while walking my dog. It is terrifying to imagine the consequences of an explosion and fire from one of these trains.

I realize that you are under enormous pressure from the oil and gas industry and others to approve these projects, but I hope you will find the strength and wisdom to stand up to the pressure and say "No" with the full confidence that you are doing the right thing.

The oil and gas industry already has five tons as much oil and gas reserves in the form of their identified in-the-ground assets, as can be safely burned without dumping far more greenhouse gasses into the atmosphere than the atmosphere can ever handle without spinning out of control. Rather than pouring more energy and resources into expanding the oil and gas infrastructure, we should be investing all our efforts and resources into green-energy research, development and deployment.

We are currently in the last decade in which humanity still has a slim chance to avoid the ever increasing consequences of catastrophic climate change. All of us, but especially you, as our elected and appointed public servants, must step up and take responsibility for safeguarding our collective future. Ours is both the first generation of humanity to experience the consequences of human-caused climate change, and the last generation of humanity that can do anything about it and, with luck, we may have a chance to minimize or reverse those consequences.

Response GP594-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP595, **Rhodes, Dusty**

Comment GP595-1

Thank you. I said earlier that ours is both the first -- Dusty Rhodes, by the way.

Ours is both first generation of humanity to experience the consequences of human-caused climate change, and the last generation of humanity that can do anything about it. And with luck we may have a chance to minimize or reverse those consequences. Otherwise, future generations will forever curse us for having had the knowledge to foresee the perils that lay ahead, but lacking the wisdom and will to stem our own greed, thus condemning them to live in a hell of our making what we could have prevented.

If you have any doubts or reservations about what actions to take or how to explain them to your constituents, I urge you to read two best-selling books. One is This Changes Everything - Capitalism vs. The Climate by Naomi Klein; and the second one is Countdown, by Alan Weisman. These two scholarly works are very timely gifts to humanity and should be required reading by every literate person on the planet, but especially by those holding leadership positions.

If, after digesting the wisdom of these two books you are not perfectly clear on what actions you must take and what decisions you must make, then I fear all hope is lost.

All of the oil and gas infrastructure projects that are currently being proposed are at odds with fighting climate disruption. President Obama and his administration have done more to combat climate change than any other in American history. The May 6, 2014 National Climate Assessment tells an unambiguous story. The planet is warming, and over the last half century this warming has been driven predominantly by the burning of fossil fuels like oil and gas. If we're serious about averting an additional two-degree temperature increase and avoiding the most catastrophic impacts of climate change, we have to keep dirty fuels like oil and gas in the ground.

Response GP595-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP596, **Rhodes, Dusty**

Comment GP596-1

My name is Dusty Rhodes again. And I have written a song with new lyrics to an old song of Bob Dylan's that I think is appropriate for these times, and I would like to sing it for you and ask that you kind of hear the message behind the words even.

So, anyway, the song is called The Climate on Earth is a Changing.

(Playing guitar and singing.)

Response GP596-1

Comment acknowledged.

GP597, **Rhodes, Dusty**

Comment GP597-1

Hi, I'm Dusty Rhodes from Olympia. And I have five minutes' worth of testimony, but we only have a couple minutes. I'll just say that I believe it falls to us as citizens to recognize the seriousness of this situation, which is what's happening all over the world, and who are not corrupted by big companies' billions and corporate handouts to take action at the local and regional level to force intelligent decision-making from the bottom up.

The only question we should really be asking about this DEIS and every DEIS or all new projects everywhere on the planet is: Will this project further burden the earth's ability to sustain the ecosystem upon which we and all other life depend? If the answer is no, then the project should be considered for approval. If the answer is yes, then it should be denied outright.

Just last week, two major disclosures were made. We learned, yet, again, the big corporations cannot be trusted. First Exxon Mobil's own scientists revealed scientific research that they conducted through 1970s and '80 proved that fossil fuels were warming the planet. So what did Exxon do? They proceeded to bury their own research and funded climate change denial groups.

Second, Volkswagen, one of the world's trusted auto makers, they intentionally programmed the vehicle's software that was designed to fool the regulators to hide the fact that those vehicle were generating up to 40 times the amount of the pollution.

Just as one man's swing of the axe weakens even the strongest tree, you must view this project as it is just one more swing of the axe to the earth, the ultimate tree of life. I urge you to do the responsible thing and say no.

Response GP597-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP598, **Richrod, Alan (City Council of Aberdeen)**

Comment GP598-1

Pertinent to state law I hereby enumerate and present my objections to granting permits to the proposed petroleum storage facilities in Grays Harbor County. The Department of Ecology is staffed with competent and scientifically minded people and therefore I need not remind you of the overwhelming importance of compliance with SEPA. Nonetheless, for the record, I shall do so: Under SEPA, a full environmental impact statement is required for any action that has a significant effect on the quality of the environment. Significant means a "reasonable likelihood of more than a moderate adverse impact on environmental quality." Further, one cannot ignore the simple fact that some compounds form a far more devastating effect on the environment than others volume for volume. Spilling the contents of a dozen train cars full of soybean meal would cause a small disruption in the train yard and would require people with shovels clean it up. However, half as many railcars of crude oil, even "stabilized" crude oil, would devastate the aquaculture of the entire region. Storage of this type of petroleum product represents a more than simply significant risk to the public and economic well-being of a population far greater than that of the city of Hoquiam. At stake would be

millions of dollars in commerce and thousands of jobs in the seafood industry. The city of Hoquiam is the only city considered in the DEIS. However, that city is centered in the vast area that is affected by port activity including the proposed terminals. The city of Hoquiam does not exist in a vacuum. I am certain that you are not even considering that the effects of a spill would be relegated to an area defined by its city limits.

Response GP598-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. This includes the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. However, as noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP598-2

Historic oceanographic studies, including some conducted by NOAA, show that tidal and river currents in Grays Harbor move so quickly that a spill in Aberdeen or Hoquiam can inundate the beaches of the North and South Shores within 12 hours. Hydrological and spill activity do not recognize the arbitrary scope of the DEIS. So for this reason, that far more economic and social value is at risk than outlined in the DEIS, I strongly urge that these permits be denied and these projects proceed no further.

Response GP598-2

For additional information about the analysis of risks in the extended study area, refer to the Master Response for the Geographic Scope of the EIS. Draft EIS Appendix N, *Oil Spill Modeling*, acknowledges the limitations of the GNOME model, including that the model does not provide the ability to depict the movement of oil up and down the coast outside of Grays Harbor. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP599, **Richrod, Alan (City Council of Aberdeen)**

Comment GP599-1

My name is Alan Richrod. I'm the 5th Ward council member for City Council for the City of Aberdeen. We're sitting now smack in the middle of 5th Ward. And the train tracks are about two blocks away. Of the dozens of inadequacies and inconsistencies in the DEIS I shall speak to one.

According to the leading industrial insurance actuary, the amount of coverage in the available personal insurance market is completely insufficient to cover the worst case oil spillage scenarios such as Lac-Magantic.

In researching worst case scenarios, I found that the people in the insurance business, whose job it is to make sure that they know such things, tell us that there is not enough coverage anywhere in the world to handle such situation.

So, if there is not sufficient insurance coverage to cover these accidents, who does cover it? In all cases, taxpayers. As near as I can find, any indication of disaster involving crude oil, the cost of mitigation, that is cleanup and returning it to the original state, which scientists involved in such things say it can't actually be done. In every case of disaster involving crude oil, a clause in mitigation exceed the payoff for it by the government and the companies involved.

I, as elected official and representative of the people of the City of Aberdeen, cannot subject my city to that sort of potential danger and predictable expense. I will submit further commentary in writing.

Thank you for your time.

Response GP599-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP600, **Rickman, Sharon**

Comment GP600-1

Dangerous Crude Oil Terminals Proposed in Grays Harbor will have unavoidable and significant adverse impacts, and should not be built. Do you realize that every science academy on the planet urges us to transition away from fossil fuels as soon as possible? We cannot do that by building new infrastructures. What are you doing in response to the Washington State Department of Fish and Wildlife stating “Grays Harbor is an area particularly sensitive to the adverse effects of oil spills.” A major oil spill could devastate marine resource jobs which support more than 30% of Grays Harbor’s workforce according to a 2013 study by the University of Washington. An economic study commissioned by the Quinault Indian Nation found that a major oil spill could put more than 150 tribal commercial fishermen out of a job, resulting in a direct loss of as much as $20 million in wages and up to $70 million in revenue for affected businesses.

How can you move forward on this project knowing that 14 of the last 16 oil train derailment spills have caught fire? It is most certain that a spill will happen in Washington State. Please hold agencies accountable and demand them to quantify the risk of an oil train spill and fire for the entire round trip. The proposed oil shipping terminals and the dangerous oil trains, storage tanks, tankers and barges that would come with them puts the health and safety of people, the local economy, and our ocean and coastlines at risk.

There is no way to mitigate the risks and dangers of these crude oil terminals. Grays Harbor communities would take on the risk, oil companies would reap the profits, and Grays Harbor would become a throughway for oil going elsewhere to places like California and even overseas. If you insist on proceeding with these projects, I urge you to make a comprehensive study of the cumulative impacts for all the communities impacted in the state of Washington.

Response GP600-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources and for information on the likely destinations of crude oil shipped through the proposed facilities.

GP601, **Riley, Mary**

Comment GP601-1

Comment for DEIS on Proposed Westway Terminal Expansion:

Table 6 of Appendix G, "Cumulative Noise Impacts," shows 103 grade crossings requiring a horn warning. The table counted 756 moderate impacts and 253 severe impacts. How would it be possible to mitigate these disturbances?

I live in Hoquiam, very near the site of the oil terminal project to be built at Terminal Three. I believe that the impacts associated with noise will be a problem to myself and my neighborhood, which includes three schools. There is also the wildlife refuge even closer to the project site. Sleep interruption is not just an interruption of comfort and rest. It is a health problem contributing to hardening of the arteries. Animals and birds are affected in ways we do not understand by lack of proper sleep. Students have their attention interrupted by loud and unpredictable noises like train horns.

The data from the Westway DEIS is applicable to the Imperium project as well as that at Terminal Three. The data cannot be accurately considered in isolation. The profitability to the three companies involved depends on their combined product volume. Has the cumulative impact of increased noise been considered by the permitting agencies?

It seems unlikely that any existing technology can adequately mitigate this problem.

I believe the "No-Action Alternative," page 2.16, is the only realistic conclusion for Hoquiam and the State to come to.

Response GP601-1

Draft EIS Chapter 6, Section 6.5.2, *Noise and Vibration*, addresses the cumulative impacts of the proposed action, the REG (formerly Imperium Terminal Services) Expansion Project, and the Grays Harbor Rail Terminal Project.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP602, **Ritter, John**

Comment GP602-1

The Columbia River Gorge is the LARGEST NATIONAL SCENIC AREA IN THE UNITED STATES* The transporting of coal, oil, and any other toxic material in large quantities should NEVER be allowed and strictly limited…. It is amazing to me that this proposal is even being considered.

Response GP602-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP603, **Ritter, John**

Comment GP603-1

Oil trains traveling in large numbers (in any number) through the Columbia Gorge ---THE LARGEST NATIONAL SCENIC AREA IN THE UNITED STATES ----- should NEVER be allowed to happen .--The risks are way to great! Please do not allow this to happen

Response GP603-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP604, **Robertson, Joelle**

Comment GP604-1

My name is Joelle Robertson, but I'm speaking on behalf of John Snyder, who is a council member in the city of Spokane. While the proposed Westway and Imperium projects are not close to the city of Spokane, they still have the potential to negatively impact our city in many ways.

A mainline for the BNSF Railway comes through the middle of our downtown corridor. As it is, we already see four or more oil trains coming through our city every day. With the proposal before us today, that would add at least two more oil trains to our daily rail traffic. Due to this I felt compelled to share the concerns of the community.

Over the past several years we've seen the massive impact a derailment can have. The Lac-Megantic in Quebec in July of 2013 killed 47 people and destroyed the center of the town. Since then there have been documented at least ten major derailments where train cars have exploded.

Data from the Pipeline and Hazardous Materials Safety Administration shows a large increase in the amount of oil spills. In 2013, more oil was spilled from train cars than the entire time period from 1975 to 2012.

Much of these spills came from the trains carrying Bakken crude which the Pipeline and Hazardous Materials Safety Administration and the Federal Railway Administration concluded has a higher gas content, higher vapor pressure, lower flash point and boiling point and thus a higher degree of volatility than most other crude in the U.S.

I will submit the written document.

Response GP604-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

GP605, **Robinson, Cheryl, BSN, RN**

Comment GP605-1

As a school nurse, I am concerned also about the adverse impact of oil-by-rail on families and health.

Response GP605-1

Final EIS Chapter 4, Section 4.7, *Impacts on Resources*, has been revised to more fully describe the potential human health impacts that could occur as the result of an oil spills, fire, or explosion.

GP606, **Robinson, Joelle**

Comment GP606-1

Hi. My name is Joelle Robinson and I'm from Seattle. I am here as my own concerned citizen, but I'm reading today on behalf of Candy Monsette, who is a member of Mandan, Hidatsa and Arikara Nation in North Dakota. And she is with the Native Energy and Climate Campaign and also the Indigenous Environmental Network. This is a public comment on the DEIS for Westway and Imperium. In my home town of New Town, North Dakota, life has changed forever because of fracking and the lust for oil. The horrible thing is that it's changed for the worst. This is no modern day (inaudible). This oil booming, as in fracking, has become devastating for us and no amount of money can ever give us back what has been lost. Many in our own communities have died because of accidents. With the hundreds of tracks that are taking over the roads, our land is being sterilized, our water poisoned, and our air tainted imperatively. Our culture has taken a back seat to strangers populating the land, many with our contentions. Rape of both men and women is on the rise, along with things we've

never dealt with before such as sex trafficking of young teenagers. Heroine abuse runs rampant as the big city drug cartels move in and our once quiet town of 1500 is now a dangerous and scary place to be, let alone to raise a child. My daughter is 15 months old and my heart aches that I do not even want her to be at home for fear of what she would be exposed to. Murder is not a word we came across in our town before the oil boom. Now we will just wait for the next and the next as many have been murdered -- yes, murdered in our little communities -- I can finish the sentence and then hand it to my colleague?

MR. KEILLOR: Yeah, we'll have to have you wrap up immediately, and we'll get to the next speaker.

SPEAKER 4: In our little communities much of it is associated with drugs and the gangs that follow the money.

Response GP606-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP607, **Robinson, Michael**

Comment GP607-1

I am a concerned citizen that can not believe that these two projects would even be considered. Both would allow trains to haul products that would destroy the natural habitats along the Columbia River if there was a wreck. Just imagine what would happen to all of the plants, animals and humans if these trains had a derailment and went onto the river. Then imagine if the oil exploded and the fire followed the river all the through cities.

Response GP607-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP608, **Rolf, Margo**

Comment GP608-1

I am writing (speaking) to express my opposition to the construction of the proposed Westway and Imperium oil terminals for Grays Harbor.

The risks would be placed on many but the rewards would go to just a few. The oil companies would receive greater profits but at what costs? The more oil transported, the greater the danger of oil spills, damage to the harbor and to the shores of western Washington, more air pollution, more tankers in the waterways, more long trains filled with highly combustible crude oil passing by homes, schools, communities and waterways, the impact on the fishing and tourist economies of the area, negative effects on tribal life, and destruction of the beauty of our environment. Does this make any sense? We must not allow further destruction of something so beautiful and putting the safety of so many in greater jeopardy for the profit of a few.

It is not just this area that will be affected. These trains carrying the highly explosive oil will not only be passing through the state of Washington but they will also be passing by every home and family along that railroad track from North Dakota to the Pacific Ocean.

The effect is greater still. Once the oil reaches its destination and is burned, the destruction and harm continue in the form of pollution and greenhouse gases that add to global climate change.

It is time to support forms of clean renewable energy and invest in them, time to create jobs that do not continue to support the dirty, climate-changing fossil fuel industry. It is not time to build one more terminal.

I support the Grays Harbor area in rejecting oil, rejecting oil trains, rejecting oil terminals, rejecting oil tankers and rejecting anyone's right to endanger the environment, the safety and future of our children and grandchildren.

Margo Rolf 29610 2"d Place SW, Federal Way, Washington 98023

Response GP608-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP609, **Roos, Tedine**

Comment GP609-1

October 8, 2015. My name is Tedine Roos and I live in Vancouver, Washington. I would like to say a few words about the extractive economic model which digs, drills and cuts the earth's resources with no concern for the damage left behind. Extractivism is connected to sacrifice zones, places which, to the extractors, can be poisoned and its people destroyed, supposedly for the greater good of economic progress.

Until recently, these places have been relatively small and the people so affected powerless, as in mountaintop removal. Many of the things we all enjoy come from such places. The extraction of tight oil has made these sacrifice zones much larger and more visible.

The marriage of horizontal drilling and hydraulic fracturing in 2006 has resulted in unprecedented destruction of water, the soil, the air and communities in North Dakota and Montana. This area, the Bakken Formation, was inhabited for thousands of years by the Arikara, Mandan, Hidatsa, and the Assiniboine. They grew corn and squash on land that is now Montana and North Dakota. They learned some things about living in an arid area.

About 1910, white man came. These first peoples were sacrificed and the prairie was plowed up. The honey hawkers (phonetic), as they were called, learned in the Dust Bowl '30s, though, to change their ways.

No less than the Economist, a periodical devoted to profit anywhere anyhow, admits that fracking is extremely destructive. But there aren't many people who live there anyway, and the ones who do are living high on the hog with their oil royalties.

This is not exactly true. Surface rights and mineral rights that split the states are separate in that part of the world. The people who own the surface rights and have been dryland farming for 50

years can no longer drink the water, till the soil, or even breathe the air. This land will never again grow food. These people have been sacrificed, just like the Mandan.

The oil trains carrying the Bakken oil, which are not safe, no matter what kind of cars, blow up, and derail, and bring respiratory illness and neurological problems as a certainty, and could incinerate towns and people anywhere along the way. We are all now in a sacrifice zone.

Aside from the horrendous environmental consequences, there have been developments in the last few months which make oil terminals a very unwise endeavor for municipalities.

According to Society of Petroleum Engineers, producers need a price per barrel of at least $80 a barrel. As we know, oil prices have been down for some time and are not expected to go up any time soon.

There have been massive infusions of tax dollars to keep this U.S. Shell industry afloat. But even so, the major producers are expected to be in Chapter 11 by the end of the year.

The sale of U.S. securities, which are loans to the government, have become much more difficult to peddle around the world. China, for one, is unloading U.S. securities lickety-split. The petrodollar undergirds the entire U.S. economy.

Other countries, especially the BRICS nations, are backing away from the petrodollar and trading in their own national currencies. The Bretton Woods Agreement, which made the U.S. Dollar the world reserve currency, is crumbling more every day.

For all of these reasons, smart municipalities get away from fossil fuel terminals as fast as possible. They are clearly stranded assets.

Response GP609-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP610, **Rose, Carol**

Comment GP610-1

I live in Vancouver, WA and am extremely concerned about all the oil trains passing through our community. Every oil train traveling to Hoquiam will pass within a mile of my home.

The greater the number of oil trains the greater the chance of an accident, spill or explosion. Should these occur along the Columbia River, it and the commerce it serves will be compromised or non-existent for years to come. Oil train cars cannot be made crashworthy. Sometime, somewhere there will be an accident. If it's horrific there will be loss of life.

Continued use of oil increases green house gases. We are a state that cares about our environment. Oil does NOT fit into our state. We will go backwards, not forwards in caring for our environment if this project is approved. I worry about the dangerous vapors that may be emitted at the Hoquiam terminal.

The risk is simply not worth any minimal gain in jobs. When there is a spill, an accident, or an explosion, there will not only be a potential loss of life, homes, and environment, but the costs will

be astronomical. The communities these trains will pass through, as well as Hoquiam, will bear the costs. I cannot even begin to understand why businesses are allowed to privatize their profits and yet burden the tax payers of our state with the costs of cleaning up after them, Keep our pristine state safe and clean.

Our citizens care. I care about Hoquiam. I grew up there and graduated from Hoquiam High School.

Response GP610-1

Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport,* presents the analysis of risk of oil spills, fires, and explosions related to rail transport related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Section 4.5.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident along the PS&P rail line. Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including a discussion of the potential longer-term impacts. Final EIS Section 4.3, *Risk Considerations,* reflects additional information about factors influencing cleanup.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP611, **Rose, Shawn**

Comment GP611-1

Name: Shawn Rose
Organization:
City/ State/ Zip: Montesano, WA 98563

I am against oil rail cars coming to G.H. This type of oil needs to be refined in or near where it is collected (Midwest_ and sold here in the states. Not to be shipped out of our Harbor. I live ½ mile from tracks in Montesano and I work about 80 feet from the rail line this oil is rolling time bomb somewhere from start to finish. Not if but unfortunately win. This is one project that must not proceed. I have been fine with the biofuel you have now keep it that way.

Response GP611-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP612, **Rosen, David**

Comment GP612-1

My name is David Rosen and I am a resident of Hoquiam. Pre-retirement I was a volunteer fireman and I wish to comment on the draft EIS for both Westway, at 3.16-30, and Imperium, at 3.16-31,

regarding the findings of "no significant or unavoidable adverse impacts" to emergency services. These findings are false on their face and not based on evidence. None of the fire trucks or ambulances that would be responding to an emergency at the Olympic Gateway Plaza can fit under the bridge or safely use the trails cited in Chapter 3, Vehicle and Traffic Safety. If you don't believe me, go measure them for yourself. Measure the actual vehicles from mirror to mirror and surface to light bar and antenna on top and you will find that the only vehicle that will fit is the Chief's vehicle. Also, go measure the actual trails, the chicanes along the way, the height of the railroad bridge behind the motel, the width of the trails from the concrete barriers behind Marshall's and along the Chehalis and you will see that the actual measurements are very different from those cited in both draft EIS at Westway 3.16-25 and Imperium at 3.16-26. Additionally, industry standard for a small fire truck turn radius is 25 feet to center line of roadway. Ambulance average would need a turn radius of 12.5 feet from the center line of the roadway. None of these is possible on the trails cited as mitigation for emergency access to Olympic Gateway Plaza. Either the companies will have to work out with the railroads a plan to route the trains away from the Olympic Gateway Plaza and complete it prior to a finding of no significant impact and granting approval or the findings for both Imperium an Westway for Chapter 3, Vehicle and Traffic Safety must be changed to unavoidable and significant adverse impacts from the proposals and the permits must be denied for both Imperium and Westway expansion projects. David Rosen

Response GP612-1

Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP613, **Ross, Elizabeth**

Comment GP613-1

Name: Elizabeth Ross
Organization: Grandmother
City/ State/ Zip: Aberdeen, WA 98520

We have to go GREEN!

Keep oil in the ground!

I have great grandbabies who need a world to live in!!

Response GP613-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP614, **Rouse-Wilson, Bonnie**

Comment GP614-1

My name is Bonnie Rouse-Wilson. I live in Seattle. I have been a lifelong resident of Washington State. I am a childcare provider for King County. I have been traveling to the pacific coast since I was a child. My sister and her husband have lived in Grays Harbor for 45 years. I am very concerned over the potential takeover of our state by large scale oil interests in this country. Oil Train traffic has increased exponentially throughout the nation and Washington. Proposed new oil terminals threaten to expand that traffic and risk even more. Every oil train that passes through our communities and over our waterways carries great risk that risk only increases as we increase that traffic. Grays Harbor has no oil train traffic or shipments of crude at the present time. The oil projects will bring a new risk to a marine ecosystem that would suffer a catastrophic loss of habitat in the event of a major spill. The DEIS fails to capture the true impacts of the Grays Harbor projects. The DEIS cites several times the risk from a major fire, explosion or spill cannot be mitigated. If it cannot be mitigated it should not be permitted.

Response GP614-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP615, **Ruth, Maria**

Comment GP615-1

Issue: The DEIS for both Westway and Imperium Terminals expansion projects is inadequate in its assessment of the impacts of vessel-transport-related oil spills on the Marbled Murrelet, a species classified as a “special-status” in the DEIS. Proposed mitigation measures are also not adequately addressed in the DEIS. Given that the Marbled Murrelet inhabits waters almost entirely within the proposed project area, permits for this project should be denied until the applicant provides more information on the impacts to the Marbled Murrelet and also specific mitigation of those impacts. Background: Marbled Murrelets (Brachyramphus marmoratus) are small, robin-sized Pacific Coast seabirds protected as a federally threatened species under the Endangered Species Act in Washington, Oregon, and California. It is also state listed as threatened in Washington. Marbled Murrelets spend 95% of their lives in marine waters, usually within three miles (five kilometers) of the shoreline and also in inland saltwater bays, sounds, inlets, and coves. Marbled feed primarily on small, forage fish and pursue their pretty to depths of up to 164 feet. Washington State Population Declines: The latest report shows a strongly negative population trend from 2000-2013 of -4.6% at the state scale. Over this same period, a significant -6.7% decline in population was observed on

Washington's Outer Coast (Northwest Forest Plan's Conservation Zone 2). (Falxa and Raphael, 2015). Zone 2 includes the Westway and Imperium proposed project area analyzed in the DEIS. The DEIS states that "murrelets likely occur in low numbers in the Grays Harbor area." The "low numbers" of Marbled Murrelets in the Grays Harbor area should not be attributed to historic unsuitability of the Grays Harbor area for Marbled Murrelets but as part of the low numbers zone-wide and state-wide In 2001, Washington had estimated 10,454 Marbled Murrelets, in 2014 just 5,000. (Falxa et al, 2015). Impacts from Vessel Transport Oil Spills: Direct Mortality: Given their small size, Marbled Murrelets are quickly covered by oil during oil spill and become hypothermic and drown. Additionally, during the process of preening, Murrelets risk ingesting lethal amounts of the oil and other hazard material on their feathers. Indirect: Marbled Murrelets' feed on invertebrates and forage fish, which include Pacific sand lance, sardine, northern anchovy, immature Pacific herring, and smelt—all of which occur in Grays Harbor and risk ingesting toxins from oil spills. The risk of Marbled Murrelets mortality increases when they ingest contaminated prey. An oil spill in Grays Harbor or within three nautical miles of the shore has the potential to impact many Marbled Murrelets in Southwest Washington—not just the birds potentially nesting in the forest area 30 miles from the project site as described in the DEIS. Cumulative Impacts: Again, the latest population data for the Marbled Murrelet show a strongly negative population trend from 2000-2013 of -4.6% at the state scale. Over this same period, a significant -6.7% decline in population was observed on Washington's Outer Coast (Conservation Zone 2). (Falxa and Raphael, 2015). These impacts are primarily from the loss of nesting habitat but also from mortality from oil spills, nest predation, and decline of forage fish populations. Mitigation: The applicant's mitigation efforts for impacts of oil spills from transport vessels on Marbled Murrelets are inadequate. The Marbled Murrelet is a non-migratory seabird and should not be lumped in with migratory shorebirds for consideration in the DEIS. While both populations of birds suffer potential mortality from oil spills, impacts to the Marbled Murrelets and mitigation of those impacts should be considered separately. References cited: WA-OR-CA: G. Falxa, M. Raphael,.2015 The Northwest Forest Plan—The First Twenty Years (1994-20013) Status and Trends of Marbled Murrelet Populations and Nesting Habitat, Falxa,

Response GP615-1

Draft EIS Chapter 3, Section 3.5, *Animals*, addresses potential impacts of construction and routine operation of the proposed action on animals, including birds such as the marbled murrelet. Chapter 4, Section 4.7, *Impacts on Resources*, describes impacts that could result from potential spills, fires, or explosions. Refer to the Master Response for Mitigation Framework for more information about the development, implementation, and enforcement of mitigation measures.

GP616, **Ruth, Maria**

Comment GP616-1

Good evening. My name is Maria Ruth. I'm from Olympia and I'm here on behalf of the Marbled Murrelet. For those of you that don't know this small seabird is on the list of endangered species on the federal government under the Endangered Species Act.

Its populations are declining in this area of Washington known zone two by 6.5 percent a year. The main cause of bird decline is from logging, but studies have shown since the 1980's that oil spills, catastrophic and chronic, are a major contributor to this bird's mortality.

Unlike larger seabirds, you will never see a Marbled Murrelet oiled on the beach. You will never see a Marbled Murrelet at a recovery location. These are small brown tide birds. They are quickly covered with oil and drown. They never make it to coast and to rehabilitation.

In addition to drowning, they also in the effort of preening and cleaning their feathers from oil, ingest the toxins in the oil and die. In addition to that, oil spills also pollute the fish.

The forage fish that they depend on. They are pursuit divers, and they prey on the small forage fish that are not adequately assessed in the DEIS. The threats to the Marbled Murrelet are not adequately addressed in the DEIS.

The Nestucca spill in 1988 spilled 231,000 gallons of fuel covering 800 square miles from Grays Harbor on out. The mitigation, 2004 is when the restoration plan was completed. Please deny this permit.

Thank you.

Response GP616-1

Draft EIS Chapter 3, Section 3.5, *Animals,* addresses marbled murrelet and forage fish; Chapter 4, Section 4.7, *Impacts on Resources,* addresses potential oil spill impacts on all animals, including birds and forage fish.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP617, **Ruyle, Susan**

Comment GP617-1

There are many concerns about transporting crude oil through Grays Harbor.

Safety to human life and health remain one of my highest concerns. News of the Quebec crude oil train explosion in July 2013 saddened me greatly. I identified with that tragic accident as my office is 25 feet from the railroad tracks. I was thankful we did not run that risk here. I had several of my patientis—retired FEMA workers, engineers, former railroad workers, tell me it was common knowledge these railroad cars carrying crude oil were <u>not</u> built for this purpose and were not safe. Again—I was relieved we did not run that risk here.

As you know, several other explosive accidents have occurred with transport of crude oil in these cars. The government has now recognized the cars are not to standard for transporting crude oil. Plans to replace these cars are “in the works” but these cars are still used and will be for some time. Even with improving the cars, how can they be safe with the cargo they carry?

Other concerns are the safety of the tracks themselves given their age and that much of this area is built on landfill.

Response GP617-1

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under

existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport,* discloses voluntary measures and design features, applicant mitigation, and other measures that would further reduce environmental health and safety impacts from rail transport related to the proposed action, in addition to regulatory compliance and best practices. To the extent possible, within the framework outlined in the Master Response for Mitigation Framework, measures addressing the need for more coordinated and focused planning include the role of the applicant as appropriate. However, as noted, no risks can be eliminated and, depending on the circumstances, significant impacts could occur.

Comment GP617-2

In addition, at the Olympic Gateway Mall, there is concern of long trains blocking access to fire trucks and ambulances in the event of an emergency.

The risks of transporting crude oil through Grays Harbor greatly out weighs the benefit.

Response GP617-2

Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP618, **Sakai, Eugene**

Comment GP618-1

Once the integrity of a scenic area has been violated it can never be made whole again. Obviously if lives are sacrificed or individuals maimed those facts cannot be altered also. The risk for the financial benefit for a few vs the permanent altered pathway of an area or lives does not seem to equate to me. Eugene K Sakai, DMD

Response GP618-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP619, **Sandwell, Susan**

Comment GP619-1

I have been a practicing RN, and public health nurse, in the western states for over 40 years. I have provided care to patients enduring chronic suffering caused by industrial accidents.

What would my job be like here, as a county health nurse, in Grays Harbor, in 2021??
Possibly something like this.....

"Oh, hello nurse ...I need to talk to you about something. This job at the port, it seemed like the pay was so good ....But now ...I just want to take a deep breath again"..,

I can't even help my grandson learn to ride his bike ....."

"The cops sent you over, didn't they nurse? Well, I know my boys have been causing trouble, breaking into cars, and spray painting that building ... Ever since the ambulance couldn't get to their mom in time, ...

I just can't keep it together at home anymore ....."

"Thank you nurse, for the potatoes and drinking water for the kids. Ever since the boats stopped crabbing, Jose can't find any work ...."

'I know we keep coming into the emergency nurse, but my little Julie gets so wheezy, and starts gasping for air..

I am just so scared she is going to die!!"

"Yes nurse, he's tried this before ....

But you know those horrible burn scars on his legs and face?

Those happened when he was riding his skateboard the day of the Blast. Now he says he'll never go back to school, and ...

He just doesn't want to live".....

For the health and well being of the people of Grays Harbor,

These permits MUST be denied!

Response GP619-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP620, **Sandwell, Susan**

Comment GP620-1

My name is Susan Sandwell. I have been a practicing RN, public health, Western States for over 40 years. I've provided care to patients and during the chronic suffering caused by industrial accidents. What would my job be like here as a county health nurse in Grays Harbor in 2021? Perhaps I may

hear some of this. Hello, nurse. I need to talk to you about something. This job at the port it seemed like the pay was so good, but now I just want to take a deep breath again. I can't even help my grandson ride his bike.

The cops sent you over here, again? I know my boys have been causing trouble breaking into cars and spray painting buildings. Ever since the ambulance couldn't get their mom in time, I just can't keep it together at home any more.

Thank you, nurse, for the potatoes and the drinking water for the kids. Ever since the boat stopped crabbing, Jose can't find any work.

I know we keep coming into the emergency room, nurse, but my little Julie gets so wheezy and gasping for air, I'm just so scared she's going to die.

Yes, nurse, he's tried this before. But you know those horrible burn scars on his legs and face, those happened when he was riding his skateboard the day of the blast. Now he says he will never go back to school and he just doesn't want to live.

For the health and well-being of the people of Grays Harbor, these permits must be denied.

Response GP620-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP621, **Scavezze, Barb**

Comment GP621-1

I'm Barb Scavezze, S-C-A-V-E-Z-Z-E, and I'm from Olympia, Washington, and I'm a grandparent of four small grandchildren including fraternal twins who were born -- they're only five months old, and I shutter to think of what could happen to them if an oil train derailed near their daycare or school.

And I know other grandparents would fear for their grandchildren's lives if their grandchildren lived or went to school in a blast zone. There are just too many schools, homes, and businesses within the blast zone of an oil train derailment and explosion.

Please deny these permits.

Response GP621-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP622, **Scavezze, Barbara**

Comment GP622-1

Name: Barbara Scavezze
Organization:
City/ State/ Zip: Olympia, WA 98501

Please deny these permits I am concerned about long oil trains traveling through WA cities, especially trains traveling near schools, homes & businesses. Several oil trains have derailed already. A derailment in this area could have devastating consequences.

An oil spill in Grays Harbor would be disastrous to the marine life in the harbor, and to the livelihood of those who depend on a healthy harbor.

Response GP622-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP622-2

Grays Harbor sits in a major earthquake tsunami zone. An earthquake or tsunami could topple storage tanks, spilling oil into the harbor & potentially ignite.

Response GP622-2

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events.

GP623, **Schaeffer, Kathleen**

Comment GP623-1

My name is Kathleen Schaeffer. I live in Montesano, Washington. Good evening. I come to you as an occupational therapist. I have serious concerns about the health and safety impacts of oil by rail transport, tank storage, and export by vessel.

The chemicals in the oil storage tanks released during loading and unloading of trains and tankers will impact Hoquiam and the surrounding towns affecting health, quality of life, and diminishing property values. On-site operations at oil terminals would release toxic pollutants including diesel particulate matter, benzene, formaldehyde, and toluene would risk the society to diesel particulate matter inhalation increasing up to ten fold.

Response GP623-1

As described in Draft EIS Chapter 3, Section 3.2, *Air*, emissions of toxic air pollutants related to routine operations of onsite stationary sources were modeled to be below the state thresholds identified in WAC 173-460-150. The Final EIS section reflects updated estimates based on a review of recently published Bakken crude oil data. These emissions are subject to compliance with an air

permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping for onsite stationary sources. Refer to the Draft EIS for a list of permit conditions and applicant mitigation that would reduce potential impacts on air quality.

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present analyses of cancer risk from emissions of diesel particulate matter related to the proposed action and cumulative projects, respectively. Final EIS Section 3.2 and Section 6.5.1.2 have been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analyses predict lower emissions; the level of increased risk is not considered significant.

Comment GP623-2

The DEIS states the increased rail traffic would almost double emissions of criteria pollutants associated with rail transport in the county. Nitric oxide primarily released by vessel traffic is estimated to be the air pollutant of great concern for both sites.

It's the keystone of smog and it's associated with asthma attacks, respiratory stress, and deaths. Exposure to pollutants associated with these projects has been shown to cause an increased risk of cancers including breast and lung and lower infant birth weight.

How can these risks be mitigated? It is my opinion these health risks are too great and therefore the permits should be denied.

Thank you.

Response GP623-2

As described in Draft EIS Chapter 3, Section 3.2, *Air*, emissions during rail transport would be spread out along the 59-mile PS&P rail line and would be unlikely to result in a localized concentration of emissions that could cause an exceedance of air quality standards.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP624, **Schaeffer, Kathleen**

Comment GP624-1

RECEIVED oct1 2015

As a resident of Montesano I have serious concerns about the health, environmental, social and economic Impacts of oil transit and storage at the Port of Grays Harbor.

The known risks related to oil-by-rail transport, tank storage, and export by vessel pose a grave threat to human health and safety.

The chemical fumes vented from the oil storage tanks, and released during loading and unloading of trains and tankers will Impact Hoquiam, and surrounding towns affecting health and diminishing property values.

Response GP624-1

The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, would reduce emissions of criteria and toxic air pollutants from onsite stationary sources. Draft EIS Chapter 3, Section 3.2, *Air*, presents emissions estimates of criteria and toxic air pollutants from onsite operations. Considering background concentrations, onsite emissions of criteria pollutants would not cause an exceedance of national ambient air quality standards. Emissions of toxic air pollutants related from onsite stationary sources would be below the state thresholds identified in WAC 173-460-150. As described in Draft EIS Section 3.2, these emissions are subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping for onsite stationary sources.

Comment GP624-2

Increased ran traffic would heighten pollution including diesel particulate matter, affecting our schools, parks, homes and businesses along the oil transit corridor. Exposure has been shown to result In Increased risks of cancers, stroke and heart attack, asthma, allergies, chronic obstructive pulmonary disease, and neurodevelopmental and behavioral disorders in children.

Response GP624-2

Draft EIS Chapter 3, Section 3.2, *Air*, presents an analysis of cancer risk from emissions of diesel particulate matter from rail transport related to the proposed action. Final EIS Section 3.2 has been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analysis predicts lower emissions; the level of increased risk is not considered significant.

Comment GP624-3

There is also the real potential for explosions and oil spills from train derailments which would Impact community safety, and water and food security.

Our communities would assume the risk of oil transit and storage, while oil companies would reap the profits.

There is no way to mitigate the risks and dangers of oil transit and these crude oil terminals, and therefore the permits should be denied.

Kathleen Schaeffer Montesano, WA 98563 October 1.2015

Response GP624-3

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions,

such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP625, **Schaeffer, Kathy**

Comment GP625-1

Hauling frequent trainload s of extremely volatile crude oil through our communities in tank cars on antiquated poorly maintained rail lines , storing it near schools, homes, businesses, in a Tsunami Zone on sites subject to liquefaction, shipping it through extremely valued,highly productive,highly sensitive marine resource environment, in fast moving sediment laden water, and then over the "second worst bar on the west coast" is a recipe for disaster.

The impacts on the Grays Harbor economy and the economies up and down the Pacific Coast, and the health and safety of the citizens would be enormous.

The multi-million commercial and Native crab, oyster and fishing and tourism industry would be devastated, with long-term loss of jobs and worker displacement.

As the DEIS states repeatedly "potential environmental damage would be significant...these risks would remain even with implementation of mitigation." The Washington Department of Fish and Wildlife has stated: "Grays Harbor is an area particularly sensitive to the adverse effects of oil spills. If there were to be a spill the volume of product considered would likely lead to a catastrophic loss of Habitat. And the potentially affected area could be much larger than just Grays Harbor vicinity." As the three West Coast Governor's jointly stated last summer: "...a sizeable spill anywhere along our shared coast would have a devastating impact on our population, recreation, natural resources, and our ocean and coastal dependent economies." Doug Zimmer, retired from USFW, stated on October 1, 2015 at Elma DEIS Hearing: 3.5-21 "The DEIS characterizes the effects of contaminants reaching a surface water body as short-term and temporary. The bottom and sides of the Grays Harbor estuary are soft soils – essentially mud – and the tidally-influenced rivers that feed the Harbor back flush for tens of miles in each tide cycle. The effects of toxic release in such areas are not short-term, nor are they temporary: rather they are chronic and persistent. Please review the effects of similar 6 releases into coastal estuaries during the Deepwater Horizon event for examples. Any toxics spilled into Grays Harbor water bodies are likely to be detectable and toxic for decades."

Response GP625-1

Section 4.7, *Impacts on Resources*, describes the general types of impacts on resources that would be expected as a result of an oil spill; the section has been revised to acknowledge the potential for more lasting impacts as the result of a spill.

Comment GP625-2

The Westway and Imperium projects should be denied as there is no possible mitigation for the cumulative, complex, deleterious and dangerous impacts associated with these projects. This DEIS must not enable the Westway and Imperium projects to go forward. These permits must be denied.

Response GP625-2

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP625-3

These proposed terminals are located in a tsunami and liquefaction zone with a 65% chance of a 6.0 or greater earth quake . A Cascadia Subsidence would drop the landform and surrounding area by 2 meters or roughly 6-1/2 feet and would instantly place approximately 113,000,000 gallons of crude oil at or below sea level. This was not adequately addressed in the DEIS.

Response GP625-3

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Final EIS Chapter 3, Section 3.1.8, *Would the proposed action have unavoidable and significant adverse impacts on earth resources and conditions?* acknowledges that while the proposed facility may not be operational following the occurrence of a large seismic event, the storage tanks would contain materials until such time as they can be safely recovered and/or the facility returns to operational status.

Comment GP625-4

The environment, effects, and transport of released crude oil, dispersed oil, and dispersants on human health and the environment should have been carefully documented and studied. Explosions, spills, and fires, can have multiple environmental and public health impacts, which should have been quantified and analyzed for their economic impacts. Chronic effects on bottom-dwelling marine communities, mammals, birds, and humans were not analyzed and discussed in DEIS.

Response GP625-4

Draft EIS Chapter 4, Section 4.2.2.2, *Northwest Area Contingency Plan*, describes the planning framework in place for Washington State and discusses the factors considered when planning and implementing a response effort. The Regional Response Team is responsible for the Northwest Area Contingency Plan development that includes the consideration of dispersants or *in situ* burning.

The approach to the risk analysis is to consider different potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. Section 4.7 also acknowledges resources that could be adversely affected by an oil spill, fire, or explosion in the study area, including impacts on environmental and public health impacts. This section has also been revised to more fully describe the potential impacts on human health.

Final EIS Chapter 4 reflects additional mitigation measures proposed to address gaps in emergency preparedness planning and response capabilities. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

Comment GP625-5

Humans can also be affected by occupational exposure to oil and other chemicals while participating in response and cleanup operations, or by environmental exposure including exposure to air pollution from the vented terminals, during loading and unloading of oil and during tank car transport, as well as ingesting oil-contaminated seafood.

Response GP625-5

Draft EIS Section 4.7, *Impacts on Resources*, has been revised to more fully describe the potential human health impacts that could occur as the result of an oil spill, fire, or explosion.

Comment GP625-6

A detailed study of the conditions of the bed, ties, rails, crossings and bridges must be undertaken and quantified. Rail line conditions from Centralia to Hoquiam are completely inadequate to handle oil trains, and as shown by the recent derailments of grain trains.

Response GP625-6

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

GP626, **Schaeffer, Kathy**

Comment GP626-1

My name is Kathy Schaeffer, and I'm a resident of Montesano, Washington. As a resident of Montesano, I have serious concerns about the health, environmental, social, and economic impacts of oil transit and storage at the Port of Grays Harbor.

The known risks related to oil by rail transport, tank storage, and export by vessel pose a grave threat to human health and safety.

The chemical fumes vented from the oil storage tanks and released during loading and unloading of trains and tankers will impact Hoquiam and surrounding towns, affecting our health and diminishing property values.

Response GP626-1

Refer to Response to Comment GP624-1.

Comment GP626-2

Increased rail traffic would heighten pollution, including diesel particulate matter, affecting our schools, our parks, homes, and businesses along the oil transit corridor. Exposure has been shown to result in increased risks of cancers, stroke, and heart attack, asthma, allergies, chronic obstructive pulmonary disease, and neuro-developmental and behavioral disorders in children, including autism.

Response GP626-2

Refer to Response to Comment GP624-2.

Comment GP626-3

There is also the real potential for explosion and oil spills from train derailments which would impact community safety and water and food security.

Our communities would assume the risk of oil transit and storage while oil companies would reap the profits. There is no way to mitigate the risks and dangers of oil transit and these crude oil terminals, and therefore the permits should be denied. Thank you.

Response GP626-3

Refer to Response to Comment GP624-3.

GP627, **Schmid, Alice Marie**

Comment GP627-1

My comments relate to both the Westway and Imperium Draft EISs.

I believe the Grays Harbor area should NOT be a terminal to ship oil or ANY fossil fuels. The Columbia River would be susceptible to muck contamination if there should be a spill due to accidents. Moreover the U.S. should NOT be encouraging burning of fossil fuels because it is causing destruction of our planet.

Response GP627-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP628, **Scholzen, R.**

Comment GP628-1

We all know from the past crude oil rail disasters how dangerous crude by rail has been. ND crude is highly dangerous because of it's explosive properties. Rail lines through the Hoquiam and Aberdeen areas pass through commercial and residential areas, not to mention the areas they pass through just to arrive in these areas. There are few remedies that are possible to prevent rail disasters even though attention has been paid to updating rail beds and other safety concerns. It is not a matter of if but definitely when such a thing will happen. A crude raid accident in the towns of Aberdeen and or Hoquiam could in fact literately destroy one of these cities. The concerns for new jobs in these areas are understandable but the cost is far too great if such a disaster should take place. And of course if these facilities should be approved and crude by rail does take place we then have to look at the possible disasters that could take place if a spill should enter the waters of Grays Harbor. We can take a small look at the BP Deep Water disaster in the Gulf only to see what price we all might pay if such a disaster should take place in Grays Harbor. Have you eaten any Gulf Shrimp lately? And as a resident close to the Pacific, I have noted oil at our shores from the Alaskan Veldese spill 10 years after that disaster.

Response GP628-1

Comment acknowledged.

GP629, **Schramm, Richard**

Comment GP629-1

I have lived my entire life in Portland, Oregon and my Mother was raised in the Hood River Valley. I grew up in a family that had a passionate love of hiking and photographing wildflowers in the Columbia Gorge National Scenic Area. During my lifetime (i.e. 64 years), I have seen the quality of our hiking and recreational experiences degraded by ever-increasing railroad traffic in the Gorge. Thus I oppose the increase in the number of trains that this proposal represents, as well as the threat of oil spills that could present a threat to life and the environment.Thank you for considering my thoughts on this important matter.

The risks of this project are not worth it merely to export more fossil fuels that will only add to global warming.

Response GP629-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP630, **Schultz, Chuck**

Comment GP630-1

I recently rode a bus from Hoquium to Olympia, which stopped for railroad tracks several times. I spent time on behalf of railroad traffic that no one paid me for. I understand that this was a safety precaution because a train crashing a bus would be disastrous. How many accidents with buses and trains occur in spite of the precaution? It may be less than one in a thousand crossings. If the percentage stays the same and the train trips increase, there will be more disasters. More trains will also mean more traffic tie ups. This will be more traveler's time for which the traveler is not reimbursed. This cost should be figured in the EIS.

Response GP630-1

Draft EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, describes potential changes in vehicle safety at grade crossings along the PS&P rail line under the proposed action. Draft EIS Chapter 7, Section 7.3, *Cost-Benefit Analysis*, describes the range of costs that could occur related to the proposed action, including costs associated with vehicle delay. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action .

GP631, **Schultz, Nancy**

Comment GP631-1

Good evening. My name is Nancy Schultz. I live in Vancouver in the blast zone. I'm vigorously opposed to any oil by rail to the terminals, because of the safety concerns you heard about, also because of the very real adverse environmental dangers.

There have been five derailments so far in 2015. I'm going to talk about four of them. We have photos. On February 16th of this year at Mt. Carbon, West Virginia, an oil train carrying Bakken crude to North Virginia derailed and exploded sending 26 cars into the Kanawha River, the main source of drinking water for the citizens in Mt. Carbon.

1. On February 6 of this year, at Mt. Carbon, West Virginia, an oil train carrying Bakken crude from North Dakota to Virginia, derailed and exploded and sent 26 cars of oil into the Kanawa River, the main source of drinking water for citizens, and burning a nearby house to the ground. Hundreds were evacuated. The fire had to be allowed to burn itself out.
2. On March 5 of this year at Galena, Illinois, 103 cars on an oil train carrying crude from the Bakken fields derailed, again with firefights having to allow the fire to burn itself out. An unknown amount of crude spilled into the Mississippi.

3. On March 7, at Gogama, Ontario, Canada, 10 cars of a 40 car length of train went off their tracks, exploding. Some of the crude entered the Mattagami River, a source of water for citizens and Indians who lives there.
4. On May 6, in Heimdal, North Dakota 300,000 gallons of crude oil burned in a huge explosion resulting in the evacuation of the entire town of Heimdal. This crude oil had been treated to reduce volatility, had two sand-filled bugger cars on each end, as was traveling at only 24 miles per hour when it derailed.

It's not hyperbole to call these trains "rolling bombs". That's what they were. The impact on the environment of smoke and fumes on our waterways cannot be mitigated. Do not let the greed of oil overcome your common sense. Deny these permits.

Thank you.

[Photos reviewed but not reproduced.]

Response GP631-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP632, **Schumacker, Joe**

Comment GP632-1

My name is Joe Schumacker. I'm a resident of Ocean City, Washington. I'm a marine biologist by trade. I've had the pleasure, first of all, to wade through these DEISs. The slider bar illustrations that basically show something like you would set an equalizer, at home, on your stereo showing risk to people's public safety, threats to environment is totally misleading. It's a way of making things look innocuous that are not.

Below those you can see the tables with the illustration of the slider bar, this event can happen in this many years, is likely to happen in this many years scenario. Some of these are just outrageous. And one of these, I heard this testimony earlier about this, was the full failure of one of the big storage tanks. I think it says it happened -- or is likely to happen in 30 to 40,000 years. What the heck does that mean? That's meaningless.

Response GP632-1

For the reasons discussed in the Master Response for Risk Assessment Methods, the figures depicting risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, have been removed from the Final EIS. Refer to the Master Response for Risk Assessment Methods for a discussion of the assumptions, data sources, and methods used in the analysis of risks.

Comment GP632-2

And when you have the testimony that you've heard earlier about the seismic situation in this area and the landfill in this area, the possibility of a subduction zone earthquake on our coast, you write that off in an analysis and say that will be covered in the building permits that will be used to build the tanks issued by the cities.

Please, please, this is something serious. Everybody here is threatened by it. Deny these permits.

Response GP632-2

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction. Final EIS Chapter 3, Section 3.1.8, *Would the proposed action have unavoidable and significant adverse impacts on earth resources and conditions?* clarifies the potential for significant and unavoidable impacts.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP633, **Schwartz, Susan**

Comment GP633-1

Name: Susan Lee Schwartz
Organization:
City/ State/ Zip: Longview, WA 98632

The oil is the wrong way for Aberdeen. The oil trains will travel through Longview. There is no way to make them safe.

They (the trains) will hold up traffic. Will someone dye [sic] because he/she cannot get to the hospital because a oil train is stopping the EMS.

Response GP633-1

As noted in Draft EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, because the frequency of train traffic on the PS&P rail line would increase, the probability of an increase in emergency response time at these crossings would also increase. This impact would only occur if an emergency vehicle experienced a delay related to a train going to or from the project site that would operate on average 1.25 times per day. Vehicle delay would be most substantial in Centralia and Aberdeen. However, for the majority of the PS&P rail line grade crossings, the increase in crossing blockage time would not result in a substantial increase in vehicle delay compared to the no-action alternative because the potential to encounter a train at any crossing for the average vehicle would be low. Nonetheless, because vehicle delay would increase, emergency vehicle delay would also increase at grade crossings.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP634, **Schwarzenback, Marian**

Comment GP634-1

Name: Marian Schwarzenbach
Organization Name (if applicable): St. Patrick's Catholic Church
City/State/Zip: Seattle, WA 98102

My comments relate to both the Westway and Imperium Draft EISs.

The Grays Harbor area is a major natural area that is a major stopover for bird migrations to and from N. America, Canada & Alaska, as well as marine mammals (whales, seals, etc.), but also fish migrating and, especially, entering and leaving major rivers for spawning. These are major fisheries, providing food and also income for a large portion of the population in S.W. Washington. Native American fisheries would be heavily endangered,--possibly ruined. The sea bed of the Bay is soft squishy mud, suitable for bivalves, etc.—it would be impossible to clean an oil spill. This is a terrible location to even consider for any exposure to filthy, poisonous products like oil or coal.

Trains carrying coal or oil are a polluting, dangerous and unpleasant source of likely spills, derailments, accidents, fires & explosions, air and soil pollution in a relatively pristine area.

Huge tankers (I can't imagine how much Dredging would have to be done in that extremely shallow muddy bay to allow the tanker traffic anticipated) dealing with strong tides & shifting sea bottoms would likely meet with disaster not unlike the New Orleans mess.

I just today saw a map of oil accidents this year in the U.S. and was astounded at the huge quantity of them—all over the country, but focused, of course, in Texas & Louisiana.

Health effects on humans in drifting chemicals & particulates endanger populations living in nearby areas and those traversed by trains.

Plankton living in waters and mud of the Bay might be the most negatively impacted—having a deadly effect on fish, birds and whales, other cetacians [sic] who depend on them for their major food sources.

It's just a terrible ideas all the way around.

Sincerely, Marian Schwarzenbach

4542 Stanford Ave N.E.

Seattle, WA 98105

Response GP634-1

The proposed action would not require dredging or deepening of the navigation channel to accommodate proposed vessel traffic.

Draft EIS Chapter 3, Section 3.2, *Air*, presents an analysis of potential impacts on air related to construction and routine operation of the proposed action.

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to onsite operation and offsite rail and vessel transport under the proposed action.

GP635, **Schwickerath, Dean**

Comment GP635-1

November 30, 2015

Dear Governor Jay Inslee and the Co – Lead Agencies; City of Hoquiam Administrator Brian Shay and Department of Ecology Director Maia Bellon ,

My wife and I strongly oppose any crude oil projects in Grays Harbor because they pose extreme risks of damage to the environment, will decrease hard earned tourism that our community has worked to add and will seriously harm jobs in our communities while providing little benefit to the citizens of the state. For these reasons the permits should be denied.

We believe that the DEIS and the process by which it is presently under review is significantly flawed. These deficiencies as commented on in detail by others require that the permits be denied.

One of the critical problems in these proposals is the location. Grays Harbor is a shallow harbor by nature in a rural community. A rural community that resists to its core spending money to protect shorelines, the harbor or rivers and the environment unless forced to by outside influences such as our state and federal government. Grays Harbor will never approve a tax levy to help protect or respond to environmental disaster including oil spills. Why would DOE approve locating projects in a community that won't help fund any project that might harm their communities, jobs, tourism, and the environment.

DOE must consider for any project approval the cumulative impacts of multiple individual projects when these individual projects are known. To not do this is for DOE to conduct business with blinders on and our community isn't a race track.

It is unacceptable for DOE to ever sit back and watch an environmental disaster to be "cleaned" by allowing it to burn out. Technology and entrepreneurs have created very powerful fire fighting systems. We saw one on Youtube that had jet engines pumping thousands of gallows of water a minute to put out oil well fires and these solutions can work for burning tank cars. Here is the link for that video. It is impressive. https://www.youtube.com/watch?v=GOlq6RRh3sg

Response GP635-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action. For a discussion of projects considered in the EIS and the approach to the analysis of cumulative impacts, refer to the Master Response for Connected and Similar Actions and Cumulative Impacts Analysis.

Comment GP635-2

We believe and DOE knows that major oil spills can not be prevented, cleaned up or properly mitigated. DOE might believe that small oil spills in the right places will be properly addressed but life never hands us everything we want. Even a small spill in a bad location will be nightmare to address and when the big one occurs; 1, 5 or 10 years down the road, it will be Grays Harbor that suffers because DOE lacked the backbone in 2015/2016 to do the right thing for our state.

Response GP635-2

The small spill scenarios addressed in Draft EIS Appendix M, *Risk Assessment Technical Report*, and Appendix N, *Oil Spill Modeling*; and summarized in Draft EIS Chapter 4, *Environmental Health and Safety,* include any volume up to the specified amount. As noted in Chapter 4, existing regulations and proposed mitigation cannot completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP635-3

This proposal puts the Grays Harbor National Wildlife Refuge at risk of not only killing the birds, marine mammals, crab larvae and salmon as a result of a large spill, but contaminating the Harbor and coastal shorelines for generations to come. A spill at the height of shorebird migration could decimate the Western Sandpiper as approximately 80% of this species population uses Grays Harbor as a critical stopover during their migration for feeding and rest.

The DEIS states in several places that mitigation is not possible. If mitigation is not possible, these projects should be denied. The risks far outweigh any short-term benefits.

The November 27, 2015 issue of The Olympian newspaper included an article on page 3A, titled "**Analysis: Derailment every other year if terminal built**". The article states the analysis was performed by a state agency but does say which one. The analysis was in regard to the proposed Port of Vancouver project to build the largest oil train terminal in the Pacific Northwest. This analysis states that an empty oil train would derail every 20 months along the proposed routes. Additionally, it state that a loaded oil train would derail every 2 years and that there would be an oil spill every 12 years. It seems that it would not be out of the question to apply those statistics to these projects. The report also includes information about the lack of preparedness by fire departments along the route. Again, similarities are likely to exist with the Grays Harbor projects. DOE should review this report.

Some projects just aren't worth the risks as we recently have seen with the Tar Sands pipeline project. After many years of review, it was finally denied. Please deny the permits for these projects.

Sincerely
Dean Schwickerath Diane Schwickerath
231 N Sand Creek Rd
McCleary WA 98557

Response GP635-3

Refer to the Master Response for Risk Assessment Methods for a discussion of the assumptions, data sources, and methods used in the analysis of risks.

GP636, **Seaman, Carol**

Comment GP636-1

Grays harbor and the Chehalis River Surge plain is a highly sensitive area. This estuary is home to a 5,000 acre Washington State Natural Area Preserve (NAP) and includes numerous species, (some/many) identified already in danger from water, land and air pollutants & disruptions. Much work has been done here to renew habitat and otherwise protect the growth and preserve the area for future generations of these fish, birds & animals.

As For this environmental impact statement, Imperium, Westway--it is fundamentally wrong and overwhelmingly incorrect to state that a 450% increase in vessel traffic, with barges carrying millions of gallons of crude oil across the 2nd most dangerous bar on the West Coast-will have no impact. It will! You are unable to mitigate human error, as well as location-earthquake, tsunami

zones. The Port of Grays Harbor demonstrates big problems with extremes in winds, high tides, high rains which do combine for an impending disaster for all of us who work and live here.

It is very frustrating that DOE & Brian Shay of Hoquiam will listen to and abide by an outside source so obviously favoring the sell out of our port to Oil! While you do not read the facts gathered by all who have homes, jobs and lives in an economy where 31% relies on our marine resources. It is apparent that you have misrepresented the facts regarding the grave impact of 2.7 billion gallons of crude oil being exported--if you are trying to tell us this oil will have no impact..check your figures on tides and disaster-your plan for clean up amounts only to throwing money at SER. Or first responders...this does not mitigate disaster. Do you understand that? Apply some logic and reasoning to your document and you must say no to this plan for crude oil. All is at risk--and for 50 jobs? Get serious -show some honesty. We are not stupid-you are selling us out to the very evils of oil! Carbon emissions and immeasurable risk to our waters & marine resources. Rethink your motives-this is not in the best interests of any one of the citizens-period! After looking at this DEIS document and accompanying propaganda--It is quite clear which side you are on. It is not in the best interests of the people and environment & economy of Grays harbor. You must say no to this crude oil. It promises to seriously and clearly be the demise of our port and contributes significantly worldwide to climate disaster!

Response GP636-1

Draft EIS Chapter 3, Section 3.17, *Vessel Traffic*, presents an analysis of channel and berth capacity under the no-action alternative and proposed action. Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP637, **Seaman, Carol**

Comment GP637-1

From: Carol Seaman Oil and water do not mix! Nor do People, Birds Fish and Pollutants mix! As a citizen, among many, with a home in the blast zone and vulnerable to all effects & unmitigated disasters associated with a cumulative proposed 2.7 billion gallons of oil planned for shipping by

barge and tankers from Grays Harbor--I am adamantly opposed to this permitting. It must be denied. In this document I find uncountable reasons for denying the permitting of these 2 oil storage & shipping companies, Westway and Imperium, at the Port of Grays Harbor! Over time & after more than 22,000 public comments on this topic, it becomes increasingly redundant and difficult to reiterate why we should not bring these proposed volumes of crude by rail through our communities, across our waters and along our important rivers to store 72 million gallons (the equivalent of 2,526 oil tank cars) in a major earthquake and tsunami zone-in the city of Hoquiam--as if this will bring life and jobs and improve our existence. It will not. In fact--that is not the case at all! We are poised on the brink of disaster in all respects and all is at risk. With this elephantine document in front of us, which cannot relegate clean-up, not mitigate spills, we can and we continue our argument on the specifics of the unmitigated risks proposed for our communities, our health and our marine resources--our Port and coastal waters. Address these risks? Admittedly, at this point in time, I am losing hope that there is much regard for critical thinking, or attention to public concern. Here goes, again:

HEALTH- Relevent testimony has been given by Washington Physicians for Social Responsibility on the status of citizen health in this county. Grays Harbor lands at the bottom of the scale. We are described as the sickest and most highly vulnerable to health risks--not properly acknowledged, or mitigated in this DEIS. Our first health concerns are spurred by carcinogenic fumes, not only from oil storage tanks (fumes which will invade our homes, our space--our senses, our bodies) but also fumes & pollutants from copious unmeasured amounts of diesel burned by increased incoming oil train traffic, as well as the 450% increase in vessel traffic diesel fumes. Fumes which cannot be mitigated and will sicken & putrify the community and all communities along the route from The Bakken Shale. The contribution to carbon emissions & global warming aspects made by this lethal combination is unacceptable, not properly reviewed in this document. The list of schools, parks, hospitals and senior centers within 1 mile of the proposed project site and a quarter mile from the rail road tracks (DEIS at 3.2-5 to 3.2-8) is disturbing. The DEIS also finds impacts from noise impossible to mitigate. Bakken oil from North Dakota and tar sands from Alberta are both extremely hazardous in different ways. The final EIS needs to fully review their unique health risks, spill clean-up issues, global warming aspects and explosive nature. Fully review and release these facts to citizens and communities.

Response GP637-1

The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, would reduce emissions of criteria and toxic air pollutants from onsite stationary sources. Draft EIS Chapter 3, Section 3.2, *Air*, presents emissions estimates of criteria and toxic air pollutants from onsite operations. Considering background concentrations, onsite emissions of criteria pollutants would not cause an exceedance of national ambient air quality standards. Emissions of toxic air pollutants related from onsite stationary sources would be below the state thresholds identified in WAC 173-460-150. As described in Draft EIS Section 3.2, these emissions are subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping for onsite stationary sources.

Section 3.2, *Air*, presents an analysis of cancer risk from emissions of diesel particulate matter related to the proposed action, including emissions from offsite rail transport. Final EIS Section 3.2 has been updated to reflect revised assumptions regarding rail operations (types and number of

locomotives), based on information received from PS&P. The updated analyses predict lower emissions; the level of increased risk is not considered significant.

As presented in Draft EIS Section 3.7, *Noise*, increased rail traffic related to the proposed action would result in increased average daily in noise along the PS&P rail line that could result in impacts considered severe on sensitive receptors under FRA/FTA criteria near eight grade crossing as a result of train horn noise required for public safety. Section 3.7 proposes a mitigation measure for the applicant to fund and support a process for the affected communities to work with the FRA to apply for a quiet zone to limit train horn sounding. Quiet zones would eliminate impacts at crossings where implemented. Where not implemented, train horns would continue to sound for safety and the potential for exposure to severe impacts at identified grade crossings would remain.

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Modeling*, refer to the Master Response for Oil Spill Modeling Methods. To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill.

Comment GP637-2

JOBS- Grays Harbor falls at the bottom of the educational scale-having the fewest college graduates in this state. We are the most uneducated-highly unemployed. Many people of Grays Harbor are in need of jobs. However, there has been no transparency on job claims. The minimal numbers of jobs offered are far from off setting the risks of this project, especially in Grays Harbor. In truth the numbers of jobs offered for these projects are not confirmed and have been varied and overstated, ranging from 8 to 75. In this DEIS the numbers presented by these projects--45 jobs! For 45? jobs--all of the people in Grays Harbor and Hoquiam are put at maximum risk. The economics of this do not make sense. Westway: P672(7-32) Cost Benefit Analysis (to Hoquiam) Onsite-3-4 workers in Hoquiam (from a total of total estimate of 15) Imperium: P688 (7-32) Cost Benefit Analysis (to Hoquiam)Onsite-4-5 workers in Hoquiam (from a total estimate of 20). Economic Impacts-According to a 2013 study by the University of Washington regarding jobs--a major oil spill could devastate marine resource jobs which support more than 30% of Grays Harbor's workforce, A study by the Quinault Indians found that a major oil spill could put more than 150 tribal commercial fishermen out of a job, resulting in a direct loss of as much as $20 million in wages and up to $70 million in revenue for affected businesses. The cost gain does not override the risks posed to the people of Grays Harbor. This DEIS fails to adequately analyze the harms and negative impacts of these terminals, not only if there is an accident, which there will most certainly be, but impacts on other proposed developments, the marine resources, economy, tourism, property... For The City of Hoquiam, The Department of Ecology, and Public Companies such as Westway and Imperium to pay millions for this study, taking more than a year to do such and then allow the public to make comment for 2 minutes--smacks of the absurd. Yet, you--named above--sit in the seat of power, making the rules of engagement, while the people of Grays Harbor, and across this state, rally the troops and grapple with this wordy, weak, unreasonable and flawed document--finding it ridiculous

and daunting for a muriad of reasons. Therefore, those who are unable, or unwilling to read this, must rely on those of who can; to make sense of nonsense and to forge an educated and reasonable argument-hoping it will be read and considered. Grays Harbor and all of her communities who have passed resolutions to stop crude by rail have raised their voices in fear of pending disaster. This most recent, elephantine, and almost insulting DEIS of some 3600+ pages is a document unreadable for many who strongly oppose, question & note the direct threats, to them, of transporting and storing 72 million gallons in an earthquake zone, a tsunami zone and adjacent to one of the most important migratory shorebird feeding grounds in the world. Again, and again. The powers that be--you, in the subject line of this message--need to mitigate this disasterous plan. The only way possible is to deny these permits. Read, Ruminate and Relegate this to the "NO PERMITTING FILE." This is a complete sell out of the health, lives, economy, environment and waters of Grays Harbor. We can do better than this! Thank you. Carol Seaman Grays Harbor Citizen Chehalis River

Response GP637-2

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2, has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP638, **Seaman, Carol**

Comment GP638-1

My name is Carol Seaman. I'm a Grays Harbor citizen. I live on the Chehalis River, 50 feet from the railroad tracks and 125 feet from the river in the blast zone. And I do have some serious concerns about this study.

I didn't write this down but my first and most serious concern about your study, in which I know that you hired a company to do the study, but I think it fails, really seriously fails to consider a great deal of other information and testimony that was given by the Washington Council of Firefighters, by the Washington State Physicians for Social Responsibility, by the friends of Grays Harbor, by the Citizens for the Clean Harbor, by the Washington Crab Fishers Association, by the Commercial Fishes of Grays Harbor County and the west coast of Washington.

And I really think before this draft is finalized, that you need to go back and look at that. Also information that came out from Siteline Institute. That really, really pinpoints the extreme dangers of this movement that is happening right now with crude oil in Washington state.

Response GP638-1

The co-leads reviewed and considered all scoping comments. Final EIS Appendix A, *Scoping Comments*, provides a catalog of all written comments received during the formal scoping period.

Comment GP638-2

So with that being said, I'd like to just read you some of my concerns, and I'll stop when my two minutes are up.

This DEIS fails to address previous and quite specific public commenting. Now we again bring more serious concerns from citizens of Grays Harbor and all of Washington and all along the entire rail line, the blast zone, east to the Bakken Shale of North Dakota, where fracking and drilling and poisoning begin. These two crude oil terminals proposed, along with the U.S. Development terminal, will ultimately result in 2.7 billion gallons of crude per year for storage and export from the Port of Grays Harbor.

The impasse of this cannot be mitigated. You need to consider and include facts and figures on the total burning of these proposed yearly exports, equaling 2.7 billion gallons of crude oil.

Response GP638-2

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively. The Final EIS has been updated to include estimated emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

GP639, **Seaman, Carol**

Comment GP639-1

My name is Carol Seaman, I spoke earlier. I turned in my comments, but I just wanted to revise the subject of mitigation, and especially as it pertains to the health and welfare of the people in Grays Harbor County, particularly those along the railroad tracks.

And when the Washington State Physicians for Social Responsibility gave their report, it was some stunning information. And I don't know if you've had a chance to look at it, but it does note that Grays Harbor is the 39th county of health. That means in Grays Harbor we have the worst health. We also have the fewest college graduates, and we also have almost the highest rate of unemployment.

And I don't know how you have mitigated that in this document, the fact that you are putting people at risk. Actually, it is kind of like we're being -- the people of Grays Harbor are being thrown under the bus -- or the train if you will -- because you have not considered the effects of the extra diesel burning.

I mean, you say it's within state guidelines or within normal limits, but you also haven't given us an idea of the carbon emissions that would result from a total -- a total burning of the 202.7 billion gallons of oil that will be going out of our harbor every year.

When that is burned somewhere else to go back on us, is that within the carbon emission levels that are required by our clean energy governor and the carbon emissions law that they're trying to pass? I mean, how much carbon are we going to burn without saying this is going to change everything, and not just for Grays Harbor.

Response GP639-1

Draft EIS Chapter 3, Section 3.2.5.2, *Proposed Action,* and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively. Final EIS Section 3.2 and Section 6.5.1.2 have been revised to include emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Mitigation Framework for a description of how mitigation is identified in the Draft EIS.

GP640, **Seaman, Carol**

Comment GP640-1

Hello again. My name is Carol Seaman. I'm a third generation Grays Harborite, and I live in a blast zone on the Chehalis River. I've said it before and I'll say it again.

I've labored over this public commenting since, this time because the plan to store 720 million gallons of crude oil in a tsunami, earthquake zone, high winds, high tides, high rains. You cannot mitigate disaster under those conditions.

Response GP640-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP640-2

Then I read that the vessel traffic increase with Panamax and barges. One Panamax tanker three football fields long coming up that narrow shipping channel 300-some more times than it did before all of this started. And I'll tell you it's pretty frightening -- very, very frightening. I wrote my master's thesis -- I'm a former educator and I wrote it on integrating higher level thinking skills in a content area.

If this was a content area and I were grading your DEIS, I would have to give you an F. The bottom is factual, the top is analysis. You're supposed to take an event all the way to the top and analyze and predict what is going to happen.

You have not predicted carefully what is going to happen here with this volume of oil on our sensitive harbor. Nor have you predicted what this is going to do to the marine resources here. Very, very improperly studied and predicted.

And I'm afraid for all of us and I hope you will consider all that's been said today and change your mind, because they're not based on critical thinking.

Response GP640-2

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. Final EIS Sections 4.4.3, 4.5.3, and 4.6.3 have also been revised to include additional mitigation measures to address risk related to spills, fires, and explosions. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident.

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

GP641, **Seaman, Carol**

Comment GP641-1

Inspite of the charts you have developed to assure us that allwill be safe in air quality, noise, water environment, safety, health etc. It just ain't so. You have failed to apply information given to you by Wash. Crab fishers Assoc., Wash. Physicians for Social Responsibility WCFF, Friends of Grays Harbor, The Quinault Nation and many others.

You have rubber stamped the efforts made by many studies to tell you this is fundamentally WRONG. 2.7 billion gal. of crude oil, 110 oil trains a month through our communities, over 100 streams Will have an impact. Disaster cannot be mitigated. Go back to the drawing board and consider the evidence given by someone other than your consulting firm. You should be ashamed for putting all at risk here in Grays Harbor.

Response GP641-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP642, **Segretti, Fiona**

Comment GP642-1

Protect Our waters in Washington. Over use of harbors is hazardous to marine life. Reinforce development of renewable energy sources and the need to keep air and water clean. New jobs can be created. Don't allow potential toxic waste and excessive traffic to spill in Our waters.

Response GP642-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP643, **Seiler, David**

Comment GP643-1

David Seiler. I live in Southwest Thurston County with Kay, but we're also property owners in Grays Harbor County as well.

I'm just going to finish her statement for her.

Given the vast quantities of severely ignitable and toxic product transported and stored, and the recent tragic accidents, insurance coverage will be woefully inadequate. Instead, taxpayers will bear the costs of responding to and attempting to clean up major tank farm and rail disasters. Environmental degradation cannot be mitigated.

If these projects are implemented, future generations will wonder why the people of this time traded sustainable fisheries and a healthy tourism economy for a crude oil portal. Thank you.

Response GP643-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP644, **Seiler, David**

Comment GP644-1

My name is David Seiler. My wife and I live in Chehalis. We also own property in Grays Harbor. We are admittedly opposed to these expansion tank farms. It's time we leave the oil fields. They represent far too great a risk of all residents along the tracks.

These tracks split communities from -- all the way from Dakota to here, one after another. And the risks are unmitigatable. I'm a retired salmon research scientist of 30 years, but I'm not naive enough

to think that the concern for the environment and aquatic resources in places such as Grays Harbor will stop these trains. It should.

It's a risk to humans and everything else as well. But I think that the thing is, the risks are worse than the DEIS estimates. I believe the proponents of these projects underestimated how much of oil will be transported to their facilities by rail. And therefore the risks are higher than estimated. They've represented the best case scenario and once if they were to get these permits, then they would move oil even at faster rate.

Imagine a new president congress approving the export of crude from this nation along with economic upturn the price of crude oil, those two factors combined make this even more unacceptable. Please deny this permit.

Response GP644-1

As noted in the Master Response for Project Objectives and Alternatives, the proposed action is a private project and the objectives and proposal are defined by the applicant. Draft EIS Chapter 2, *Proposed Action and Alternatives*, describes the type of material and approximate volumes to be transported based on this information. The City of Hoquiam will specify maximum throughput in the conditions of a shoreline development permit. In addition, other permit approvals could identify the maximum allowable (permitted) throughput of the facility. Any increase in annual throughput capacity would require revised or new permits or plans.

GP645, **Seiler, Katherine and David**

Comment GP645-1

October 16, 2005
RECEIVED
OCT 17 2015

Dear Governor Jay Inslee and the Co- Lead Agencies; City of Hoquiam Administrator Brian Shay and Department of Ecology Director Maia Bellon,

We strongly oppose the expansion of crude oil projects in Grays Harbor because they pose extreme risks of un-mitigatable loss to human life and the environment while providing little benefit to the citizens of the state. For these reasons the permits should be denied.

We believe that the DEIS and the process by which it is presently under review is significantly flawed. These deficiencies, detailed below, require that the permits be denied.

First, the arbitrary and capricious limit of two minutes per person to provide oral comments is inadequate. There are several purposes of oral testimony, to establish the record and to allow others to hear the testimony thereby enabling subsequent discussion. These elements are considered essential to a full public process. In this case, the two minutes allowed for public testimony is insufficient to complete a cogent thought, much less the complex issues that should be aired, to address the number of key issues in this proposal, and allow all present, not just the co-leads to hear other citizen thoughts. Two minutes limits the public disclosure of concerns and opportunity for discourse. Shame on the co leads for imposing a two minute limit on each person commenting on

thousands of pages of complex issues. Clearly, this violates the public testimony requirements of SEPA.

Second, sixty days is inadequate time for the public to read, analyze and comment on over 3000 pages, fraught with inconsistencies, and errors. Consequently, many errors may slip through.

Response GP645-1

Pursuant WAC 197-11-455, the lead agency for a SEPA proceeding shall provide 30 days for review of and comment on a Draft EIS. This may be extended by 15 days upon request. The co-lead agencies issued an extended 60-day comment period that was then extended to 90 days based on public requests to provide additional time for review and comment.

The time limit for public testimony in the main room was established to allow the greatest number of people to speak given the large turnout. Numerous other opportunities to comment were also available, including the opportunities to provide oral testimony to court reporters in semi-private areas at the open house and to provide written comments in various formats.

Comment GP645-2

Third, Impacts and risks are a function of the volume of crude oil transported over the rails. The entire DEIS risks and impacts are based on a thru put volume of crude oil provided by the proponents. It is critical to understand, however, that there are no restraints on the volume of thru put once this project is approved. When, oil prices rise and or the ban on exporting USA crude is lifted and or due to other market forces the proponents find that it is in their interest to increase the volume pushed thru, the thru put for these trains, tanks and ships will increase. Over and over in past SEPA documents, we have seen one volume proposed, only to increase when economic incentives prevail. All impacts projected in the DEIS are based upon the proposed volume and therefore, to the extent that this is underestimated so-are the actual impacts.

Similarly, but in the opposite direction;-the benefits of this proposal- i.e. the number of resultant jobs are likely overstated. The result is that the DEIS under estimates the negative impacts and risks while overestimating the benefits. Therefore this DEIS must be denied as the projected impacts are underestimated.

Response GP645-2

As noted in the Master Response for Project Objectives and Alternatives, the proposed action is a private project and the objectives and proposal are defined by the applicant. Draft EIS Chapter 2, *Proposed Action and Alternatives*, describes the type of material and approximate volumes to be transported based on this information. The City of Hoquiam will specify maximum throughput in the conditions of a shoreline development permit. In addition, other permit approvals could identify the maximum allowable (permitted) throughput of the facility. Any increase in annual throughput capacity would require revised or new permits or plans.

Comment GP645-3

The fourth reason, is the extraordinary amount of errors and inadequacies contained within the DEIS. A few examples:

1) The DEIS has tried to explain mitigation for burning train cars. However, it acknowledges that the sole method to deal with tank train fires is to stand back and let them burn.

Response GP645-3

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Final EIS Section 4.3, *Risk Considerations,* also reflects additional information about factors influencing cleanup. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment GP645-4

2) The DEIS states that marine mammals do not enter within 3 miles of the harbor routinely to feed. This statement which is absolutely false, indicates that the authors know nothing about the harbor's ecosystem.

Response GP645-4

Draft Chapter 3, Section 3.5, *Animals,* acknowledges frequent marine mammal use of Grays Harbor. Final EIS Section 3.5 clarifies whale use of Grays Harbor, including frequent use by the gray whale, and provides additional information on gray whales, humpback whales, and killer whales.

Comment GP645-5

3) That the maximum speed of water in the Harbor would be one knot and achieved only once per day. The monumental ignorance exposed by this statement causes one to question is this just an egregious error or a deliberate attempt to mislead. After all it is common knowledge that cleaning up oil in moving water is impossible.

Response GP645-5

Specific reference to the error is not provided. Draft EIS Section 4.3, *Risk Considerations*, indicates water flows within the harbor average between 1.9 and 2.8 knots but can reach 5 knots.

Comment GP645-6

Fifth, all three crude oil projects should be considered holistically before a decision to permit any one project. The risks to public safety and to the environment, the actual economic costs and reduction in the day to day quality of life elements, such as delays of transportation, noise, vibration, air pollution, must be based on the impacts from all projects combined. Expansion of these storage facilities would not be considered without construction of the Port of Grays Harbor terminal. All of the risks and impacts from transporting crude oil to and from these storage facilities by rail and

ship, respectively have to be identified and assessed by this DEIS. SEPA requires related projects to be considered as a whole.

Response GP645-6

Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of the incremental addition of impacts from the proposed action to impacts from past, present, and reasonably foreseeable future actions—including the REG (formerly Imperium Terminal Services) Expansion Project and the Grays Harbor Rail Terminal Project. Refer to the Master Response for Connected or Similar Actions for more information on the consideration of connected actions. Refer to the Master Response for Geographic Scope of the EIS for an explanation of why Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport in the extended study area qualitatively.

Comment GP645-7

The addition of storage of this quantity of hazardous oils requires additional terminal capacity. Therefore, this DEIS must examine the primary project risks; delivering crude oil to the harbor via rail and exporting the same by ship. A derailment or major spill would be a catastrophe, most likely including a major fire, and oils that are impossible to clean up once spilled into the Chehalis River or Grays Harbor. This DEIS does not provide for adequate prevention, response, cleanup or mitigation. The reasons for this are basic: it is not possible. If any such measures were possible they would be so costly that these projects would not even be considered. For example the response to fires resulting from oil train derailments to date has been to stand back and wait for them to burn out.

The DEIS states in several places that mitigation is not possible. Which brings us to a key point- if mitigation is not possible, then why are we considering permitting this proposal? There are extremely high risks and little benefit. This proposal puts the Bowerman Basin, a National Wildlife Refuge and national treasure at risk of not only killing the birds, marine mammals crab larvae and salmon as a result of a large spill, but contaminating the Harbor and coastal shorelines for perpetuity. It puts thousands of children in the blast zone, not only in Aberdeen and Hoquiam, but all along the route, at risk of incineration. It is true, there is no mitigation for such risks. Therefore these projects must be denied.

This is the one chance to get this decision right. There are a few permits to be issued and the building of tanks that caused the SEPA to be engaged. This SEPA opportunity is the only time that the full rail impacts will be assessed. Even if the trains derail with the attendant horrors, and the corporations fall to bankruptcy as has been described in many scenarios, that won't stop the continuation of this rail traffic. Another company could take over operations of the storage facilities since the construction has already been permitted. This is the one chance to secure our future by saying no to the dangerous and deadly rail traffic upon which this project depends.

The Grays Harbor watershed which drains over 2,500 square miles is the largest system accessible to anadromous fish in Washington State outside the Columbia Basin. The harbor is a national treasure that provides habitat essential to important fish and wildlife populations that support the local and state economy. These oil storage projects will cause irreparable harm to these resources and the dependent economies. If these projects are permitted, future generations will wonder why we traded sustainable fisheries and a tourism economy based on a healthy environment for a crude oil portal.

Appended to this letter are additional comments that should be considered in the EIS process.

Sincerely Katherine B Seiler, David E. Seiler

Cc: Sally Toteff, Washington Department of Ecology
The Surfrider Foundation The Friends of Grays Harbor Earth Justice
Citizens for a Clean Harbor

Response GP645-7

Draft EIS Chapter 4, Section 4.2.1, *What framework prevents incidents from happening?* describes the formalized planning framework in place to address risks related to oil spills, fires, or explosions from the terminal operations, rail transport, or vessel transport. The responsible party may vary during the transport of crude oil. This section describes the requirements for planning and preventive equipment and design. Section 4.2.2, *What framework prepares for an incident?* describes federal and state regulations to prepare for an incident, the integration of plans, and drill and exercise requirements.

Final EIS Section 4.2.3, *What framework provides responses to an incident?* has also been updated to better reflect existing response capabilities and resources in the study area, including information identifying existing gaps from the Marine and Rail Oil Transport Study (Ecology 2015). Final EIS Section 4.7, *Impacts on Resources,* has been updated to better reflect how the proposed action could affect emergency service responses.

Final EIS Chapter 4 reflects additional mitigation measures proposed to address gaps in emergency preparedness planning and response capabilities. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions.

Chapter 4, *Environmental Health and Safety*, identifies other proposed measures to ensure that broader prevention, preparedness, and response planning involves the appropriate stakeholders and that updates to any plans applicable to reducing risks related to the proposed action contain appropriate applicant information and participation. To the extent possible, as outlined in the Master Response for Mitigation Framework, measures that address the need for more coordinated and focused planning clarify the role of the applicant as appropriate.

Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7 describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

For more information about the analysis of potential impacts in the extended study area, refer to the Master Response for the Geographic Scope of the EIS. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP645-8

Additional comments:

The likelihood of an earthquake or tsunami has not been adequately addressed. The DEIS states that the tanks and their appurtenances -valves, piping etc... in both tank farms are not required to be

resistant to a major earthquake or the impacts of a tsunami that could affect the structures and also overtop the containment. Since we have seen recent examples of both earthquakes and tsunami's on coastal waters, and the likely spills and either explosions or fires that could result, it is reasonable to require that the tanks be able to with stand the likely projected earthquakes and tsunamis. Also all tanks should be fitted with valves that immediately close should shear action occur.

Barring a tsunami, perhaps the greatest risk the storage facilities face is liquefaction. On October 14th, 2015, PBS ran an hour long special, 'The Oregon Field Guide Show', that presented geologists and seismologists discussing the preparedness of structures in Oregon to withstand a large seismic event. They demonstrated how during an earthquake, liquefaction will cause tank destruction and massive spills from the'tanks that were placed on fill. The DEIS reports show that the project sites match the Oregon tank situation. The mitigation for such liquefaction potential must be to engineer these tank farms to prevent such liquefaction during a serious earthquake on the order of 9.0.

Response GP645-8

Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events.

Comment GP645-9

In 35 years of being regulated and regulating hazardous substances, I, K Seiler, have never seen a pollution prevention system that didn't fail. Insufficient consideration of how to deal with the likely cataclysmic scenarios has occurred. Events will happen. In the case of Hazardous Waste Facilities, the companies have to provide funding in trusts or bonds, to pay for sudden and non-sudden events that could impact the community or environment, and requires posting insurance for the fullest extent of possible occurrences. These facilities are not required to do so, but actually have vastly more volume of severely ignitable and toxic materials than those permitted Hazardous Waste Facilities. These proponents are LLCs which limits their liability; once the relatively small amount of insurance these facilities are required to obtain ($25 Million) has been used to deal with an incident, the remaining costs to deal with a larger incident will be passed on to the state and local government.

Additionally, the insurance money is never available immediately. The local government or state will need to jump into the breach to pay for any costs that these companies don't immediately pay for. The costs to address immediate issues could bankrupt either Aberdeen or Hoquiam, which has deeper pockets than the small towns that routinely are in the blast zone of a derailment or fire. Washington State already has budget woes, and increasingly doesn't have resources to fund emergencies such as this.

In the case of the Lac-Megantic rail disaster in Quebec, Canada, estimates of cleanup exceed the $400 Milllon claim, which the province of Quebec has filed for, and there are over $450 Million in claims from the families of and the impacted people. It is likely that these estimates understate the actual costs to the area, it's environs and it's peoples. And this is just what happened for part of a train that derailed. Should a major event happen at the storage facilities or terminal or in the harbor the costs

will be much higher. Thus for either of these projects to go forward, they each should be required to establish a fund of at least $1 Billion that would be immediately accessible for work to respond to an emergency, mitigate the impacts to the extent possible and recover from such an event.

Transportation hazards of Bitumen oil are different than normal crude oil. Cleanup of that oil will be more hazardous to complete and at times not possible. Note the following about one cleanup of Bitumen oil- which they call Dilbit.

From Congressional Research Services Report from September 2014 US Rail Transportation of Crude Oil: 'Dilbit may pose different hazards and possibly different risks than other forms of crude oil. On July 26, 2010 a pipeline owned by Enbridge Inc. released approximately 850,000 gallons of dilbit into Talmadge Creek a waterway that flows into the Kalamazoo River in Michigan. [45] Three years after the spill, response activities continued, [45] because, according to EPA, the oil sands crude [47] "will not appreciably biodegrade." The dilbit sank to the river bottom, where it mixed with sediment, and EPA has ordered Enbridge to dredge the river to remove the oiled sediment. [48] As a result of this order Enbridge estimated in September 2013 its response costs would be approximately $1.2 billion, [49] which is substantially higher than the average cost of cleaning up a similar amount of conventional oil. [50]

Cleanup in Grays Harbor is likely to be much more difficult than that of a creek, and therefore either much more costly or just not possible. This is another reason to deny the permits, or to require the $1 Billion in bond money for the day that it will be needed.

Response GP645-9

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Modeling*, refer to the Master Response for Oil Spill Modeling Methods. To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP645-10

As already stated the numbers that are outlined for train delays for traffic are likely to be best case scenarios. Delays of traffic have a cost. Nowhere in the DEIS do we see an evaluation of the cost of delays to businesses and the public. Here is a real example of the costs of train delay - especially when the likelyhood of multiple train delays at one time are considered for the three projects: A friend of ours has a small business teaching piano from her home near Satsop. Her house will be cut off from access multiple times a day for train delays. It is likely that her customers will drop her as a teacher when they have to factor in the extra 20 or more minutes for train delays. One more small business winking out and things like this will be played out over the route. I have already heard several people say if this comes to pass that they will not use services on the train route. The true costs oftrain delay need to be incorporated into the DEIS.

Since the train traffic delays are likely to cause cost to many of the communities, and potential health concerns or deaths in emergencies, incorporating overpasses for train crossings for commuter and business traffic should be considered as appropriate mitigation. The mitigation actions that are proposed over and over are the very least that can be done and of little or no cost to the. proponents. It appears that the consultant was told to make sure that the mitigation doesn't cost the proponents. The DEIS has to be revised to include mitigation even if the costs are significant to the proponents.

Response GP645-10

Grade separation was not deemed reasonable as mitigation for impacts related to the proposed action, as described in Section 3.16, *Vehicle Traffic*. The Final EIS section has been revised for clarity. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*. Refer to the Master Response for Mitigation Framework for an explanation of how mitigation measures were identified.

Comment GP645-11

Burlington Northern Santa Fe (BNSF) and PS&P are not included in the proposals as a partner, yet much of the risks occur In transit on their rails. These corporations are responsible for scheduling trains and maintaining cars and tracks. As a result they are a huge partner inthe impacts. The BNSF portion of the rail route isn't even analyzed in the DEISs (Imperium Project Chapter 3). We have been told that the traffic impacts can't be truly stated because it isn't known what the scheduling ofthe trainswill be, since the railroads won't release this information. Therefore this DEIS is flawed, because it doesn't recognize major partners that need to be included.

Response GP645-11

The Draft EIS addresses the indirect impacts of rail transport related to the proposed action in the study area in Chapter 3, *Affected Environment, Impacts, and Mitigation*, and Chapter 4, *Environmental Health and Safety.* Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP645-12

The DEISs state in the water sections that it is not likely that the toxics spilled at the project sites would get to Grays Harbor. This is due to the requirements of the permits and the training of staff required. We wish this was true, but if this was the case then the Department of Ecology would not routinely be responding to spills from businesses permitted through the NPDES system, which it does. This cavalier attitude plays very loose with facts. The DEIS should be revised. If such a statement is left in the DEIS it must be supported. This could be done by comparing spill reports in our state with the permit system. Since that was not done this false statement should be removed and a true analysis of the likelihood of spills reaching the environment outside containment and outside the project be completed.

Response GP645-12

Draft EIS Chapter 3, *Affected Environment, Impacts, and Mitigation*, addresses the impacts associated with routine operations, including the potential for minor spills and leaks. As noted in Section 3.3, *Water*, the potential for impacts associated with such spills would most likely be minimized by containment features and best management practices. The potential for widespread environmental damage related to the risk of oil spills, fires, and explosions is addressed in Chapter 4, *Environmental Health and Safety.*

Comment GP645-13

The Imperium DEIS goes on to state that the Groundwater generally is impaired due to lube- oil-range petroleum projects. There is no citiation for where this information comes from, nor does it state from what operations that occurred to cause this contamination and when. This should be fixed if known and if not known it should state so.

Response GP645-13

This comment is specific to the REG (formerly Imperium Terminal Services) Expansion Project and would be addressed in responses to comments as part of the Final EIS for that proposed project.

Comment GP645-14

Highly flammable materials will be stored at these projects. Due to their nature, all permits must require in the footprint of each project that only non-sparking equipment be used.

Due to the composition of the crude that would be transported, the material once spilled would be considered Hazardous Waste, due its characteristics of both ignitability and toxic components. That would mean that any of the materials spilled that could not be recycled immediately back into product would be considered hazardous -waste and must be treated as such.

The environment and the public in addition, to explosion and burning hazards, would be exposed to cancer causing substances. And since many of the materials that would be spilled, could not be completely cleaned up, they would pose an exposure for many years. As a result the costs of exposure and of disposal of the Cleaned up materials would be much higher than other commodities that could be spilled, such as wheat. These costs are nowhere addressed in the DEIS and should be incorporated into the funding referenced above. This funding must be made immediately available

through bonds or other mechanisms. These funds must also be made available for cleanup of spills across all cities, counties and towns that this proposal has an impact on.

The proposal will cause the loss of property values throughout the rail route and especially within 1/2 mile of the railroad in the established blast zone. The increase in noise, delay of traffic, the increased risk of spill and potential for disaster will cause the properties within the 1/2 mile radius of the blast zone to be most severely affected, but others further out will be impacted as well, as people choose where to do business. Those costs have not been considered in this DEIS. Compensation for those within the blast zone for loss of real estate value should be fully mitigated. In the event of a major conflagration property values will decline far from the blast zone.

Response GP645-14

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. Draft EIS Chapter 7, Section 7.3.4, *What are the costs of the proposed action?* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP645-15

The delays of the oil trains will cause loss of life at the individual level in day-to- day operation of these projects, even if other disasters don't happen. In our circle of friends and neighbors, we have two families who will be cut off behind the rail transit who have family members that need medical services when they need them-on an emergency basis. Those families, when they purchased their homes believed they had timely emergency assistance, not knowing these projects would change their response times. This will be a significant change and impact to the conditions of their property. As stated in the DEIS at 3.15.27 the delays are estimates and based on the limited trains proposed. They do not consider the full range. Of the impact when thru put is increased. And, as also stated in 3:16.3.2, there is the potential for loss of life due to delay. This again is another reason for denying these permits.

Response GP645-15

Refer to Response to Comment GP645-2 regarding throughput estimate evaluated in the EIS.

Final *EIS* Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed

action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

Final EIS Chapter 3, Section 3.16.8, *Would the proposed action have unavoidable and significant adverse impacts on vehicle traffic and safety?* clarifies that while implementation of proposed mitigation could reduce impacts on vehicle traffic, average and peak hour vehicle delays at the following grade crossings in Aberdeen would remain significant.

- Average hour: East Heron Street and Newell Street (Olympic Gateway Plaza area).
- Peak hour: Washington Street (Port of Grays Harbor area).

Comment GP645-16

The rail grade has sections that cannot reliably provide safe passage of these heavy and lengthy crude trains. As an example there was a train accident and large wheat spill in Central Park recently. Had that incident involved volatile crude oil it would have been a disaster. We have appended an article from the LA Times below which points out several problems with rail traffic that will be at issue for these proposals. The 2014 Pennsylvania train derailment happened on newly laid rails, less thana year old. Railroad experts hypothesize that the failure of the rails which caused the incident is likely because of several factors including the length of and thus the weight of the trains. Also mentioned in this same article is the impact of heavy rain on track stability used by heavy long crude trains. Since this is a likely reason for derailment, appropriate mitigation must be required including;

1) reducing the train length significantly, and
2) reconstructing the rail beds so they are on solid substrate, not on compressible fill.

Far from adding jobs to the Pacific Northwest these storage facilities will damage our existing economy. The rail system and road system will be stressed to the limits, adversely affecting quality of life and economic viability. As stated above the full impacts of the train impacts on traffic; and based on these issues, impacts to our businesses that need access to timely rail service, have not been evaluated by this DEIS. For those reasons alone, these projects should not be granted. Note these statements which are excerpted from Sightline's 72nd article about Crude Oil transport, October 8, 2015:

Newcomers to our rail system, these oil trains play no part in moving the cargo that makes the Northwest economy tick. Far from boosting commerce, oil trains threaten to derail it. Consider the case of Cold Train, a Quincy, Washington company that, until recently, shipped refrigerated fruits and vegetables. The company went bust after its goods were crowded off the rails by coal and oil trains (http://www.truckinginfo.com/blog/trailer-talk/story/2015/04/founders-of-failed-cold-train-blame-bnsf-railway-sue-for-41-million.aspx). The owners of the now-defunct company are suing BNSF, but it's already too late for the workers who lost their jobs.

"New projects could induce as many as 100 loaded crude oil trains per Week to transit Washington."

Terry Whiteside, who represents the Wheat and Barley Commissions for many western states, says that "the huge increase in Bakken oil movements and doubling of coal movements have contributed to the worst service meltdown in two decades affecting all commodity movements in the northern tier." A Cargill executive said much the same thing to the Seattle nmes in a 2014 story headlined, clearly enough, "Oil trains crowd out grain shipments to NW ports."

Response GP645-16

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Draft EIS Chapter 3, Section 3.15.4.7, *Current PS&P Rail Line Capacity and Operations*, presents the results of the rail modeling analysis of the PS&P rail line capacity. Based on this analysis, the addition of 1.25 trains per day on average to baseline trips would result in approximately 4.25 train trips per day along the rail line, which is approximately one-third of the capacity of the line. For more information about the analysis of potential impacts on the BNSF main line, refer to the Master Response for the Geographic Scope of the EIS.

All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP646, **Seiler, Kathy**

Comment GP646-1

Hello. I'm Kathy Seiler. I live in Olympia, Washington. I border on the Chehalis River and Grays Harbor County. I live in Thurston County.

We are opposed to both of these projects because they provide little benefit to Washington state while incurring extreme risk to public safety, the environment, and quality of life.

It is disingenuous to consider the impacts of the oil storage projects separately. All three, including the Grays Harbor Terminal and Storage, should be considered as a whole. And because these projects depend on transporting crude oil by rail and ship, impacts during transport to and from these storage and terminal projects must also be assessed for the total capacity. SEPA requires related projects to be considered as a whole.

Response GP646-1

Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of the incremental addition of impacts from the proposed action to impacts from past, present, and reasonably foreseeable future actions—including the REG (formerly Imperium Terminal Services) Expansion Project and the Grays Harbor Rail Terminal Project.

Comment GP646-2

A derailment or major spill will be catastrophic. It would likely include a major fire, and oils that are impossible to clean up once spilled into the Chehalis River and Grays Harbor. No where in these DEISs is adequate prevention or response described; nor could it be. The response to such derailment, spills and resulting fires to date has been to let them burn themselves out, as it is impossible to contain them.

Response GP646-2

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment GP646-3

Nor has the likelihood of an earthquake or tsunami been adequately addressed. Anyone who dismisses this potential should review the videos of the tsunami that wiped out the Fukushima nuclear plant in 2011.

Response GP646-3

Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events.

Comment GP646-4

In my professional 35 years of working with hazardous substances, I have seen every type of pollution control system fail. These DIES's provide insufficient consideration of cataclysmic scenarios. Events will happen. In the case of hazardous waste facilities, the companies have to provide funding in trusts or bonds to fully pay for sudden and non-sudden events that impact the community or environment. Insurance is also required to mitigate for the fullest extent of the damage. These projects should be required to meet those standards.

These projects provide inadequate disaster response or mitigation funding. These companies are limited liability corporations.

Response GP646-4

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP647, **Serres, Dan**

Comment GP647-1

Please see the attached documents from the Tesoro-Savage Draft EIS to be included in the record for the Westway and Imperium DEISs.

Response GP647-1

All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP648, **Serres, Dan**

Comment GP648-1

Please see the attached documents from the Tesoro-Savage DEIS to be included in the record for the Westway and Imperium DEISs.

Response GP648-1

All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP649, **Serres, Dan**

Comment GP649-1

Please see the attached documents - Section 3 of the Tesoro-Savage DEIS - for inclusion in the record for the Westway

Response GP649-1

All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP650, **Shafer, Sarah**

Comment GP650-1

I would ask that you quantify the risk of an accident for the entire route from North Dakota to Centralia. I also ask that you please report accurate information as the Draft EIS for the oil terminals

in Grays Harbor was horrible. Instead of saying that 14 of the last 16 derailment spills caught fire and 10 exploded, they said most oil train spills don't catch fire.

Response GP650-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

As stated in Draft EIS Section 4.5 *Environmental Health Risks – Rail Transport*, long-term historical data show that most rail-related oil spills do not result in fires or explosions and a fire or explosion would be less likely to occur than an oil spill. Additional information regarding the risks of fire explosions during rail transportation is provided in Draft EIS Appendix M, *Risk Assessment Technical Report*.

GP651, **Shaleen**

Comment GP651-1

My name is Shaleen. I'm a member of the Confederated Tribes of Warm Springs, Oregon. And I travel 150 miles to get here today because I'm really concerned about the safety of the people who are fishing -- tribal fishers on the Columbia River.

And our people have a treaty, guaranteed right to fish on the Columbia River and also to live -- inhabit the Columbia River from around Bonneville Dam up to John Day. And there's around a 150 mile stretch of train that goes along the Columbia River there.

And it's kind of hard to explain but our camping sites are sandwiched between the train tracks and the river there. And I've always felt the threat of the trains there. And when we camp, we're literally like ten to 100 yards from a train track. And there's dozens of these sites on both sides of the river all the way up and down.

And it's just the trains are something you can't get around. In fact, one of the treaty emblem sites also has a sign at the railroad that says Indian crossing. And it's just -- it's actually harder to explain than in real life. It actually literally feels threatening.

And I'm worried about the people like if there's a train wreck then people—families, kids, and the old people—won't be able to escape. There's, you know, not really a safety plan. And I just think this is—in the bigger picture this is really a threat to our way of life if a disaster happens to our ecosystem.

Thank you.

Response GP651-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the

extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP652, **Shapiro, Alice**

Comment GP652-1

Name: Alice Shapiro
Organization: Sierra Club
City/ State/ Zip: Portland, OR 98212

I believe the impacts to the entire length of this project need to be considered the impacts regarding health, climate change, train derailments and other non-mitigatable consequences are not limited to the local area around Gray's Harbor. The entire Columbia Gorge (& world) are at risk.

Response GP652-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action

GP653, **Shapiro, Howard**

Comment GP653-1

The detrimental effect to the citizens and environment of the entire Pacific Northwest must be considered in considering this permit. The DEIS in error by limiting findings to this immediate area. The Aberdeen area does not exist in a sealed vacuum: it is an integral part of the Pacific Northwest and the rest of the world! Deny the permit!

Name: Howard Shapiro
Organization: Sierra Club
City/State/Zip: Portland, OR 98212

The DEIS states that there are several unmitigatable sections to this application. This is enough to deny the permits for this application. It should be obvious that the increase in dangerous rail traffic carrying a potentially lethal cargo (fracked crude) and the resulting impacts of holding up traffic, including emergency vehicles, is not worth the inflated estimate of income to local government. Most of this income will possibly be expended on attempted cleanup if an accident occurs.

Response GP653-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP654, **Shapiro, Howard**

Comment GP654-1

Thank you. My name is Howard Shapiro. I live currently in Portland, Oregon, where I've served on the County Planning Commission. And I do understand your position. I would like to say that it is occasionally okay to smile.

The EIS indicates that there are several unmitigatable sections to this application. This is enough alone to deny the permits. It should be obvious that the increase in dangerous rail traffic carrying potentially lethal cargo and resulting impacts of holding up traffic, including emergency vehicles is not worth the inflated estimated income to local governments.

Most of this income will possibly be expended on attempt to clean up if an accident occurs. The detrimental effect to the citizens and environment of the entire Pacific Northwest must be considered in considering this permit.

Response GP654-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP654-2

The DEIS is in error in limiting findings to just the immediate area. The Aberdeen area does not exist in a sealed vacuum. It is an integral part of the Pacific Northwest and the rest of the world. Please deny this permit. I don't want to be down in Portland and read about something that happened up here and say I told you so.

Thank you.

Response GP654-2

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP655, **Sharpe, Elaine**

Comment GP655-1

No to oil refineries in Washington. Oil refineries alter landscapes, could possibly pollute river ecosystems, increase greenhouse gases, and decrease the quality of air and of life.. Train tanker cars are not built to safely transport crude oil and the length of trains is a hazard to communities and emergency agencies. We can do better than allow potential pollution to our beautiful Pacific a northwest.

Response GP655-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action. The proposed action does not include construction of an oil refinery. Refer to Draft EIS Chapter 2, *Proposed Action and Alternatives*, for a description of the proposed facility and operations.

GP656, **Sheats, Melanie**

Comment GP656-1

Hi, my name is Melanie Sheats. I'm from Olympia, Washington. And I came here today to listen. I didn't have a predrafted speech. But what I hear today from the speakers that are pro permits is -- what stuck in my mind was simply the economy -- stimulating the economy.

But my question is: How is the local economy impacted with one mistake? One natural disaster? Look at South Carolina, and they just had a thousand year flood, completely unanticipated. But I never thought I would hear in my lifetime the term thousand year flood.

And what we can learn from other people is the reasons why those risks, what might be lost, what is the risk; the high risk of possible catastrophic fire, spills, and air pollution.

We need to protect our wildlife, birds, flora, humans. We can have earthquakes, tsunamis, and soil liquefaction risks that make health impacts. We'd have unimaginable cost of cleanup with the burden put onto the taxpayers. There's a job exaggeration versus job loss should there be some type of disaster, The impact of climate change, corporate profits benefitting just a few, noise pollution, sacrifice of the region.

I mean, I've heard 100 reasons why you should deny this. And I've only heard one that makes sense, stimulate the economy. But, again, I ask the question, with one mistake, one national disaster, what is lost? And I think that's the question that needs to be answered.

Response GP656-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP657, **Shelman, Dave**

Comment GP657-1

There is a common link between all the proposed coal and oil expansion facilities. Almost all the fossil fuels scheduled to come to these facilities will travel via the Columbia River Gorge. The review of each facility, including each EIS, will be incomplete if it does not evaluate the impacts that will be felt in Gorge communities, tourist sites, and, most critically, to the Columbia River National Scenic Area. The increased barge and rail traffic alone will harm these resources---even if no accidents ever occur. Over time they will happen. The Gorge is a valuable and fragile environment that cannot withstand the damage likely to occur if this traffic is allowed. Include study of the impacts along the routes of the fuels being delivered to these facilities.

Response GP657-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, and Chapter 6, *Cumulative Impacts*, address potential impacts in the extended study area, including the potential for increased risks, individually and cumulatively, respectively. The analysis of impacts in the extended study area is qualitative for the reasons discussed in the Master Response for Geographic Scope of the EIS. Final EIS Chapters 5 and 6 have been revised to clarify the potential impacts in the extended study area.

GP658, **Sherdahl, Eric**

Comment GP658-1

The risks and adverse environmental,economic and social potential devastation from the proposed projects cannot be fully mitigated and therefore the permits should be denied. Please reconsider and say no to these unacceptable oil trains and oil terminals. The reality of earthquakes, mudslides and floods are enough of a reason, to stop this project from moving forward.

As a homeowner in Hoquiam,you have not adequately mitigated for property values dropping, health and safety in our communities threatened and all the potential for destruction to our economies and way of life. Please deny these permits, for the sake of all people all along the tracks.

Response GP658-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP659, **Sherdahl, Judy**

Comment GP659-1

Hello, my name is Judy Sherdahl, and I live in Hoquiam. The current findings in the DEIS proposed oil terminals show that the risk to our community's safety and potential adverse environmental and economic damage cannot be fully mitigated.

The possibility of such unmitigated devastation is not acceptable. We need to say no to these oil terminal projects and yes to protecting our community, our children, and our future. There is disturbing safety record of train derailment in Grays Harbor County.

This last year, 2014, four separate derailments occurred. The Grays Harbor derailment on April 30 crossing at S. Washington Street in Aberdeen derailed and spilled its contents traveling at only five miles per hour.

The railroad investigations determined this, and I quote, Failing railroad ties that were soaked by recent heavy rains caused the derailment in Aberdeen. So I ask you this. How is it possible to mitigate for rainfall and future train car derailment?

Consider the recent storm on January 6, 2015, in Hoquiam where 5.4 inches rain fell in 24 hours causing flooding and mud slides. These torrential rains overwhelmed both Abrdeen and Hoquiam in the very areas you propose these train terminals will be situated.

Also take into account that these sites are located at earthquake, liquefaction, and tsunami zone. How do you mitigate loss of life? How do you mitigate potential destruction to entire communities? Not to mention concern about the risks of water pollution, increase of toxins that will impact a citizen's health from these proposed projects.

So, in your DEIS describe how oil trains, oil terminals will negatively affect the health, safety, and welfare of all communities.

Response GP659-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including impacts on human health.

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

GP660, **Sherman, Rhonda**

Comment GP660-1

Studies show that coal exports endanger the health and safety of all who live in the transportation corridor. The problem with coal dust is compounded by problems associated with dangerous diesel pollution emitted as these super-heavy trains push and pull toxic loads from Wyoming and Montana to Oregon, Washington, and British Columbia. PLEASE DO NOT ALLOW THIS!!! I DO NOT SUPPORT THIS!!!

Response GP660-1

The proposed action would not involve the transport or handling of coal. Refer to Draft EIS Chapter 2, *Proposed Action and Alternatives*, for a description of the proposed facility and operations.

GP661, **Sherman, Russell**

Comment GP661-1

No Coal is clean energy, Its all a big lie, Give back our land and our water our mineral rights, they belong to the people, not to big corporations.... Coal is killing our planet and no you can escape.

Response GP661-1

The proposed action would not involve the transport or handling of coal. Refer to Draft EIS Chapter 2, *Proposed Action and Alternatives*, for a description of the proposed facility and operations.

GP662, **Sherman-Peterson, Ronald**

Comment GP662-1

Please deny the permits to proceed with these oil-related projects in the Grays Harbor area. Please be sure to include all impacts in any and all impact statement studies, including impacts on the amount of carbon in the atmosphere that will result from the burning of the oil shipped through terminals. Below are a few of the many facts to be taken into account, Proposed oil shipping terminals and the dirty, dangerous oil trains, storage tanks, tankers and barges that would come with them puts the health and safety of people, the local economy, and our ocean and coastlines at risk. There is no way to mitigate the risks and dangers of these crude oil terminals. Grays Harbor communities would take on the risk, oil companies would reap the profits, and Grays Harbor would become a throughway for oil going elsewhere to places like California and even overseas. Wrong place for oil terminals: Much of what makes Grays Harbor special would be at risk. The narrow, shallow shipping channel and strong currents put Grays Harbor at high risk of an oil spill. A single major spill could devastate the area's maritime economy, productive fisheries, tribal treaty rights and spectacular coastal waters. Dirty and dangerous oil trains: The alarming safety record of oil trains means an explosive oil train derailment may be a question of when, not if.

Response GP662-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Section 4.6.3, *What mitigation measures would reduce impacts related to vessel transport?* to reduce the likelihood of a spill reaching the environment and the potential impacts if an incident were to occur in Grays Harbor. As noted in, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. For more information about the data, assumptions and methods used in the risk analysis,

refer to the Master Response for Risk Assessment Methods and the Master Response for Environmental Health and Safety Analysis.

Comment GP662-2

Less dramatic but equally concerning is the air pollution, spill risks, and traffic delays oil trains would bring to communities along the rail line from Hoquiam to Centralia and all the way to the oil source in North Dakota and Alberta, Canada. Better way to meet our energy needs: Washington State is rapidly moving away from fossil fuels and towards clean, renewable sources to meet our energy needs and respond to global warming. Building more, big infrastructure for yesterday's energy is the wrong path to meet today's energy needs.

Response GP662-2

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*, which presents a detailed analysis of potential impacts on air quality in the study area related to the proposed action.

GP663, **Shillinger, Barb**

Comment GP663-1

What I want to say is that the future of Grays Harbor depends on protecting our environment, protecting the fish, the oysters, the birds, all of those things, our scenic, our beaches.

If we have oil here, they -- for one thing, they don't tell the truth about the number of jobs that are being created. A lot of times they count -- well, all of the time they count the jobs that it will take to make the facility but not -- that will not be permanent jobs when they leave.

And we've seen that even if there are jobs, they don't go to the local people. They go to people who come from somewhere else. So I think the storage of oil in the harbor is an insane idea.

It's right across from the bird sanctuary, and someone said that the birds can go somewhere else, but they can't. This is an important stomping ground for them and their flight to and from Alaska, and they can't stop anywhere else. This is where they stop.

And so I think that it's just a bad idea. It doesn't provide jobs any more than the soybean trains provide jobs.

It takes one person to unload a whole train of soybeans, and it will be the same with the oil. It will all be automated. It won't provide a lot of jobs, only the construction side of it would.

And I'd rather see them build visitor centers and schools and parks and other things and put people to work that way rather than have them build facilities to store oil on Grays Harbor.

My name is Barb Shillinger, S-H-I-L-L-I-N-G-E-R, from Aberdeen.

Response GP663-1

Draft EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, addresses economic considerations, social policy implications, and the costs and benefits, including job creation. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP664, **Shillinger, Lamont**

Comment GP664-1

No small number of jobs is worth risking our environment for.

I'm Lamont Shillinger.

Response GP664-1

Comment acknowledged.

GP665, **Shober, Harlan**

Comment GP665-1

October 26, 2015 Harlan Shober 2280 SE 34th Ave. Portland, OR 97214 To: US Army Corps of Engineers Regulatory Branch Post Office Box 2946 Portland, OR 97208-2946 Telephone (503) 808-4385 Attn: Melody White, Project Manager WA Department of Ecology SEA Program Post Office Box 47600 Olympia, WA 98504-7600 Telephone (360) 407-6068 Attn: SEA Program, Federal Permit Coordinator Reference: NWP-2014-177/2 (Kalama Manufacturing and Marine Export Facility) and NWP2015-111 (Kalama Lateral Project) To all concerned: I urge you to reject these and any other proposals to develop transportation or storage facilities for fossil fuels. Such decisions are all too often made by bureaucrats whose scope of understanding is artificially limited to the arcane details of codes and regulations. Rarely have they walked the land they've been set up to condemn. To the extent that any of you are whole persons, consider this: We know, beyond any reasonable doubt, that the first adverse effects of climate change are already upon us. We know that humans are causing nearly-impossible-to-reverse damage to the very thin and fragile skin of this blue-green sphere. There is no other place for us to go. In boardrooms from Washington, D.C., to New York and from Ottawa to Edmonton corporate leaders pour over spreadsheets and maneuver for immense profits at the expense of frontline communities. You owe a duty, as whole persons, to use the broadest possible perspective to protect those communities. You can't escape the responsibility of knowing what you know. Don't pimp out your neighbors and fellow citizens. Regards, Harlan Shober

Response GP665-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP666, **Shubert, Stephen**

Comment GP666-1

The DEISs include all the vessel traffic from these proposed projects in Grays Harbor entering the Salish Sea. This could be for bunkering (vessel fueling) purposes and/or to deliver crude oil to the refineries. If these projects are permitted, 638 additional crude oil tanker and tank barge transits would be passing through the Salish Sea each year. More vessel traffic means more risk of a major oil spill, therefore, we ask that the FEISs thoroughly address all of the projects' potentially adverse impacts to San Juan County's water environment, economy, and all of its species (human and otherwise).

San Juan County's tourism economy is inseparably linked to a healthy and sustainable salmon fishery and Orca population — where there is salmon, there are Orcas. "Our" Southern Resident Killer Whales (SRKW) have been tracked by NOAA to the mouth of Grays Harbor where the salmon rivers of the Humptulips, Satsop, and Wynoochee empty (see tracking map below). For not only the SRKW and salmon, we ask that the FEISs address all potential adverse impacts to all the 119 species-at-risk in the Salish Sea, their migratory pathways and their critical habitats. We ask the FEISs to include a cumulative impacts analysis of all existing, new, and "reasonably foreseeable" (proposed) vessel traffic in the Salish Sea.

Response GP666-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from vessel transport—less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP667, **Simone, Dorthea**

Comment GP667-1

Oct 8, 2015 Aberdeen, WA
For Grays Harbor Hearing DEIS documents..
.Health Questions:
Greetings safety experts.

Three year ago, now, The American Nurses Association passed this resolution to ban all Fracking of Oil . Please, read these copies of the nurses' Resolution..

...We insist you stop harming families, especially, in rail road towns, here. I will not review the devastating effects on Health that you have heard over and over.....but I have a few questions:

Re: Diesel Fumes:

Were they able to test for worsened air quality after the 1,100 gallon diesel spills into the Columbia River, last Friday? We can expect more diesel to pull more trains, right? Diesel evaporates and those train fumes....contain formadehyde....., arsenic..... and benzene, right?

...So, whereas, the Crude or Coal Transporters or OilFrackers will not help,

...Will each city need to construct special buildings with air filters, during dangerously high emissions, from many more trains?..Will they give out air filter masks? With ,newer, emissions control plans, will the trains pollute in a way that spreads out pollution over several days? Will trains stop running when pollution becomes too deadly? With new standards, In Louisiana and Texas, oil refineries pollute extra on the weekend if they.....had "Polluted too..little".....during week days.

Are you testing, now, for the toxins already present,from Coal, Oil and Diesel in our waters, air, and land, before adding more pollution trains here? ...Some politicians do not seem to know the contents of Crude Oil Tankers,so, I ask if you have or have you not explained what is in these cars to them? What should they tell their citizens? Should all with children leave here? Rail Roads used to buy the homes of people they forced out. Why not now?

Response GP667-1

As stated in Draft EIS Chapter 3, Section 3.2, *Air*, although regulations do not apply to mobile sources such as rail locomotives, an analysis of cancer risk from emissions of diesel particulate matter specific to rail transport related to the proposed action was completed for and presented in the Draft EIS. Draft EIS Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present analyses of cancer risk from emissions of diesel particulate matter related to the proposed action and cumulative projects, respectively. Final EIS Section 3.2 and Section 6.5.1.2 have been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analyses predict lower emissions; the level of increased risk is not considered significant.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP667-2

What alternative modes of transportation are now on standby, in case the traffic is blocked after train accidents. Extra helicopters to get patients to the Hospital Emergency rooms? Why doesn't a transport Corporation pay for help with that?

Response GP667-2

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms.

Final EIS Chapter 4 reflects additional mitigation measures proposed to address gaps in emergency preparedness planning and response capabilities. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

Comment GP667-3

Nurses want polluters to stop harming people and to pay for their health care when negligent! How will you help???

(541) 400-8935

Thank you
D Simone RN

Response GP667-3

Refer to the Master Response for Liability and Responsibility for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft and Final EIS. All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP668, **Sims, Kimberly**

Comment GP668-1

Oct. 6, 2015

Westway and Imperium Terminal
Services Expansion Project EISs
c/o ICF Internatinoal
710 Second St, Suite 550
Seattle WA 98104

RE: Expansion of Gray's [sic] Harbor Facility

To Whom It May Concern:

I am writing to express my opposition to the expansion of the Gray's Harbor oil terminal facility. Please deny this project. Washington State does not want to be a conduit for the transport of fossil fuels to Asia.

Thank you for your consideration.

Sincerely,
Kimberly Sims

9512 130th Ave NE
Seattle, WA 98115

Response GP668-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP669, **Sinclair, Sheri**

Comment GP669-1

I just finished reading the summaries from each area of concern within the EIS Draft. Two sentences provided the red flag. 1) A large oil spill, fire or explosion would likely include unavoidable and significant adverse environmental impacts. 2) The likelihood is low, however, the potential consequence to the environment and human health is high. Also, the graphs of how likely spills would happen and the adverse affects generally indicate that spills will happen especially small and medium spills. That in turn will likely reach water and will have an adverse affect on the environment and human health.

Response GP669-1

For the reasons discussed in the Master Response for Risk Assessment Methods, the figures depicting risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, have been removed in the Final EIS.

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion.

Comment GP669-2

How can the affected business in the Olympic Gateway Plaza sit idly by as their business will surely be affected by the increase in rail traffic. Which of these businesses support these projects and which object? It's already pretty easy from Montesano to head to Olympia to shop rather then Aberdeen. This would give us one more reason to do just that!

The increase in jobs, which in the long run, isn't many does not make these projects viable for our communities. The risks in all areas is just too high and too many. It is my understanding that many of the longshoremen that work at the Port do not live in Grays Harbor. This means they are not supporting this county with their income. How many of the currently employed longshoremen actually live in Grays Harbor? This whole plan is so short sighted.

Response GP669-2

Draft EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis,* addresses economic considerations, social policy implications, and the costs and benefits associated with the proposed action. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP669-3

A large spill and resulting explosion will happen, it's just a matter of when. Our environment and citizens are worth more then a few jobs and padding the pockets of a few highly paid administrators as well as the shareholders. Stop these greedy corporations from destroying our beautiful, abundant and unique land and waterways. Not to mention the short sightedness of continuing to rely on oil for energy. Building such infrastructure and taking such risks for a source of the past. Enough!! This EIS Draft must have cost a fortune for the State to put together. Who paid for it? I certainly hope it was Westway and Imperium and not us taxpayers!! Stop this madness! It is that which is most at risk that is at the core of what is valuable about this county. The county should be focusing on promoting all that we have to better the tourism industry here, rather then put all that we have at risk with these projects. NO CRUDE IN GRAYS HARBOR!

Response GP669-3

A third-party contractor was hired to prepare the EIS. The City of Hoquiam administers the contract and the City and Washington State Department of Ecology oversee and direct the contractor's work. The cost of the analysis, document preparation, and public outreach activities are paid by the applicant.

GP670, **Skinner, Cate**

Comment GP670-1

My name is Cate Skinner and I am the station manner of KXPB radio in Pacific Beach.

As human beings and adults, it is our moral responsibility to leave this planet habitable and healthy for our children and our grandchildren. How do you people sleep at night knowing full well that at some point, if this project is approved, our harbor will experience a major crude oil spill? No more crabbing, no more fishing, no more clam digs. No birds migrating will stop at Bowerman Basin because it will be spoiled, too.

No tourist will visit because our beaches will be covered in oil and dead birds from the Strait of Juan de Fuca to Oregon. My question for you is: How do you look your children and grandchildren in the eye when they ask you, Why did you allow this to happen? I won't wait for an answer, but your children and grandchildren will.

Response GP670-1

Comment acknowledged.

GP671, **Skinner, Kate**

Comment GP671-1

My name is Kate Skinner. I am station manager for KPSB radio in the Pacific Beach. And as human beings and adults, it is our moral responsibility to leave this planet habitable and healthy for our children and our grandchildren.

How do you people sleep at night knowing full well that at some point there will be a catastrophic accident? No more crabbing, no more fishing, no more clam digging, no birds migrating will stop at Bowerman Basin because it will be fouled. No tourist will visit our pristine basin because it will be covered in oil and dead birds.

My question for all of you is how do you look your children and your grandchildren in the eye when they ask you why did you allow this to happen? I don't expect an answer, but they will.

Response GP671-1

Comment acknowledged.

GP672, **Skinner, Wayne**

Comment GP672-1

We are the people who oppose these oil terminal projects. Your EIS predicts one major accident or incident every seven years. Common sense says such frequency is unacceptable.

Also, the EIS predicts a 30 to 50 percent chance of 6.0 or greater earthquake within a 30-year span, unacceptable, and with consequential tsunami and liquefaction.

We are the people who ask you to protect our oceans, our rivers, our livelihoods, our vitality, and our spirit. Help us and the next seven generations to prosper. Do not permit these projects.

We are the people who subsidize the Port of Grays Harbor, 2.3 million in 2015. We generate eight billion dollars in the fishing and marine industries. We subsidize the railroads and the cars still derail. We are the City Councils of Elma and Montesano and Aberdeen who voted no to these projects.

Honor our voices and override the decision of three port commissioners and the Hoquiam Permit Department, respect us and Grays Harbor.

Submitted by: Wayne Skinner, PO Box 22, Chehalis, Washington 98535. Phone: 360-580-3290.

Response GP672-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP673, **Smith, Al**

Comment GP673-1

My name is Al Smith. I'm a Wishram Valley resident. I'm also a member of the Grays Harbor County Marine Resource Committee. My rebuttal statement for this evening's event regarding the Westway and Imperium expansion projects are as follows:

Damage payment. In an event of a spill, who pays when a responsible party goes bankrupt and what is the ceiling payment? In your economic summary, you neglected to mention the approximate loss of $140 of revenue per annum to this county in the event of a oil spill. The slow, cancerous demise of the entire community in the event this happens is daunting at the very least.

The Gulf of Mexico is one of the many pilot demonstrations of what crude oil will do to an aquaculture system, say nothing for what it will do to the human community long-term.

Response GP673-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP673-2

Your failure to talk about how you plan to fight an oil fire is alarming to this retired 40-year volunteer. Your failure to show a plan on how to remove EMS patients in a rail-blocked facility blows me away.

I find it odd that we have developed the technology to remove a heart from a human being and repair it, but do not have the technology or plan to stop a train and break it in half to allow EMS personnel to pass into the blocked area to save a life.

In closing, I will leave you with this coming to truth. As I speak, if we continue to burn ancient carbon and emit CO2, we are merely writing our own epitaph.

Thank you for listening and considering these remarks.

Response GP673-2

As described in Draft EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, increased vehicle delay from trains related to the proposed action would also increase emergency vehicle delay at grade crossings. Delays would affect emergency response times if an emergency vehicle was blocked at a grade crossing occupied by a proposed action train. The potential for the proposed action to affect emergency response would also depend on whether the dispatched emergency vehicle would need to cross the PS&P rail line and the availability of alternative routes if a train occupies the crossing at the time of the call.

Average vehicle delay would slightly increase compared to the no-action alternative at grade crossing between Centralia and Aberdeen. Vehicle delay at grade crossings in Centralia would be

greater; however because emergency response providers are located on both sides of the PS&P rail line, emergency response calls could be dispatched to stations that would not be blocked. The most significant vehicle delay would occur in Aberdeen from rail switching operations near Poynor Yard can block access to the Olympic Gateway Plaza and Port of Grays Harbor areas. Final EIS Section 3.16 reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

GP674, **Smith, Al**

Comment GP674-1

November 30, 2015

Mr. Brian Shay, City Adm.

City of Hoquiam 609 8th Street Hoquiam, WA 98550

Westway & lmperium Terminal Services Expansion Project EIS's c/o ICF International 710 2nd Street Suite 550 Seattle, WA 98104

Dear Sirs:

I first want to thank both parties for providing this opportunity, to speak on the terminal expansion projects.

With regards to the recently released DEIS on the installation and operation of a multi tank farm facility at the Port of Grays Harbor and Hoquiam, I want to re-emphasize to both parties of my continued opposition to this project.

The addressed parties in this letter should, by now, fully understand the reasons why it is not conducive to good environmental health to freight/truck, unload, install, and to operate a bulk crude oil terminal in Grays Harbor County. On points that concern this retired firefighter, I will try to be brief:

Again, and in past experiences of others, the petroleum industry has demonstrated a casual disrespect for the importance of first response issues. It is a foregone conclusion that EMS/training, and adequate location of fire suppression foam storage, in or near populated and unloading centers is paramount.

Your response to spill mitigation measures in the lower Chehalis River System was not specifically addressed to that waterway system. Rather it was presented to the national arena.

You did not address financial responsibility in the event of a major event. Who accepts responsibility when Westway or lmperium LLC files for bankruptcy following a major spill event? In brief, who compensates all of the financially affected businesses, and to what duration will they be paid for their losses? Further what is the ceiling of pay out to the affected businesses?

You did not specifically address the County of Grays Harbor population with a relief plan following a major spill event that will cause irreparable damage to our Chehalis estuary. Bear in mind, 30+ percent of Grays Harbor County's revenue comes from the maritime industry.

Response GP674-1

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP674-2

Your persistence in building these projects on a known liquefaction zone coupled with the close proximity of the Cascadia Subduction zone, has provided this writer nothing more than a sense of distrust in your consultants and engineers arrogance.

Response GP674-2

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP674-3

Your public statement at a recent Aberdeen City Council meeting that you will provide 100's of jobs, is seriously questioned when taking into account the current revenue dollars provided Grays Harbor County from our fisheries industry which is so reliant on a healthy ecosystem.

Response GP674-3

Draft EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, addresses economic considerations, social policy implications, and the costs and benefits associated with the proposed action. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7.

Comment GP674-4

In the event you succeed in locating crude oil storage facility (s) in Grays Harbor, what plan is in place to address foreign water ballast disposal in our waters due to an increase in shipping traffic? It is unreasonable to assume bulk oil tanker ships will discharge ballast ten miles or more out of port

during heavy storm events. The possibility of invasive species in ballast water has been demonstrated in every international port around the world.

Response GP674-4

Draft EIS Chapter 3, Section 3.3, *Water*, Section 3.4, *Plants*, and Section 3.5, *Animals*, describe potential ballast water impacts and the regulatory requirements to reduce these impacts. Section 3.4.7.1, *Applicant Mitigation*, and Section 3.5.7.1, *Applicant Mitigation*, identify mitigation measures to further reduce potential impacts.

Comment GP674-5

To paraphrase an August 31,2015 letter from Quinault Indian Nation's, President Fawn Sharp: "It is abundantly clear to us, and to the non-tribal citizens who have joined us in this opposition, that the expansion of Bakken and crude oil traffic is not safe , nor is it in the best economic or environmental interests of our region. This is an area dependent upon healthy natural resources which are jeopardized by these proposals,"

She goes on further to state the track record of the past and current shipping and transportation infrastructure: "We are well familiar with the dismal and tragic record of train accidents and oil spills in this country and in Canada and we want no part of it. Our land, our fish, and our wildlife and our water are far too precious to us to just let this happen without a fight."

In closing, a large number of Grays Harbor residents have opposed these projects and forcing this issue upon us under the guise of long term jobs is very misleading.

Thank you for your time and consideration in the above comments. Respectfully submitted,

Al Smith, Resident Wishkah Valley

Response GP674-5

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP675, **Smith, Jeff**

Comment GP675-1

November 9, 2015

Westway and lmperium Terminal Services Expansion Projects EISs c/o ICF International 710 Second Street, Suite 550 Seattle, WA 98104

Dear ICF International,

Thank you for this opportunity to provide comments.

I am very concerned about climate change, and expanding the oil terminals at the Port of Grays Harbor Terminal I is absolutely the wrong way to go. You're going the wrong way!

In the Northwest we are experiencing shorter winters, less snow, less water in our streams and rivers, more and more extreme forest fires. Our ways of life are changing, and we know, if we don't

radically reduce our reliance on carbon-intensive fossil fuels, things will only get worse. In fact, if we trigger the tipping points by altering our arctic ecosystem, we will threaten the very survival of people on this lovely planet.

It's wrong to cause catastrophic climate change. It's wrong to profit from the resulting environmental and social wreckage.

This is why we need to move rapidly away from investing in the obsolete fossil fuel infrastructure as represented by expanding the existing bulk liquid storage terminals located at the Port of Grays Harbor Terminal 1.

It is unacceptable to make decisions based on climate change denial and obfuscation as practiced by Exxon and others in the oil industry. Like those planning this expansion of oil infrastructure, Exxon knew that its fossil fuel developments would make the climate change, yet, for more than 30 years, they denied this knowledge. We can no longer afford this denial

Instead, Americans must invest our hard-earned capital in renewable energy.

Oil companies want to use the Gorge as a giant oil-by-rail pipeline and make Washington State their hub for transporting, storing, and exporting Bakken crude oil and tar sands oil. The Grays Harbor oil-by-rail export terminal (together with two terminals in Vancouver) would transport 25 million gallons of volatile Bakken crude oil in unsafe rail cars every day through the Gorge. That's 55 fully loaded, mile-long trains every week. Many of these trains will bisect my town, Missoula, Montana.

The cumulative impacts of these projects and explosive nature of this crude oil threaten the safety of my fellow citizens, the millions of people along the rail lines. It's time for people of conscience to resist this new fossil fuel infrastructure. Our children and grandchildren are speaking to us. Please listen. Please say no to expanding the Grays Harbor Terminal 1.

Sincerely,

Jeff Sm1th 105 Channel Drive Missoula, MT 59804

Response GP675-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Draft EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, *Climate Change*, describes the projected impacts of climate change in the Pacific Northwest. Final EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport from likely source to furthest likely destination, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively.

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP676, **Smith, Joyce**

Comment GP676-1

Please do not go through with this proposal!! My whole life I have wanted to explore and enjoy the southwestern part of Washington. Now that I have finally reached the age that I can take the time to do so, you threaten to take it all away with a horrible accidental oil spill. With the increased risk of tsunamis, earthquakes, and terrorist acts, it is not a question of "if" it will happen, but "when" it does happen. If this were our last option at energy, then I would say, yes, but it is not. We have so many other options for energy. We do not NEED to send this oil out of the country. If we must drill it here, then let us refine it where it is drilled and use it as close to that area as possible, to lessen the possibility of disastrous results. We do have other options. Let us keep the most dangerous options for last, and enjoy our waters and lands until then.

Response GP676-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP677, **Smith, Joyce**

Comment GP677-1

I strongly oppose shipping crude oil from the Port of Grays Harbor. The environmental risks on the rail line and facilities so close to places like the Gateway Mall, an active fishery, and the National Bird Sanctuary does not make sense. The threat to our estuary, beaches, fishery, shore birds, and the local economy is simply not worth the risks involved and certainly not to encourage the extraction and shipment of bakken crude or other fossil fuels. Biodiesel already shipped from our port presents too great of a risk already given the seismic nature of this area. Please deny permits to move forward with these projects.

Response GP677-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP678, **Snyder, Jeff**

Comment GP678-1

Good evening. I'm Jeff Snyder. I'm from Olympia. I think it was 25, 26 years ago I spent three days out here in Ocean Shores picking up dead birds in an oil spill that happened with the barge. I didn't know if any of you remember that, but it was the worst thing that I've ever experienced in my life.

Opening of the beaks of birds and trying to clean them out with a stick so they could breathe, tagging dead sea lions, their whole heads were covered in oil, watching birds turn and run away. Cormorants running away from us because we were trying to capture them and put them in buckets. We were capturing them in blankets taking them to the cleaning areas in Ocean Shores.

And we brought back -- between the three of us we brought back probably 100 birds, dead, in plastic bags. And when we got back and we were collecting them all we asked what do you want us to do with them, and they said put them in the truck. And it was a refrigerated truck and it was three quarters of the way full of dead birds.

I had to tell them the location of the two dead sea lions, and the harbor seal, and a number of other animals, a dead eagle.

And you tell me if it's worth it. And that's all I ask. Until you're out there cleaning those animals and picking up the dead bodies, I don't think you understand what can happen. And it will happen. It's not an if. It's going to happen.

Thank you.

Response GP678-1

Comment acknowledged.

GP679, **Soares, Jared (Earth Economics)**

Comment GP679-1

The proposed Westway and Imperium Expansion Projects puts local residents and county resources at risk of damages from spills and derailments and should not be approved. The broad effects of increased crude by rail throughout Grays Harbor County have not yet been fully explored.

Economic and environmental impacts have been examined separately, and the relationship between a healthy ecosystem and a thriving economy has been largely ignored. Yet healthy ecosystems are crucial to the health of the economy. The county's manufacturing industry is driven by the availability of naturally occurring raw materials. The natural landscape of Grays Harbor provides a wide range of ecosystem services to the agriculture, timber, and shellfish industries. These services are often unquantified and thus undervalued. Maintaining healthy ecosystems ensures the availability of fertile soils, wood products, shellfish, and fish supplies in the county. Grays Harbor contains 60,000 acres of farmland that produce over $20 million in revenue. The county is also one of the largest producers of timber and shellfish products in Washington State. 88% of Grays Harbor is renewable forestland, and the county produces 12% of the state's timber. Additionally, the natural environment attracts over 7.5 million people for recreation and tourism activities each year and supports nearly 10% of the county's employment. The natural environment creates the landscape that allows these industries to thrive. Earth Economics conducted a nearshore ecosystem service valuation of the direct and indirect benefits of healthy ecosystems to local residents. The study estimated the total worth of Grays Harbor's nearshore ecosystems to be between $313 million and $3.1 billion dollars per year. This value does not take into account inland ecosystems. The proposed projects in Grays Harbor would greatly decrease the value of local ecosystems and damage critical industries that depend on healthy waterways and forestland for production.

Response GP679-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based

on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values.

Comment GP679-2

Regarding oil spills, the risks and the total damages incurred may be greater than stated. None of the damages within the DEIS include information about ecosystem services, thus the overall damages from a derailment are greatly underestimated. Healthy ecosystems provide the necessary inputs for agriculture, timber, fish, and shellfish industries to thrive. A single oil spill near Grays Harbor Bay could destroy the shellfish, timber, fishing, and agricultural industries throughout the county. The jobs added by the proposed projects do not compensate for the loss of industry in the case of a train derailment and subsequent leak or spill. In 2014 alone, there were 1,193 oil spills in California, Oregon and Washington. This number may be low as many spills and leaks go unreported. Of the reported spills, 15 dumped over 10,000 gallons of oil. Equipment failure was the leading cause of spills (55%). The Northwest region averaged 9 freight train derailments per month (1 derailment every 3 days). Many of the materials to be handled under the proposed action are flammable, increasing the risk of explosion, contamination of waterways, and destruction of natural resources. The Washington State Marine and Rail Oil Transport Study recommended the state hold over $22 million for an oil spill prevention and preparedness program. The frequency of derailments and subsequent damages demonstrates our vulnerability to a catastrophic train derailment. The proposed projects will greatly increase the risk and, consequently, the cost to insure local stakeholders against damages. The proposed actions increase the risks of an already dangerous industry. The estuary of Grays Harbor depends on the natural resources that surround it. The damages from an oil spill are underinsured and underestimated, putting much of the financial and environmental impacts on local taxpayers. The proposed projects leave local residents and industries more vulnerable to train derailment and spills.

Response GP679-2

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The approach to the analysis of the risk of oil spills is to consider different potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms, including potential impacts on biological and other natural resources that support fisheries, shellfish, and other industries.

Final EIS Chapter 4 reflects additional mitigation measures proposed to address gaps in emergency preparedness planning and response capabilities. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances of an incident, the environmental impacts could be significant.

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP680, **Soden, Mary**

Comment GP680-1

Without dignity, of course people are powerless. Strip the land or the person of dignity and you can direct and scheme you wish against them or it, with impunity and with the best of motives. To some this kind of efficiency is a modern technique, lamentable but not evil. For others it is a debilitating degradation, a loss of integrity and spirit that no kind of economic well-being can every justify." Barry Lopez in ARTIC DREAMS. I have seen fires in the Columbia River Gorge nearly ever year since I have lived here, 25. Many are caused from railroad cast outs, sparks and heat. This narrow funnel through the Cascades will not be livable for human beings if you have your way. There is a sickness in men's minds no matter how educated they are, and how willing to corrupt themselves, that is reaching insanity. This land of unique grandeur is not yours to play with. You will mangle the people and the land. Somewhere there are head men who are deciding to move all life backwards. Fire them and stop.

Response GP680-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP681, **Solomon, Laurie**

Comment GP681-1

There are no mitigation measures in place for potential (and historical) oil spills into the ocean or the Columbia River. As recently as 2013, an explosion in Quebec did massive damage and cost many lives. Prior to the Exxon Valdez spill, in 1988, 231,000 gallons of oil spilled into the ocean near Gray's Harbor with devastating consequences to wildlife and fishing for quite some time.

Response GP681-1

Comment acknowledged.

Comment GP681-2

Please don't allow 25 million gallons of crude oil to be transported along the Columbia Gorge on a daily basis. We need to be focusing on using renewable energy, not using our resources to continue to fund oil companies to deplete oil reserves and destroy the planet. Thank you for your consideration of my comment.

Response GP681-2

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP682, **Soman, Michael**

Comment GP682-1

I am a physician and member of Washington Physicians for Social Responsibility. My comments come from a public health perspective. Risks: Tsunami Risk to Terminals: The oil tanks are at risk of being dislodged, spilling contents, and potentially catching fire due to a tsunami triggered by an earthquake along the Cascadia subduction zone. Research documents a major quake at the Cascadia zone has a 30% chance to occur within the next 50 years – modeling from WA State Department of Natural Resources indicates that Hoquiam and Aberdeen are in a tsunami inundation zone. Yet the DEIS states, "current design standards do not require consideration of tsunami risks." Applicants cannot mitigate the impact of tsunami waves of 20 to 100 feet.

Response GP682-1

Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events.

Comment GP682-2

Vehicle Traffic Delays Unavoidable: Long delays at rail crossings present major and immitigable consequences for emergency services. Aberdeen is likely to be the at-grade crossing most impacted by delays. Complete blockage will occur. since expected delays will be 35 minutes per train several times a day, this will dramatically affect an EMS system where outcomes are dependent on response times of less than 10 minutes. These delays will be a matter of life and death.

Response GP682-2

Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

Comment GP682-3

Projects Will Exacerbate Air Pollution: DEIS states, "Increased rail traffic would almost double emissions of criteria pollutants associated with rail transport in county." Onsite operations would release toxic pollutants. Pollutants associated with these projects increase risk of cancers, are associated with lower infant birth weight and increase respiratory death; contribute to impaired

pulmonary development for infants and children; increase the risk of asthma; contribute to neurodevelopmental disorders; and increase risks of lung disease, heart attack, stroke, systemic inflammation, and overall risk of disease and mortality.

Major Train Accidents a Foregone Conclusion: Recent history shows that train derailments are common. U.S. DOT analysis predicts that oil and ethanol trains will derail on average 10x per year during the next 20 years. These derailments will be costly in lives and in dollars. Crude oil coming into Grays Harbor is volatile and flammable Bakken oil, making train transport more dangerous than in the case of other crude oils. In addition to health risks from fires (including burns and smoke inhalation), rescue and cleanup crews face toxic exposures to crude oil.

Response GP682-3

Final EIS Chapter 4, Section 4.7, *Impacts on Resources*, has been revised to more fully describe potential human health impacts from oil spills, fires, and explosions.

Comment GP682-4

Oil Spill Risks Understated: Oil spills during transport and handling of crude oil over land and water are likely. The DEIS's claim that a medium pipeline or storage tank spill is predicted to occur once in 1,100 years and a large spill once every 22,000 years greatly underestimates the probability of an accidental spill – whether at the port or during a vessel accident. DEIS suggests that medium to large spills during rail transport are moderately to highly likely, and will have a moderate to severe impact. Who would consider this an acceptable risk? Health impacts include neurotoxicity, cancer, lung disease, loss of cognitive function, and endocrine disruption. Contamination of Water: A crude oil spill off Washington's coast adds risk from contaminated seafood. Toxins accumulate in seafood increasing risk to humans who eat seafood. Oil spilled during a derailment threatens drinking water near rail lines. Spills would threaten wells in Spokane, Chehalis, Centralia, Aberdeen, Olympia and Hoquiam Any Risk of Fires and Explosions Presents Serious Risk: Air pollution from fires is a major public health threat. Trains and terminals would be located within population centers, putting residents at risk. chance of associated spills and fires.

Response GP682-4

Refer to the Master Response for Risk Assessment Methods for a discussion of the assumptions, data sources, and methods used in the analysis of risks. Additional information on the risk assessment is provided in Appendix M, *Risk Assessment Technical Report.* Final EIS Chapter 4, Section 4.7, *Impacts on Resources*, has been revised to more fully describe the human health impacts that could occur as the result of an oil spill, fire, or explosion.

Comment GP682-5

Projects Contribute to Longer-Term Injuries from Climate Change: Climate change is the largest emerging health threat of this century. These projects release greenhouse emissions that contribute to climate change. They also facilitate emissions from the end-use of the crude oil. We can't afford that.

Response GP682-5

Comment acknowledged.

GP683, **Sommers, Louis**

Comment GP683-1

My name is Louis Sommers. I'm a Westport city council member, member of the Washington Dungeness Crab Fishermen's Association, and I've been a fisherman for 40 years. Westport, Grayland, Hoquiam rely heavily on tourism, charter fishing, commercial fishing on the oyster beds and clam beds. We have over 3,000 families live up on our south coast.

When I was a fisherman—when I was a deckhand in the early '80s, we had an oil spill outside of Grays Harbor. It was only 216,000 gallons, but I remember that day like it was yesterday. I remember seeing dead birds floating on top of the water and cleaning buoys.

It took us months to clean buoys. There's 60,000 crab pots out there in the ocean and 120,000 buoys. And it took us over three months to clean them buoys. And it was very devastating to the crab fishermen and our crab. It affected everybody that lived in Westport.

And if we have a spill like this, it will devastate everyone that lives on the coast: Ocean Shores, Westport, Grays Harbor, Hoquiam. I'm opposed to this oil by rail.

Response GP683-1

Refer to the Master Response for Purpose and Focus of the EIS and the Master Response for Geographic Scope of the EIS for additional information about the scope of the EIS.

GP684, **Sowers, Jeff**

Comment GP684-1

Hi. My name is Jeff Sowers. I'm a teacher at East Grays Harbor High School in Elma, Washington, in the blast zone. I'm here today with some of my students who go to school in the blast zone.

The public needs to know what the real risks of this are. And I know when I looked at this Environmental Impact Statement that was the first thing that came to my mind are, what are the real risks in terms of hard numbers that we are really looking at with this proposal.

And so I went looking for that in this rather thick, impenetrable and opaque document, and I did find them. They were there. And I was shocked. Once in 11 years it's predicted that there would be a spill from a collision or derailment resulting in a 10,000-gallon spill likely to reach water, having an impact, a severe environmental impact.

Once every 11 years. And once in every 45 years a spill in a vessel collision in the harbor resulting in a spill of 105,000 gallons with a severe environmental impact. Once in every 43 years for loading, a 10,000-gallon severe environmental impact.

If you add all those together you get a predicted once every seven years a medium to large spill with a severe environmental impact. In seven years.

So based on this report, within seven years we're going to have a serious incident in Grays Harbor County. And once you -- I mean, it's like wow, how can anybody approve something like that. That's insane, that if you can predict within seven years there's going to be this serious incident.

So I went and talked to Brian, I said, Brian -- you know, he's in charge of the City of Hoquiam and part of the process is approving these permits. I said, Brian, how could you approve a permit for -- a shoreline permit where you knew that this would happen? He said that doesn't say that in there. So he didn't even find this information in this document. So I would just urge you to make it more transparent so the public can see what the real risks of these proposals are.

Response GP684-1

As discussed in the Master Response for Environmental Health and Safety and based on the risk assessment in Draft EIS Appendix M, *Risk Assessment Technical Report*, the analysis of risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, evaluates the likelihood of different spill sizes associated with terminal (onsite) operations, rail transportation, and vessel transportation separately. The risks across these operations are not combined in the Draft EIS because of differing regulatory and design requirements described in Chapter 4, because the cause of an incident involving the facility or rail or vessel transport would likely be different, and because the proposed facility, rail line, and vessel transport corridor are physically separated.

The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

GP685, **Spalding, Shelly**

Comment GP685-1

Hi. My name is Shelley Spalding. I have lived in the Elma area for 25 years. And I am very concerned about the high level of danger that their oil transport brings to Northwest communities and waterways.

Accidents impact lives, homes, schools, jobs, drinking water, and so much more. Our communities cannot afford an oil spill or explosion. And for these reasons I urge Ecology and the City of Hoquiam to use this analysis in the Draft Environmental Impact Statements to reject these oil terminal projects. Thank you.

Response GP685-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP686, **Speltz, Greg**

Comment GP686-1

My comments relate to both the Westway and Imperium Draft EISs.

Oil and oil shipments are a major concern of our times. Unfortunately, in the name profits we have polluted the water, the air and often the earth itself - our common heritage. It would be [illegible] immoral to further endanger sloppy [?] coal at Grays Harbor in the name of "progress" This game of chance we cannot afford to play.

Response GP686-1

Refer to the Master Response for Purpose and Focus of the EIS and the Master Response for Geographic Scope of the EIS for additional information about the scope of the EIS.

GP687, **Spike, Wilma**

Comment GP687-1

I'm writing today with my concerns about shipping oil through Grays Harbor. The "bar" leading into Grays Harbor has the distinction of being the second most dangerous bar to cross on the Washington coast. To take tugboats pulling barges carrying oil across this bar is totally stupid! There was one spill in the mouth of the harbor a few years ago, and people have not forgotten. It cost 68,000 birds their lives, plus ruined the beach for clams, tourists, the crab business, etc. In addition to this, we are in a major earthquake zone, so if that were to happen – and they keep saying it's not if – it's when – what happens when the sand the terminals are built on liquifies?? And then there is the threat of tsunamis. They could simple take the terminals right out to sea!

If any of this were to happen here – and it surely will – Ocean Shores can put away their tourist ads, because no one would want to come. Westport would lose it's fishing business, and the people earning their living catching the fish, crab, harvesting oysters, digging and selling clams, may as well move on. Their income would be gone! The seabirds who rest here every year, and do that in only I believe 3 places on earth, where would they go???

And why are we even thinking of doing this?? Big oil is the only one who benefits in this little plot. The companies keep saying it will bring in jobs to this area. This had been proven to be a lie. The few jobs that may end up here certainly do not make up for the losses that will certainly happen from derailment and ocean spills. Or from a natural disaster.

I would certainly hope after reading all the concerns of residents in this area and the whole state, that you see that to even consider letting this happen here is almost laughable. It's maybe the most UN-suitable place to bring the dirty and dangerous crude oil through.

Do the right thing. STOP OIL TRANSPORT IN GRAYS HARBOR

thank you,

Wilma Spike
Ocean Shores, WA
360-289-2553

Response GP687-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures that would reduce the likelihood of a spill

reaching the environment and the potential impacts of an incident As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP687-2

While I have many concerns about the transporting of oil within Grays Harbor, one that is personally high on my list is the health hazards that come with this.

One reason I moved to Ocean Shores was for the clean air. I have lung problems and am the best I can be with the ocean air. The pollutants that will be released from the railroad emissions, the onsite terminals, and the vessels taking the oil out of Grays Harbor would necessitate my moving from this area. There are no regulations at this time to limit these emissions. I am only one of how many residents that could no longer live in our chosen homes and cities.

There also is the risk of increased cancer, including breast and lung cancer. There is the threat that children will suffer from impaired pulmonary development that results in other, life threatening conditions. These are our citizens of the future. Can they not have that future unless they move out of here?

Did we learn nothing from Hanford? People in the small towns surrounding that plant have had a very high percentage of cancers, which is directly linked to the nuclear operation.

When we can foresee the results of transporting, storing, and shipping crude oil out of this beautiful county, why in the name of God, would we let this happen????

I strongly urge you to stop this movement and save the Pacific Northwest for the future generations.

Response GP687-2

The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, would reduce emissions of criteria and toxic air pollutants from onsite stationary sources. Draft EIS Chapter 3, Section 3.2, *Air*, presents emissions estimates of criteria and toxic air pollutants from onsite operations. Considering background concentrations, onsite emissions of criteria pollutants would not cause an exceedance of national ambient air quality standards. Emissions of toxic air pollutants related from onsite stationary sources would be below the state thresholds identified in WAC 173-460-150. As described in Draft EIS Section 3.2, these emissions are subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping for onsite stationary sources.

Draft EIS Chapter 3, Section 3.2, *Air*, presents an analysis of cancer risk from emissions of diesel particulate matter from rail transport related to the proposed action. Final EIS Section 3.2 has been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analysis predicts lower emissions; the level of increased risk is not considered significant.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP688, **Stanoway, Ed**

Comment GP688-1

Hi, Ed Stanoway. I'm a new resident of Aberdeen. I am an entrepreneur. I am a local musician and I'm a homeowner here. And we have all listened to people tonight testifying about the environmental impact. People testified about the impact of the quality of life. We've listened to people testified about their tribal concerns.

I'd like to introduce you to a term. This term is cognitive dissonance. Cognitive dissonance is the mental stress or discomfort experienced by an individual that holds two or more contradictory beliefs. Boiled down to a nutshell, what it is is a person knows something is not going to work out for them or in their favor, but they engage in that behavior anyway.

A smoker has one more pack of cigarettes. They deny the cancer studies until they're diagnosed and then they ask, Why me. You have the opportunity here tonight to decide whether this community asks, Why us. You know what is happening. We have all seen the derailments. We have all seen the fires and explosions. You have heard the horror. You have a choice tonight.

Now, is there anybody up here willing to look these people in the eye and tell them that their lives do not matter? If you do, I want you to do that right now. We're all waiting.

Response GP688-1

Comment acknowledged.

GP689, **Stearns, Christopher**

Comment GP689-1

My name is Christopher Stearns—Chris Stearns. And I'm the PUD commissioner for Thurston County. I'm just here on behalf of myself due to my professional expertise in working on shoreline issues throughout the state of Washington for the Department of Fish and Wildlife Habitat Program.

In my past work, I've done a lot of shoreline work on forage fish, specifically herring and smelt. And I'm concerned that any significant oil spill ending up in the Grays Harbor estuary would impact herring runs that go into the southern part of Grays Harbor currently and spawn on the saltbush, which is a rather unique attribute.

Most of the herring in the state do not spawn on saltbush, so it's probably a new unique population only found in Grays Harbor of herring that are spawning there. And that's only been found in the last 10 to 15 years. People were not aware of it before and it just recently came to the attention of the Fish and Wildlife people that were working throughout the state on identifying where all the herring are. So that's one concern I have.

Response GP689-1

Draft EIS Chapter 3, Section 3.5.4.3, *Grays Harbor*, identifies the Pacific herring's use of eelgrass beds for spawning. The impacts from an oil spill on eelgrass are, in turn, referenced in Chapter 4, Section 4.7.1.3, *Animals*, which also acknowledges the potential for disruption of the estuarine and marine food web from oil spills.

Comment GP689-2

The other concern I have is the short line for the rail connection to the Port of Grays Harbor comes through the southern part of Thurston County. And a lot of the bridges and rail crossings have not been upgraded for the kind of traffic that is being contemplated to move oil throughout this part of the state.

Generally, short lines aren't as maintained as well as main connections, where most of this traffic normally goes through our state. And I'm concerned about spillages and how it would impact the fisheries on the Chehalis, which are in a fairly good state. I was once a fisheries biologist for the Chehalis tribe. And significant winters still had runs as well as spring—one of the last remaining wild spring Chinook runs in the state. That is in a healthy state and these should be protected.

So I'm concerned about those runs being impacted by these oil shipments because they have so much volatile organics in them.

Response GP689-2

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP689-3

And they are also a serious concern for most of the first responders who just are not well prepared for an accident if it were a car on this short line.

And as I said, some of it comes through my county as well as Grays Harbor County. And I just don't see that the line is capable of handling the traffic being proposed.

And that's, I guess, all I have to say on the matter, other than hoping that Ecology would take those into consideration. Thank you.

Response GP689-3

Draft EIS Chapter 3, Section 3.15.4.7, *Current PS&P Rail Line Capacity and Operations*, presents the results of the rail modeling analysis of the PS&P rail line capacity. Based on this analysis, the addition of 1.25 trains per day on average to baseline trips would result in approximately 4.25 train trips per day along the rail line, which is approximately one-third of the capacity of the line.

Final EIS Chapter 4, *Environmental Health and Safety*, has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency

response providers, and additional mitigation measures to reduce risks. Refer to the Master Response for Emergency Response and Planning Gaps.

GP690, **Steege, Theodore**

Comment GP690-1

Any initiative that furthers the use of fossil fuels should be denied. It is long past time to take extremely seriously the affect of pumping more greenhouse gases into the atmosphere.

Response GP690-1

Refer to the Master Response for Purpose and Focus of the EIS and the Master Response for Geographic Scope of the EIS for additional information about the scope of the EIS.

GP691, **Steinke, Alana**

Comment GP691-1

Asthma is a terrible disease. I know this, because I have it. Asthma can kill. I know this because, as a pediatric nurse, I was witness to this.

Washington's asthma rate is ranked among the highest in the nation. This includes both adults and youth. Nearly 100 Washingtonians have died from asthma each year. More than 5,000 each year are hospitalized.

Asthma also hurts our state economy. In 2010 Hospitals charged $73 million for asthma related hospitalizations. $4.8 million was charged to patients, $68.5 million to insurance providers, government sponsored programs and charities. $43.1 million was charged to Medicaid and Medicare. We also lost 4.3 million person-days of productivity. As a society, we also pay the cost for decreased student attendance.

One of the biggest contributors to asthma is outdoor air pollution. The World Health Organization stated that air pollution killed 7 million people in 2012. Diesel exhaust from the locomotives contains more than 40 toxic air pollutants, including benzene, arsenic, formaldehyde and NOx., as well as the deadly particulate matter.

The Natural Resources Defense Council estimates that as much as 3% of crude oil in each tank car leaks out into the air as it moves along the tracks; That's 900 gallons of toxic air pollution per car and each unit train is at least 100 cars.

The DEIS suggests that adhering to current regulations will mitigate any additional air pollutants from this project. The EPA has recently stated that the current federal limit on smog-forming pollution linked to asthma and respiratory illness "is not adequate to protect the public health."

Janet McCabe of the EPA said a new, stricter standard is needed to cut dangerous ozone pollution and prevent thousands of asthma attacks, ER visits, and premature deaths.

This increased rail traffic from this project would nearly double the emissions of pollutants from rail transport in the county. There are homes and recreational areas near the site that would be at risk.

Response GP691-1

The dominant air toxic emissions from rail transport are diesel particulate matter emissions from the burning of diesel fuel. Air dispersion modeling of diesel particulate matter emissions was conducted for the proposed action's rail activities between Poynor Yard and the project site, the area with the highest emissions along the PS&P rail line due to rail switching and unloading activities. Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present analyses of cancer risk from emissions of diesel particulate matter related to the proposed action and cumulative projects, respectively. Final EIS Section 3.2 and Section 6.5.1.2 have been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analyses predict lower emissions; the level of increased risk is not considered significant.

Comment GP691-2

The 59 mile area around Grays Harbor that was studied for this DEIS was woefully inadequate. The increased train traffic would affect everyone along the route from the Bakken, to Spokane, through the Columbia River Gorge and the many cities including Washougal and Camas where the trains run through town and next to schools.

As a retired R.N. with more than 40 years experience, I support the Oregon and Washington Health Care Professionals· Position Statement on Crude Oil Transport and Storage and I urge you to deny the permit for this project.

Alana Steinke, Vancouver, WA

Response GP691-2

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP692, **Steinke, Alona**

Comment GP692-1

Hello, my name is Alona Steinke. I'm from Vancouver. Asthma is a terrible disease. I know this because I have it. Asthma can kill. I know this because I have been witness to it.

Washington's asthma rate is rated among the highest in the nation. Nearly 100 Washingtonians die from asthma each year. More than 5,000 each year are hospitalized. That's a high cost to pay.

One of the biggest contributors to asthma is outdoor air pollution. Diesel exhaust from the locomotives contain more than 40 toxic air pollutants. It is estimated that as much as three percent of crude oil in each tank car leaks out into the air as it travels. That's 900 gallons of toxic air pollution per car.

The DEIS suggests that adhering to current regulations will mitigate any additional air pollutants from this project. The EPA has recently stated that current federal limits on smog-forming pollution linked to asthma and respiratory illness is not adequate to protect the public health.

That stricter standard is needed to cut dangerous ozone emissions and prevent thousands of asthma attacks, ER visits, and premature deaths. The 59 miles around Grays Harbor is woefully inadequate. The increase in train traffic would affect everyone along the route from the Bakken fields through all the communities where the train often runs through the center of town and right next to schools.

As a retired RN of 43 years, I support the Washington Oregon Healthcare Professional Physician statement on the crude oil transport and storage and I urge you to deny this permit.

Response GP692-1

Refer to Responses to Comments GP690-1 and GP690-2.

GP693, **Steinke, Don**

Comment GP693-1

To the consultants writing the Draft EIS for the proposed Westway and Imperium oil terminals in Grays Harbor by Don Steinke November 2015 Dear Consultants, Ecology and City of Hoquiam. In December of 2014, the Washington State Attorney General sent a letter to the Energy Facility Site Evaluation Council saying the Preliminary EIS for a different oil terminal proposal was deeply flawed. http://www.columbian.com/news/2015/oct/18/official-says-vancouver-oil-terminal-plan-deeply-flawed/ In June of 2015, the Energy Facility Site Evaluation Council of Washington told its contractor to rewrite the Draft EIS because it still did not meet minimum requirements. http://www.columbian.com/news/2015/jul/07/tesoro-savage-state-regulators-blast-each-other-ov/ On August 3, 2015, the EPA and the Army Corps of engineers said the Tesoro Savage plan doesn't pass muster. Have they looked at your plans yet? http://www.columbian.com/news/2015/aug/03/epa-oil-terminal-plan-doesnt-pass-muster/ We found at least 95 shortcomings in the DEIS for the Grays Harbor crude oil terminals.

You need to do a much more inclusive and accurate rewrite. How can the decision-makers make good decisions based on an incomplete and inaccurate report? The projects proposed by Westway and Imperium will have unavoidable and significant adverse impacts in every county the trains travel through. Nowhere in your Draft EIS do you mention that people might burn or die. Nowhere do you mention that oil trains are likely to spill, catch fire and explode in the extended area. Every statement you make in the EIS can be shaded to down play the risks or not. If the oil terminal will generate harms that cannot be mitigated, it is your responsibility to say so. If there is likely to be one non-yard derailment spill every 10 years, don't say the probability is low, say it is certain.

Response GP693-1

Final EIS Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. This section has been revised to more fully describe potential human health impacts. Final EIS Sections 4.4.3, 4.5.3, and 4.6.3 have also been revised to include additional mitigation measures to address risk related to spills, fires, and explosions. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local

jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant.

Comment GP693-2

Your Draft Environmental Impact Statement glosses over the impacts, particularly in the extended rail study area. Our communities have names and there will most likely be property damage, burns, loss of life, and oil in the river as a result of building the oil terminals in Grays Harbor.

Response GP693-2

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

Comment GP693-3

The probability of a derailment spill might be only 1 every 10 million miles which might be classified as low but when the project is likely to generate 44 million miles in 30 years, it would reasonable to declare the project is likely to generate 4 or 5 derailment spills in 30 years. We don't have the correct numbers, but you need to get them from the FRA.

Response GP693-3

Refer to the Master Response for Risk Assessment Methods for a discussion of the assumptions, data sources, and methods used in the analysis of risks.

Comment GP693-4

Significant property damage, loss of life, burns and oil in the river is almost guaranteed to happen and will be unavoidable. You computed the probability of harm for the last 59 miles of the route and we want you to compute that probability for the entire route. A million people who live, work, and drive near the tracks are at risk. Having 2 drunk drivers on the road doesn't mean it is OK to have three. We disagree with your use of the word "low" in this frequently used expression: "Although the likelihood of a large spill, fire, or explosion is low . . ." Either replace the word "low" with the word "high" or ask your consultants to do the math for the entire route and give us an actual number.

Please do a thorough job of evaluating the cumulative impacts on all the affected rail communities if all the coal and oil terminals are approved. I will send omissions and errors later.

Response GP693-4

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, acknowledge the potential for impacts in the extended study area, including the potential for increased risks, qualitatively for the reasons

discussed in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 has been revised to clarify the potential impacts.

Draft EIS Chapter 6, *Cumulative Impacts*, addresses cumulative impacts within the study area. Refer to the Master Response for Cumulative Impact Analysis and the Master Response for the Geographic Scope of the EIS.

GP694, **Steinke, Don**

Comment GP694-1

by Don Steinke November 2015 Dear Consultants, Ecology and City of Hoquiam. Addressing speed limits. Please make this a part of the public record. Please do a thorough job of evaluating the cumulative impacts on all the affected rail communities if all the coal and oil terminals are approved. How can the decision-makers make wise decisions if you withhold information from them? Include in the EIS the fact that the U.S. Rail Chief says the only way to prevent fireballs is to limit speeds to 12 mph. http://www.bloomberg.com/news/articles/2015-03-13/speed-limits-may-not-stop-fiery-oil-spills-u-s-rail-chief-says

Response GP694-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 further describes the potential risks associated with rail and vessel transport in this area. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Refer to the Master Response for Similar or Connected Actions.

GP695, **Steinke, Don**

Comment GP695-1

From Don Steinke Dear Consultants, Ecology and City of Hoquiam. About worst case urban scenario. If you don't do a thorough job of evaluating all the impacts, what recourse do we have? Your EIS needs to include the details of a worst case urban disaster. What is the worst case urban disaster involving oil trains headed to Grays harbor? A train derailed from the elevated tracks in Spokane in 1990, image attached. A train could derail next to the Boeing Drone factory in Bingen, or inside the Camas Paper Mill, or on top of the dike in Vancouver next to the condos and restaurants. http://beniciaindependent.com/wall-street-journal-federal-worst-case-urban-disaster-planning-for-oil-trains/

[Photo reviewed but not reproduced.]

Response GP695-1

Refer to the Master Response for Environmental Health and Safety Analysis for a discussion of the determination of risk scenarios considered in the EIS.

GP696, **Steinke, Don**

Comment GP696-1

From Don Steinke Dear Consultants, Ecology and City of Hoquiam. Re: video of an oil train explosion There have been at least ten oil train explosions. Brian Shay, Ecology, and the citizens need to know what an oil train explosion is like. The EIS needs to include this video. https://www.youtube.com/watch?v=4UnLUofco-0 Please make this comment part of the public record and notify me of action taken.

Response GP696-1

The commenter's comment [video] is part of the public record. The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP697, **Steinke, Don**

Comment GP697-1

From Don Steinke Dear Consultants, Ecology and City of Hoquiam. Re: Cost of major spills Please make this comment part of the public record and notify me of action taken. Please include an analysis of the worst case marine and land spills. Include the total cost, and who would pay if it happened.

The oil spill in the Kalamazoo River shut down the river for a year, and the clean-up cost has exceeded $1.2 billion. What were the economic impacts of those spills? Fishing is a big deal in Michigan and is also in the Pacific NW. Please ask some Coast Guard retirees to describe the impacts of a spill.

Response GP697-1

Refer to Response to Comment GP696-1.

GP698, **Steinke, Don**

Comment GP698-1

From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Economic impacts – building trades Please make this comment part of the public record. 1. The president of the National Building

Trades Association is also a member of the American Petroleum industry. The building trades association is a top down organization. Of course the building trades will speak in support of the terminals. They will support any project that promises union jobs. They'll get their money up front, but the community would be stuck with a dangerous and polluting industry for a lifetime. 2. The building trades spoke in support of the ill advised Satsop Nuclear power project. They got their money up front, but the shareholders and investors lost. 3. Infrastructure dictates destiny. The building trades shouldn't dictate the destiny of Grays Harbor. 4. The building trades are not allowed to care about climate change.

Response GP698-1

Comment acknowledged.

GP699, **Steinke, Don**

Comment GP699-1

Did you notify the city of Vancouver of comment opportunities? Did you notify the Vancouver Columbian? Notify all the newspapers in all the rail communities including Portland, Hood River, The Dalles, Idaho and Montana. Also notify all the city governments in those cities. If people don't know, how can they comment? If the Mayor of Washougal is willing to camp out for a week next to the tracks in protest, certainly his town newspaper should be notified. If the cities of Portland, Vancouver, Seattle, and Spokane have passed resolutions opposing oil trains going through Vancouver, then their newspapers should be notified. If you didn't notify those people, it seems you should and extend the comment period another 45 days. Also the subject line should more reader friendly -- such as Comment sought on Grays Harbor Oil Terminals involving oil trains traveling through your neighborhood. Please make this part of the public record and notify me of action taken.

Response GP699-1

Legal notices for the release of the Draft EIS, comment period, and public hearing were published in the *Washington State Register* (201504472 and 201504475) on August 31, 2015. Email notices were sent to the individuals, tribes, agencies, and organizations listed in Draft EIS Chapter 8, *Distribution List*. A Notice of Availability was published on August 27, 2015, in *The Montesano Vidette*, and a news release was issued on August 31, 2015. Notice of the public hearings and public comment period was published in the following papers: *Centralia Chronicle* and *Aberdeen Daily World* on September 26 and October 3; *Montesano Vidette* on September 24 and October 1.

GP700, **Steinke, Don**

Comment GP700-1

Please include in the EIS some personal stories of people who live and work in Oil Towns. For example, people who move here after driving the NJ turnpike from Newark to Carteret on a hot summers day say they can still smell it just by thinking about it. In Vancouver, Port Commissioner Elect Eric LaBrant writes: "I was down on the coast of the Gulf of Mexico to tour Texas oil towns. An oil terminal can only begin the slide toward altering the landscape, river, and quality of living here. There will be no other direction once it begins. City after city, the downtown core was rotten, a

string of abandoned buildings, boarded up businesses, and For Sale signs. La Marque, Texas City, Orange, Port Neches, Groves. The construction unions in Texas oil towns have been starved to death. And once they've got their foot in the door, big oil is as happy as any other corporation to break unions. The prosperity we're being offered is a poison pill."

Response GP700-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP701, **Steinke, Don**

Comment GP701-1

From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Labor Please make this comment part of the public record. Policy for the Building Trades is developed at the National Level in collaboration with big oil. The oil industry promises union jobs to construction workers in exchange for their visible public support. The Building Trades get short term benefit and then move on, leaving the community with a dangerous and polluting industry and an eventual brownfield. The Building Trades should not determine the destiny of a community. They spoke in favor of the nuclear power plants. They got their money 40 years ago for Satsop and the public and shareholders were stuck with a costly mistake. The Washington State Labor Council on the other hand is sponsoring an initiative to the people to put a price on carbon and use the revenue to transition to the green energy economy. There are far more jobs in renewables than in oil. Instead of sending billions out of state to multinational oil companies, we can use the money to build our own economy. http://www.wslc.org/00resolu.htm#28 It is doubtful that the Port will ever make much money on the deal. Bakken Crude and Tar Sands Crude is only profitable when the price of oil is high. It is likely that the shippers will shut down when the price of oil low. The price of oil is likely to be low into the future as Iran adds 1 million barrels per day and the C.A.F.É. suppresses demand.

Response GP701-1

Comment acknowledged.

GP702, **Steinke, Don**

Comment GP702-1

From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Special Interests Please make this comment part of the public record. It seems to me that the City of Hoquiam should be considered as a special interest. The City may look at the revenue for the City, and ignore the costs to the public in the rest of the state. Public officials are supposed to put State interest above Hoquiam interests. Oil trains will derail and catch fire. People will die. We are willing to accept the risk of death in a car accident, but we are not willing to accept the risk for a product we no longer need and which has so many other harmful impacts.

Response GP702-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP703, **Steinke, Don**

Comment GP703-1

From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Special Interests Please make this comment part of the public record. What will be the impact on insurance rates for properties near the rail lines?

Response GP703-1

Refer to Response to Comment GP696-1.

GP704, **Steinke, Don**

Comment GP704-1

From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Climate Change Primer Please make this comment part of the EIS. No scientist disputes the fact that CO2 is a greenhouse gas. No scientist claims that that nature recycles CO2 as fast as we put it into the air. Every national academy of science agrees that man is exacerbating climate change. The longer we continue business as usual, the more suffering we bequeath to humanity.

Response GP704-1

Comment acknowledged.

GP705, **Steinke, Don**

Comment GP705-1

From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Alternatives Please make this comment part of the EIS The auto industry has spent billions to design alternatives and they are here. The 2016 Chevy Volt hybrid has a range of 420 miles and can average 360 miles per gallon for a person driving 60 miles per day. It goes 53 miles on the battery before the onboard generator fires up to provide 42 mpg. The last 7 miles would use only 1/6 of a gallon. A owner drive 60 miles per day and go 360 miles on one gallon. The owner would save $30,000 worth of fuel in the life of the car. Norway plans to ban new cars which require gasoline, beginning in 2025. Every major automaker is producing a zero emissions vehicle.

Response GP705-1

Comment acknowledged.

GP706, **Steinke, Don**

Comment GP706-1

From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Tribal opposition Please make this comment part of the public record. Include the names of the tribes that oppose oil trains and terminals. The resolution from the Columbia River Inter-Tribal Fish Commission is attached. Lands Commissioner Peter Goldmark has a partial list. http://seattletimes.com/html/opinion/2025059962_goldmarkopedrail20xml.html

Response GP706-1

All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP707, **Steinke, Don**

Comment GP707-1

From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Resolutions of opposition Include all the resolutions of concern or opposition from all the communities that would be affected by the oil terminals. Get a copy from Rein Atteman of the Washington Environmental Council. rein@wecprotects.org The City of Vancouver also has on file resolutions from 13 neighborhood associations opposed to the oil terminal in Vancouver, but part of their opposition was related to oil train risk.

Response GP707-1

All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP708, **Steinke, Don**

Comment GP708-1

From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Lessons learned from Lac Megantic. Please include a description of the events that took place in the aftermath of the oil train accident in Lac Megantic. We're the fire fighters able to prevent the fire from getting worse? Did flaming oil come up in basement sewers? Has the town been rebuilt? How much did the accident cost? What lessons were learned in Lac Megantic?

Response GP708-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of

associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*. For information about how historical events were considered in the analysis of risks, refer to the Master Response for Risk Assessment Methods.

GP709, **Steinke, Don**

Comment GP709-1

From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Perceived risks Gramor Development was appointed by the City of Vancouver to build a $1.3 billion waterfront development on the Columbia River next to the train tracks. Gramor is concerned that the perceived risks of the oil trains would undermine the success of their project making it much more difficult to pencil out. Mayor Leavitt has said this project is preeminent to SW Washington and is intended to be a world class project. He is also concerned that he might not be able to get insurance. The taxpayers have already spent $50 million to get the property ready.
http://www.thewaterfrontvancouverusa.com/master-plan.html

Response GP709-1

Comment acknowledged.

GP710, **Steinke, Don**

Comment GP710-1

From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Projections of non-yard derailments 1. What is the non-yard accident rate for BNSF? 2. What fraction of the BNSF's non-yard accidents are derailments? 3. Based on BNSF's accident history, project the total number of non-yard derailments that the two terminals could be expected to generate in 30 years on the mainline round trip. http://safetydata.fra.dot.gov/officeofSafety/publicsite/summary.aspx

Response GP710-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail a transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS.

GP711, **Steinke, Don**

Comment GP711-1

From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Volatility of the oil Please include in the EIS

1. Why Bakken crude is more prone to ignite than motor oil?

2. A discussion of B.L.E.V.E. as it relates to oil train explosions.

3. A discussion of the process from spill to ignition to pool fire to BLEVE

4. An explanation of why Tar Sands Crude ignited and exploded in Ontario.

5. The number tank car derailment spills in North America since the beginning of 2013. Include tank cars carrying alcohol, propane, LPG, diluted bitumen, and other crude.

6. What is the vapor pressure of Bakken Crude.

7. What was the vapor pressure of the oil in the Lac Megantic oil train fire?

8. Are sparks rare around trains derailing at 25 mph?

9. What is the slowest speed at which an oil train derailed and caught fire. We believe it was 24 mph in Lynchburg VA

Response GP711-1

The term "explosion" used throughout the Draft EIS, and the assessment of the likelihood and consequences of explosion incidents, refer to boiling liquid, expanding vapor explosions (BLEVE), vapor cloud explosions (VCE), and other types of explosive events that could result from releases of crude oil. As discussed in Final EIS Section 4.5, not all spill events would result in a fire (ignition), and not all fire events would result in an explosion. The Final EIS proposes mitigation that would reduce the potential for oil spills, fires and explosions, but, as noted in Chapter 4, *Environmental Health and Safety*, mitigation would not completely eliminate the possibility of an incident. The approach and methods for analyzing risk of train oil spills, fires, and explosions in the Final EIS is discussed in more detail in Appendix M, *Risk Assessment Technical Report* and the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods, which includes information about how historical events were considered in the analysis of risks. Refer to the Master Response for Purpose and Scope of the EIS.

GP712, **Steinke, Don**

Comment GP712-1

From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Spills Please include in the EIS

1. The costs of the 20 worst oil spills in North America.

2. What fraction of the oil is recovered in a clean-up?

3. What fraction of Bakken crude is benzene, what are the health and environmental impacts of benzene, and what fraction of the benzene is recovered in a spill cleanup?

4. What would be the impacts of an oil spill on the sole source aquifers in Spokane and Vancouver?

5. What would be the impacts of an oil spill on the Chehalis aquifer?

6. How would tar sands crude be cleaned from the Columbia, Cowlitz, and Chehalis Rivers? It sinks.

Response GP712-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP713, **Steinke, Don**

Comment GP713-1

From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Crude Shrinkage Please include in the EIS

1. What percent of the cargo is lost between the wellhead and the refinery. We've seen industry reports of 0.5% to 3%. Power Point Presentation by Alan Mazaud, Energy Resources, Pennsylvania Rail Freight Seminar, May 23, 2013, p. 17.

2. Tell us about the use of infrared cameras to detect fugitive emissions from the tank cars. The Oregon rail inspector says he has heard hissing from oil tank cars. We've heard inspectors are not allowed to use infrared cameras and wonder how then can we adequately asses the health and safety impacts. One of our residents investigated.
https://www.youtube.com/watch?v=35uC1gLctnw

3. Approximately 1% of the fuel is lost from the tank cars due to evaporation. Is this a violation of the clean air act? Discuss the safety and health impacts. Scroll down to Crude Shrinkage.
https://rbnenergy.com/crude-loves-rock-n-rail-brent-wti-bakken-netbacks.

Response GP713-1

Most of the evaporative emission losses associated with rail tank cars transport occurs during the loading of the tank car. Evaporative losses during transport are minimal due to the low vapor pressure. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP714, **Steinke, Don**

Comment GP714-1

From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Greenhouse gas inventory Please include in the EIS

1. Please field-truth your models of methane emissions from oil fields. The old models are not reliable.

2. Your greenhouse gas emissions inventory needs to include the fugitive emissions between the well-head and the refinery.

3. Your greenhouse gases inventory needs to include the fact that 20% of the gas is flared in the Bakken compared with less than 1% nationally.

4. Also include in your inventory the flared or sold gases removed from the crude to reduce its vapor pressure.

5. Discuss incomplete combustion from flaring.

Response GP714-1

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively, in the context of emission inventories and reduction goals. Final EIS Section 3.2 and Section 6.5.1.2 have been revised to include emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion, the Master Responses for Purpose and Focus of the EIS, and the Master Response for Geographic Scope of the EIS.

GP715, **Steinke, Don**

Comment GP715-1

DEIS GH From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Malfunction of Vapor Combustion Units Please include in the EIS

1. A discussion of the reliability of the vapor combustion units and this recent incident. ANACORTES — Shell Puget Sound Refinery was fined $77,000 on Nov. 10, 2015 for a February incident that brought numerous complaints of an odor. The state Department of Labor & Industries fined the refinery for two violations relating to improper operation of a flare, a gas combustion device that burns off substances that shouldn't go airborne. The flare also prevents fires or explosions. The more serious violation alleges the refinery skipped decontamination steps when shutting down a flare for maintenance. Skipping those steps exposed workers to toxic substances, according to Labor & Industries. The department cited that as a "willful violation" — the most severe — and docked the refinery $70,000. The second violation was a $7,000 penalty for giving workers the incorrect flare shutdown procedure. Swinomish Indian Tribal Community members were reportedly sickened by the odor. Two people were hospitalized, according to Swinomish Chairman Brian Cladoosby. Source: http://www.goskagit.com/all_access/shell-fined-for-incident-that-caused-odor/article_d71ad98e-9438-5620-9a2b-078f2ef86c23.html

Response GP715-1

As described in Draft EIS Chapter 3, Section 3.2, *Air*, the proposed action is subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping for onsite stationary sources. Refer to the Draft EIS for a list of permit conditions and proposed applicant mitigation that would reduce potential impacts on air quality.

Refer to the Master Response for Purpose and Focus of the EIS.

GP716, **Steinke, Don**

Comment GP716-1

DEIS GH From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Tank Car puncture resistance Please include in the EIS 1. A discussion of the speeds at which tank cars can puncture. According to this website, the existing tank cars can puncture at speeds of 10 mph and the next gen tanks cars at speeds above 13 mph. Puncture resistant to 12 mph http://www.thompsonhine.com/publications/dot-proposes-new-tank-car-standards-classification-rules-operational-controls-for-crude-oil-ethanol-transportation

Response GP716-1

Draft EIS Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* acknowledges the voluntary applicant measure for all new rail cars to meet or exceed the U.S. Department of Transportation Specification 117 design or performance criteria and that all existing tank cars be retrofitted in accordance with the U.S. Department of Transportation-prescribed retrofit design or performance standard (80 *Federal Register* 26643). However, as noted in Section 4.5.4, *Would the proposed action result in unavoidable and significant adverse environmental impacts related to rail transport?* the risks cannot be eliminated. Refer to the Master Response for the Purpose and Focus of the EIS.

GP717, **Steinke, Don**

Comment GP717-1

DEIS GH From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Tank farm fires and explosions Please include a discussion of several tank farm fires and explosions. Lightning caused: https://www.youtube.com/watch?v=oAsBscxpKks Negligence in Buncefield UK http://www.epsc.org/news_details.aspx?Group=News&Page=final_buncefield

Response GP717-1

Draft EIS Chapter 4, Section 4.4, *Environmental Health Risks—Terminal (Onsite)*, describes the risk and potential for storage failure. Appendix M, *Risk Assessment Technical Report*, describes the data sources for the assumptions of risk assessment for storage tank failure. Because storage tank failure could result from multiple factors, the analysis does not assume any one cause of tank failure. The tank failure rate developed for the analysis is based on studies that analyzed historical data of previous storage tank releases caused by various factors. Refer to the Master Response for Environmental Health and Safety Analysis for additional information.

GP718, **Steinke, Don**

Comment GP718-1

DEIS GH From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Financial Responsibility In the Draft EIS you say the Federal government would pick up the tab for an accident

in the event of slow payment from industry up to $1 billion. Discuss whether or not that is adequate in the event of a tar sands spill in Grays Harbor or in the Columbia. How well would Hoquiam attorneys do against the attorneys for big oil and the rail roads? BNSF has 35 attorneys working full time to fend off lawsuits.

Response GP718-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP719, **Steinke, Don**

Comment GP719-1

DEIS GH From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Wayside detectors and positive train control In your Draft EIS, you mention wayside detectors on the mainline, but don't mention whether or not there were any wayside detectors in the study area. Several years ago, Congress mandated Positive Train Control by the end of 2015 to prevent collisions between freight and passenger trains, but recently the railroads said they won't come close to meeting the deadline. http://www.bloomberg.com/bw/articles/2013-10-24/fcc-plan-to-prevent-train-wrecks-jars-railroads-american-indians

Response GP719-1

PS&P currently does not have positive train control and it is not planned or required. The Federal Railroad Administration specifies that positive train control applies to "Class I railroad main lines (i.e., lines with over 5 million gross tons annually) over which any poisonous- or toxic-by-inhalation (PIH/TIH) hazardous materials are transported; and, on any railroad's main lines over which regularly scheduled passenger intercity or commuter operations are conducted."[2]

[2] Federal Railroad Administration. No date. *Positive Train Control (PTC) Information (Railroad Safety).* Available: http://www.fra.dot.gov/Page/P0358

GP720, **Steinke, Don**

Comment GP720-1

DEIS GH From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Cumulative Impacts If all the proposed coal and oil terminals are approved there would be 25 miles of loaded coal trains per day and approximately 12 miles of loaded oil trains per day passing through neighborhoods which are home to a million people. Please include the cumulative impacts of the trains on: General commerce School bus delays Emergency response delays Public safe Horn noise Public health from diesel emissions Property values Climate

Response GP720-1

Refer to the Master Response for Cumulative Analysis for more information on the scope of this analysis.

GP721, **Steinke, Don**

Comment GP721-1

DEIS GH From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Misc 1 topics related to the oil terminals.

1. The secondary containment for each storage tank in the tank farm needs to be isolated from the others. Otherwise fire from a leak in one tank could weaken other tanks sitting in the same pool, causing other tanks to weaken spill and to exceed capacity of the secondary containment.

Response GP721-1

Secondary containment equipment and design features are subject to federal and state regulations. The proposed action would comply with all state and federal regulations for designing secondary containment.

Comment GP721-2

2. The ultrasound track inspection equipment failed in Gainford Alberta http://www.edmontonjournal.com/Rail+defect+caused+fiery+Gainford+train+crash/10838510/story.html

Response GP721-2

Comment acknowledged.

Comment GP721-3

3. In the Economic Impact Analysis Planning model used by ECONorthwest check to see if the model includes the fact that oil trains are prone to catch fire. It seems the model was designed for standard rail traffic rather than for high volumes of unit oil trains that explode.

Response GP721-3

Draft EIS Appendix O, *Economic Impact Analysis,* does not provide information related to risks of a rail incident. This analysis is presented in Appendix M, *Risk Assessment.*

Comment GP721-4

4. Discuss how inadequate crew size on trains leads to mental errors and inadequate staff in an emergency. A worker recently quit his job as an engineer because his irregular schedule made it impossible for him to stay alert. He nearly hit a car with children twice because he forgot to blow the whistle.

5. Lessons learned from the recent rail worker whistleblower victory in court. http://www.seattletimes.com/seattle-news/railroad-whistle-blower-awarded-125m/

Response GP721-4

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms.

Comment GP721-5

6. The cost of providing adequate staff, evacuation sirens, and equipment for emergency preparedness in all rail communities. NTSB says emergency response planning along the rail routes is “practically nonexistent”.

Response GP721-5

Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for additional information about the analysis of emergency planning and response capabilities in the study area. For more information about the analysis of potential impacts on the BNSF main line, refer to the Master Response for the Geographic Scope of the EIS.

Comment GP721-6

7. Discuss the probability of a derailment in America’s largest landslide area, in the Columbia River Gorge.

Response GP721-6

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5

reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

Comment GP721-7

8. The Coast Guard has not updated its regulations regarding loading marine vessels as asked by Congress five years ago, according to a story by Ashly Ahearn of Earth Fix, Public Radio Seattle.

9. Compare the quality of barges as compared with ships in terms of load security.

10. Proper treatment of bilge water.

Response GP721-7

The U.S. Coast Guard inspects or oversees the inspection of tank vessels (including tank barges) in accordance with international and domestic construction standards and mechanical equipment requirements contained in 46 CFR 30.

Comment GP721-8

11. The speed of the train that spilled into the James river was 24 mph. It also caught fire.

12. The four ruptures of the newer safer CPC 1232s in 2015.

Response GP721-8

Comment acknowledged.

Comment GP721-9

13. The impact of greenhouse gases on snow pack and our economy.

Response GP721-9

Draft EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, *Climate Change*, acknowledges that greenhouse gas emissions from the cumulative projects would contribute to global greenhouse gas emissions, which contribute to climate change, and describes the projected impacts of climate change in the Pacific Northwest.

GP722, **Steinke, Don**

Comment GP722-1

DEIS GH From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: 2nd Greenhouse gases inventory comment from Steinke We believe your assessment of the NET change in greenhouse gas emissions in not accurate. The oil terminals in Grays Harbor will lead to a net global increase of up to 70,000 barrels per day more than there would be if the terminals were not built. This figure is based on a study commissioned by The Sightline Institute. Sightline chose Oil Change International to perform the study because they performed the analysis of the Keystone Pipeline climate impacts for the EPA. http://www.sightline.org/research_item/tracking-emissions/ We are in an oil glut. You ignore the impact that increased supply of oil will have on consumer interest in fuel efficient cars.

There are no guarantees that global production of oil will decrease to match domestic increases. Increased supply leads to higher rates of consumption It is not good enough to maintain emissions at a constant level. Our global and state goal is to reduce emissions. We have no hope of stopping climate change if we continue to build new fossil fuel infrastructure. We need to leave fossil fuels in the ground. We need to transition away from fossil fuels, but new oil terminals will strengthen our dependence on them. Once a facility is built, investors such as pension funds will demand a return on investment for the rest of the century. In November of 2014, the United Nations released a report warning that greenhouse gas levels are at the highest they have been in 800,000 years. We have no time to lose before the window of opportunity to stay within 2 C of warming closes. Our emissions need to drop 70% by 2050. 2014 was the warmest year on record and it looks like 2015 will break that record substantially. https://www.washingtonpost.com/news/capital-weather-gang/wp/2015/11/18/2015-will-be-the-warmest-year-on-record-by-an-enormous-margin/

Response GP722-1

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively. Final EIS Section 3.2 and Section 6.5.1.2 have been revised to include emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. The Final EIS does not make a determination of whether these emissions would add to or replace existing emissions.

GP723, **5, Steinke, Don**

Comment GP723-1

DEIS GH From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: Spills 2 Steinke Please include the following in the EIS

1. A report of the Skykomish WA oil spill that required the downtown to be moved and took decades to clean up. http://skykomish.wednet.edu/news/2015/03/13/school-clean-up/ http://www.skykomishhotel.com/brain-busting-hangover-environmental-scam-exposed/

2. The 2010 oil spill in the Kalamazoo River, shut the river down for over a year. What about a spill in the Columbia, The Cowlitz, the Chehalis, or Grays Harbor or their tributaries? What would be the economic impacts of shutting down river and harbor traffic?

Response GP723-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP723-2

3. Benzene in the river or the Harbor. How much benzene is in the oil and what are its impacts on aquatic environments, and what would be the benzene impacts if 3 tank cars spilled into the Cowlitz or Chehalis Rivers in late August.?

Response GP723-2

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms and has been revised to more fully describe the potential human health impacts, including those related to benzene exposure.

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

Comment GP723-3

4. Please analyze the impacts of a derailment spill on Lake Pend Oreille in Idaho.

5. From the Endangered or Threatened Species List for Montana, Idaho, Washington and Oregon, which ones would be harmed by an oil spill?

Response GP723-3

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

Comment GP723-4

6. Your Economic Impact Analysis Planning model needs to include the additional real risks associated with spills on sole source aquifers and marine environments. Two friends in the Coast Guard have told me that it would take a decade for salmon to recover from a spill in the Columbia.

Response GP723-4

Draft EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, addresses economic considerations, social policy implications, and the costs and benefits associated with the proposed action. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7.

Comment GP723-5

7. Include the impact of an oil spill on the wildlife refuges along the entire route.

8. A report of recent oil spill clean-up results, such as: http://www.upworthy.com/see-how-the-beaches-in-the-gulf-of-mexico-look-today-5-years-after-the-disastrous-bp-oil-spill?c=sr1&sr_source=lift_facebook

Response GP723-5

Refer to the Master Response for Geographic Scope of the EIS.

Comment GP723-6

9. Tar sands oil through pipelines in the US is exempt from payments into the Oil Spill Liability Trust Fund because diluted bitumen is not classified as oil. Does this still hold and does it apply to rail? http://www.treehugger.com/corporate-responsibility/exxon-wont-pay-cleanup-fund-because-arkansas-oil-spill-isnt-oil.html

Response GP723-6

Excise tax collection is beyond the scope of the Draft EIS. The source of funding for the Oil Spill Liability Trust Fund does not affect how money is paid from the fund to support the costs of an oil spill response and claims against the fund for agency expenses and damages. Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP723-7

10. What would be the health effects of a major vapor release from a spill. http://vancouver.24hrs.ca/2015/05/28/vancouver-spill-could-hurt-1-million-report

Response GP723-7

Final EIS Chapter 4, Section 4.7, *Impacts on Resources*, has been revised to more fully describe the potential human health impacts from an oil spill, fire, or explosion.

GP724, **Steinke, Don**

Comment GP724-1

DEIS GH From Don Steinke To Consultants, Ecology and City of Hoquiam. Re: More Misc Please include the following in the EIS Sorry my comments are not sorted.

1. Please describe the impacts of depleting our Bakken reserves on national security.

Response GP724-1

Refer to the Master Response for Purpose and Focus of the EIS.

Comment GP724-2

2. Please describe the impacts of decreased oil supply on consumer decisions.

3. Preeminent to Southwest Washington is the $1.3 billion Columbia Waterfront development. What will be the impact of the perceived risk of oil trains on that project? The taxpayers spent $50 million getting this property ready before the first oil train arrived. Now what do we do?

Response GP724-2

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2, has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP724-3

4. Tell us how many days it takes for a round trip for the tank cars. How many tank cars will be required altogether?

Response GP724-3

As stated in Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, existing train traffic along the PS&P rail line is between 3.0 and 3.1 trains per day on average and the average train running time between Centralia and Poynor Yard in Aberdeen is approximately 6 hours, including stopping time (sampled over 30 days). The PS&P rail line has a maximum capacity of 12 trains per day and is currently operating well below capacity. Operation of the proposed action at maximum throughput would add 458 unit train trips per year, or 1.25 trips per day on average, along the PS&P rail line. Therefore, with this addition, there would be approximately 4.25 train trips per day along the rail line, which is approximately one-third of the capacity of the line.

Comment GP724-4

5. The Vancouver Fire Fighters have recently declared that they would not be able to protect the public in the event of an oil train fire and explosion.

Response GP724-4

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. Refer to the Master Response for Emergency Response and Planning Gaps.

Comment GP724-5

6. Mention that BNSF imposes a $1000 surcharge on the older tank cars, but the newest tank cars have also ruptured and exploded several times this year.
http://blogs.wsj.com/moneybeat/2015/03/18/refiners-sue-railroad-energy-journal/

7. Canadian Pacific Railway wants to stop hauling crude oil, because the risk is too great.
http://m.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/canadian-pacific-railway-wants-to-limit-shipments-of-dangerous-goods/article23298275/?service=mobile

Response GP724-5

Draft EIS Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* acknowledges the voluntary applicant measure for all new rail cars to meet or exceed the U.S. Department of Transportation Specification 117 design or performance criteria and that all existing tank cars be retrofitted in accordance with the U.S. Department of Transportation-prescribed retrofit design or performance standard (80 Federal Register 26643). However, as noted in Would the proposed action result in unavoidable and significant adverse environmental impacts related to rail transport? the risks cannot be eliminated.

Comment GP724-6

8. Please include the fact that people are likely to burn and die.

Response GP724-6

Final EIS Chapter 4, Section 4.7, *Impacts on Resources*, has been revised to more fully describe potential human health impacts that could occur as the result of an oil spill, fire, or explosion.

Comment GP724-7

9. OPEC appears unwilling to give up market share and Iran is coming back.

Response GP724-7

Comment acknowledged.

Comment GP724-8

10. Included a risk/benefit analysis for the entire rail corridor.

Response GP724-8

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, and Chapter 6, *Cumulative Impacts*, address potential impacts in the extended study area, including the potential for increased risks, individually and cumulatively, respectively. The analysis of impacts in the extended study area is qualitative for the reasons discussed in the Master Response for Geographic Scope of the EIS. Final EIS Chapters 5 and 6 have been revised to clarify the potential impacts in the extended study area. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Comment GP724-9

11. Compare the vapor pressure of the Bakken Crude that is being shipped now, with the vapor pressure of the oil involved in Lac Megantic.

12. At what vapor pressure, would crude oil not produce enough vapor to ignite, in the event of a derailment spill? Consider that even if the vapor pressure in a teakettle is not high enough to make it whistle, it will whistle if jostled.

Response GP724-9

For information about how historical events were considered in the analysis of risks, refer to the Master Response for Risk Assessment Methods.

Comment GP724-10

13. U.S. DOT predicts 10 oil train derailments per year
http://www.seattlepi.com/business/energy/article/AP-EXCLUSIVE-Fuel-hauling-trains-could-derail-at-6095021.php#page-1

Response GP724-10

Comment acknowledged.

Comment GP724-11

14. Discuss the social cost of carbon.

15. Discuss the cost of an inadequate action on climate. For example, the Prime Minister of Fiji recently said that unless strong action is taken this fall, the Pacific Ocean as we know it is doomed.

16. The demand is declining and alternatives increasing, and what we can do to reduce demand.
http://www.greencarreports.com/news/1096706_ca-electric-utility-applies-to-build-25000-electric-car-charging-stations

17. Discuss the economic future of the oil terminals. Climate policies and demand reduction is driving down the price per barrel. Tight shale oil is much more expensive than Saudi Oil and will have trouble capturing market share from. What will you do with the oil terminal in 2030 when the bottom will have fallen out of the market?

Response GP724-11

Refer to the Master Response for Purpose and Focus of the EIS. Draft EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, *Climate Change*, acknowledges that greenhouse gas emissions from the cumulative projects would contribute to global greenhouse gas emissions, which contribute to climate change, and describes the projected impacts of climate change in the Pacific Northwest.

Comment GP724-12

18. South Portland Maine bans the loading of crude oil from a pipeline into ships over concerns that the emissions from the vapor combustion units would be unhealthy. http://www.environmentmaine.org/news/mee/south-portland-passes-tar-sands-ordinance-final-vote

Response GP724-12

The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, would reduce emissions of criteria and toxic air pollutants from onsite stationary sources. As described in Draft EIS Chapter 3, Section 3.2, *Air*, the proposed action is subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping requirements for onsite stationary sources. Refer to the Draft EIS for a list of permit conditions and proposed applicant mitigation that would reduce potential impacts on air quality.

Comment GP724-13

19. Describe the chemical composition of Bakken crude.

Response GP724-13

Refer to Final EIS Chapter 3, Section 3.14, *Hazardous Materials*, and Chapter 4, Section 4.3, *Risk Considerations.*

Comment GP724-14

20. Describe the effect of fracking materials on the properties of Bakken crude. We've heard that the most powerful non-nuclear bombs are made by adding nano-particles to hydrocarbons liquids.

Response GP724-14

Refer to the Master Response for Purpose and Focus of the EIS.

Comment GP724-15

21. You ignored the possibility that rear locomotives could continue to push and derail many tank cars.

Response GP724-15

Refer to Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport*, for more information on potential rail accidents and derailments.

GP725, **Steinke, Don**

Comment GP725-1

DEIS GH From Don Steinke To Consultants, Ecology and City of Hoquiam. Errors or invalid assumptions.

1. You say "Heavier oils . . . do not generate many flammable vapors", but the oil train fires and explosions in Timmens and Gogama Ontario in the late winter of 2015 involved Tar Sands Crude. http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/oil-train-derailments-reignite-debate-over-railway-safety-rules/article23039713/

Response GP725-1

The reference in the comment is specific to pooled oil. Draft EIS Chapter 4, *Environmental Health and Safety*, does acknowledge the potential for an incident to result in a fire or explosion, particularly if it involves the high energy of a train derailment. Final EIS Section 4.7, *Impacts on Resources,* has been revised to more fully describe potential air quality and human health impacts related to chemicals released during oil fires.

Comment GP725-2

2. You repeatedly say the risk of a serious accident in the extended area is low. Give us an actual number based on FRA statistics for BNSF. How many derailment spills can be forecast over 30 years?

Response GP725-2

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action and notes depending on the circumstances of an incident, the impacts could be significant.

The results of the risk assessment are presented in Draft EIS Chapter 4 in terms of the expected number of years between incidents to provide an idea of how often spills of different sizes might happen. For example, a spill of up to 2,100 gallons could occur during vessel loading at the facility once every 8 years. The results were also presented on a per-year basis in Appendix M. For example, the same spill of up to 2,100 gallons could occur at the facility 0.12 time per year. The annual results from Appendix M can be multiplied by any number of years to determine the overall chance of an incident occurring over a longer period, such as the lifetime of the proposed action. For example, over a 50-year period, the same spill of up to 2,100 gallons could occur six times. Refer to the Master Response for Risk Assessment Methods.

Comment GP725-3

3. In your economic summary, you make a chart of economic benefits and costs assuming there would be NO job losses and no fiery accidents or explosions. You didn't include the harm to jobs in the fishing industry. You didn't include the decay that will set in, as people move away.

Response GP725-3

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP725-4

4. You imply the 25 mph speed reduces the risk instead of acknowledging that the tank cars can rupture and catch fire at much lower speeds.

Response GP725-4

The Draft EIS acknowledges that lowered speeds are one of the many factors that can influence the likelihood that a rail incident could occur.

Comment GP725-5

5. Remove sentences like this "Long-term historical data may show that most spills do not result in fires or explosions" You need to focus on non-yard derailment spills.

Response GP725-5

Draft EIS Chapter 4, *Environmental Health and Safety*, and Appendix M, *Risk Assessment Technical Report*, base the risk assessment on non-yard derailment spills.

Refer to the Master Response for Risk Assessment Methods for a discussion of the assumptions, data sources, and methods used in the analysis of risks.

Comment GP725-6

6. You assume that if one tank car spills from a derailment, the subsequent pool fire doesn't cause other tank cars to heat up, weaken, explode and spill.

7. You assume empty tank car derailments don't cause fire, but the fire chief in Ellensburg says otherwise.

Response GP725-6

The severity of an accident when a derailment occurs would depend on many factors, including but not limited to the speed at which the train was traveling when the incident occurred. The risk analysis applies accident rates from the Federal Railway Administration to the PS&P rail line as discussed in greater detail in Master Response for Risk Assessment Methods; BNSF data are included in this data and analysis. Accidents can occur with empty trains, as mentioned in the Draft EIS, and if an accident sufficiently damages a car and leads to the ignition of the small amounts of residual matter in the "empty" cars, small fires are possible but less likely than for loaded trains. The risk assessment calculated the likelihood of accidents for empty trains, but did not focus on the consequences of such events because there is no potential for large amounts of crude oil being released and spreading, with or without a fire, or for large amounts of vapor to be generated from a release.

Comment GP725-7

8. You assume the impacts to property values of an oil train, is the same as the impacts to property value of a general freight train.

Response GP725-7

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values.

Comment GP725-8

9. In the event of an accident, you assume the responsible parties will be able to pay for damages and do so in a timely manner.

Response GP725-8

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP725-9

10. You assume that oil production in Alaska and from OPEC might decline in amounts equivalent to the amounts proposed for Grays Harbor. We have no guarantees of that.

Response GP725-9

Refer to Final EIS Appendix Q, *Crude Oil Market Analysis*, and the Master Response for Crude Oil Extraction, Transport, and Combustion.

Comment GP725-10

11. You assumed that mud-flows from Mt. St. Helens eruptions would never wipe out the tracks. Even a thunderstorm could trigger a mudflow.

Response GP725-10

Draft EIS Chapter 3, Section 3.1.4.3, *Geologic Hazards (Landslides and Slope Instability),* acknowledges the potential for landslides and slope instability along sections of the PS&P rail line.

Comment GP725-11

12. http://www.bloomberg.com/news/articles/2015-09-21/the-800-ways-taxpayer-money-supports-fossil-fuel-industries

Response GP725-11

Comment acknowledged.

Comment GP725-12

1. Describe the impacts of hydrogen sulfide. It settles in low spots. First it kills your sense of smell. Then it kills you. , and Centralia already exposed to dangerous impacts that can't be mitigated but that doesn't mean it is OK to increase the risks.

Response GP725-12

As described in Draft EIS Chapter 3, Section 3.2, *Air*, onsite emissions of toxic air pollutants related to routine operations of stationary sources, including hydrogen sulfide, would be below the state thresholds identified in WAC 173-460-150. The Final EIS section reflects updated estimates based on a review of recently published Bakken crude oil data. These emissions are subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping for onsite stationary sources. Refer to the Draft EIS for a list of permit conditions and applicant mitigation that would reduce potential impacts on air quality.

Draft EIS Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Final EIS Seciton 47 has been revised to more fully describe these potential impacts.

Comment GP725-13

2. The people of the State of Washington have the right to decide which risks they are willing to accept and which they are not, and just because some dangerous projects got permission, that doesn't mean we should approve of more risk.

Response GP725-13

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP726, **Steinke, Don**

Comment GP726-1

SEPA requires that the ultimate decisions be within the range of alternatives evaluated in the EIS. And all the alternatives should be included, such as: • Pipelines • Better tank cars, • Tanker trucks • Reducing the vapor pressure. • Other ports • Alternative design configuration • Rail safety improvements • Reducing the size of the project • The State may not be able to order BNSF to carry out alternatives, but it seems that these options reasonably bear on legitimate possible alternatives. • (what about the alternative of hybrid cars?) Please evaluate all the alternatives in the EIS.

Response GP726-1

Refer to the Master Response for Project Objective and Alternatives for an explanation of the alternatives evaluated in the Draft EIS.

GP727, **Steinke, Don**

Comment GP727-1

Hello, I'm Don Steinke. I'm a retired science teacher. If you're opposed to these oil trains, could you please raise your hands? Thank you. Local interest are not supposed to be jeopardizing the rest of the state. Please don't let dollar signs blind you to the harm this project will cause to others.

In Vancouver, our port director asked that the Department of Ecology ignore other communities when they studied the environmental impacts. Did someone in Hoquiam make the same request to the Department of Ecology? We called her and she said, We're not going to study other communities. Who asked her to do that?

We specifically asked you to study the impacts to Vancouver and Spokane, but the DEIS totally ignores us. The Department of Ecology and the City of Hoquiam do not have the right to sacrifice Vancouver for the benefit of special interests.

BNSF averages one nonyard accident per million miles. On that basis, we conclude that these terminals will lead to 44 nonyard accidents in 20 years. Serious accidents are guaranteed. Not low, just guaranteed.

This DEIS doesn't meet the minimum standards. We ask that you totally rewrite the section on the extended area. We ask you to find that these projects will lead to significant and unavoidable adverse impacts and choose the no action alternative.

Thank you.

Response GP727-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, and Chapter 6, *Cumulative Impacts*, address potential impacts in the extended study area, including the potential for increased risks, individually and cumulatively, respectively. The analysis of impacts in the extended study area is qualitative for the reasons discussed in the Master Response for Geographic Scope of the EIS. Final EIS Chapters 5 and 6 have been revised to clarify the potential impacts in the extended study area. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

GP728, **Steitz, Jim**

Comment GP728-1

From: Jim Steitz [mailto:jimsteitz@mac.com]
Sent: Tuesday, October 13, 2015 11:18 PM
To: ECY RE Spills Rulemaking <SpillsRuleMaking@ECY.WA.GOV>
Subject: Reject Westway and Imperium Oil Terminals

Jim Steitz
564 Esslinger Drive
Gatlinburg, TN 37738

October 13, 2015

ATTN: Westway and Imperium Oil Terminal EIS
Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

To Whom it May Concern,

As a former resident of the Pacific Northwest, who retains great affection for my original home, I urge you to **reject the proposal of Westway Terminal Company and Imperium Terminal Services to ship crude oil through Grays Harbor.**

The volume of oil to be handled by such terminals would constitute an **unmitigated ecological disaster, in violent opposition to the state's objective of reducing carbon dioxide emissions.** The Washington State government has expressed an overall goal of moving toward a lower-carbon economy, and to avoid the worst impacts of global warming. If these goals are to have any meaningful policy expression within the agencies, tasked with carrying out a governor's policy, then the Department of Ecology cannot issue this permit. This oil export terminal would be linked by rail, and in turn link ravenous, inefficient economies overseas, to some of the largest carbon bombs in North America, namely the Canadian tar sands and the Bakken oil shales of the Dakotas. **Human survival demands that this grave liability to our atmosphere remain securely underground.**

The Westway and Imperium terminals, and other proposals for fossil fuel infrastructure along the Pacific Northwest coast, would be especially and painfully ironic for a state that has otherwise made admirable and meritorious progress in shifting to clean energy and ecological sustainability more broadly. I can scarcely fathom the horrific reversal of ecological paradigm that The Westway and Imperium terminals would constitute for **Washington State, whose role in the global energy infrastructure would invert from a leader in the low-carbon transition, to a conduit of death for the highest-carbon fuels on Earth.** The State of Washington has already committed itself to regional greenhouse gas reduction initiatives, and even though the initiatives are not yet self-enforcing, the Westway and Imperium terminals' colossal volume of oil shale and tar sands **would dwarf any carbon reductions attained in those frameworks. It therefore is a contrary and irreconcilable public policy to Washington's goals.**

Even before the climate impacts are considered, the immediate impacts to communities and landscapes between the oil sources and the departure point to the Pacific are numbing. The cities of **Spokane and Grays Harbor would suffer an unacceptable diminution of their quality of life** due to noise, air pollution, and the omnipresent eyesores of tankers and oil-loaded freight trains. Many other communities along the railroads further east would find additional hours of their day transformed into an acoustic and seismic barrage of rail traffic beyond anything they bargained for in joining that community. These oil-freighted trains have compiled a poor safety record in recent months. Their load of heavy crude is known to be even more explosive than lighter-grade oils, and human life is placed at unacceptable risk by running these loads on a recurring basis immediately adjacent to rail-line towns. Moreover, the risk of **oil tanker spills in the precious waters of Grays Harbor and the Pacific Coast cannot be overstated.**The coastline is a defining feature of both economic and aesthetic sustenance for Washington State, and no risk to its integrity should be contemplated.

For all of these reasons, I urge you to immediately **reject the** Westway and Imperium terminals **as contrary to the public interest of both Washington State and your fellow human beings** around the world who depend upon a habitable climate. Thank you for your attention to this urgent issue.

Sincerely,

Jim Steitz

Response GP728-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP729, **Stenger, Joseph**

Comment GP729-1

As a family physician who lived for a time in the Grays Harbor area and a grandfather, I am concerned about the dangers to the population as outlined by PSR including risks of diesel fumes, spills, fires, noise and delay of emergency vehicles.

However, my biggest fears have to do with the inability to safeguard these facilities in the face of a major earthquake and tsunami. As this event is getting more inevitable, we need to put our efforts

into reducing population risk, not building more facilities like this that would create catastrophic damage during such an event.

Furthermore, we in the Pacific Northwest need to be leaders in reducing climate impacts of fossil fuel burning. These projects would add huge tonnage of CO2 every year of their existence. The fact that much of this oil would likely be shipped to other countries does not reduce the risk to all of us. We are already seeing unprecedented changes such as loss of snowpack in our mountains, historic high monthly temperatures, loss of crops, loss of animal and plant populations- we need to reduce the damage already in play to prevent giving our grandchildren a much worse environment to live in than we inherited. Thank you for reading this. Please act in good conscience, considering the true impact over the next decades.

Response GP729-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP730, **Stepp, Patricia Joy**

Comment GP730-1

My name is Patricia Joy Stepp. I'm an elder. I'm a great grandmother, and I have empathy to the Native Americans that will be affected by any oil spill along the Columbia River, along the beautiful estuary, the coast.

I live within a mile -- I'm from Vancouver, Washington. I live within a mile of the Columbia and I live a few blocks from where oil trains are passing all the time where very many people live.

I'm allergic to diesel. Anyway, I've been an environmental activist for many years. I am a Washingtonian. And I think we should think as Washingtonians as we combat this evil that is growing in our state. I know people need jobs, but I think we should think about our children and grandchildren, and in my case our great grandchildren.

I'm Native American descendant, so I'm in empathy with my brothers and sisters here who are fighting to keep their way of life, clamming and all the things that are important to their well-being. And I would like to just speak from my heart and tell you that as we grow older we see things differently than we did when we were young.

And as a retired person who writes and cares about what's going on and reads a lot, I think we should listen to our elders when they're talking about this particular thing. And I think you'll get good feedback from elders. Thank you so much. Please stand up to big oil.

Response GP730-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP731, **Sterr, William**

Comment GP731-1

I am opposed to additional oil facilities in Washington for the following reasons: - oil, and other fossil fuels pose a threat to our environment in their mining, transport, and burning. In additional, the transport of oil by rail has proven to be ecologically and public safety damaging.

- the additional oil trains will pose a threat to the standard of living in our community of Vancouver. - continued low cost access to oil delays our inevitable transition to safer, renewable energy. - acceptance of additional oil terminals will strengthen the position of corporations which have proven themselves again and again to be enemies of the common people.

Response GP731-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP732, **Stokam**

Comment GP732-1

Name: Stokam
Organization:
City/ State/ Zip: Aberdeen, WA 98520

I would prefer that my community/region not be turned into an oil depot.

Response GP732-1

Comment acknowledged.

GP733, **Stonington, Louise**

Comment GP733-1

Please reject the proposed Westway and Imperium oil terminals. The DEIS demonstrates too much potential harm to Grays Harbor. In addition, there are many other risks and harms not adequately explained. There are risks of to our environment by increasing US national security vulnerability caused by added pressures on military from global warming, and also by diminishing US military access to domestic fuels The burning of the fossil fuels being shipped will add additional costs to health of US population.

Lost opportunity costs to businesses and investors of Washington State are a factor. Allowing expansion of trade in fossil fuels, which already control 85% approximately of the energy market, depresses growth in US produced clean energy and efficiency technology and the US is losing ground in this sector to international competition.. Closer to home, the oil trade causes economic loss to Grays Harbor area of shellfish industry which is shown to be under threat by increasing emissions from burning of fossil fuels. The Blind Men and the Elephant is an old story. We have better methods of study today. With computer analysis of billions of measurements we can see the whole picture of

what is happening to the world. We can protect our future if we make reductions of carbon emissions a priority in every business and governmental decision. Thank you.

Response GP733-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP734, **Stormo, Paul**

Comment GP734-1

I am writing to formally express my concern about and resulting opposition to the Westway and Imperium Expansion projects. That concern and related suggestions include:

1. Skepticism that the current and expected price of oil will support the economic model encouraging development of the expansion.

2. Belief that the risk of catastrophic incidents in rail transport to Gray's Harbor are understated, particularly given the four derailments within the last 18 months.

Response GP734-1

Refer to the Master Response for Risk Assessment Methods for a discussion of the assumptions, data sources, and methods used in the analysis of risks.

Comment GP734-2

3. The nearly non-existent additional local support for project-related emergency response in case of incident, particularly if a reasonable response time of 15 minutes is established. Bi-annual instruction for local departments, and the addition of one vehicle to support the new activity is woefully insufficient.

Response GP734-2

Final EIS Chapter 4, *Environmental Health and Safety*, has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Refer to the Master Response for Emergency Response and Planning Gaps.

Comment GP734-3

4. Although the estimated rail use time increases three-fold with from current state to maximum expected for the project, no provision has been made to enhance rail-crossing safety, including what would seem to be an obvious addition of controlled access (rail crossing gates) at each intersection within organized cities and towns. Safety instruction alone is not sufficient.

Response GP734-3

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Draft EIS Section 3.16.5, *What are the potential impacts on vehicle traffic and safety?* states that The Railroad-Highway Grade Crossing Handbook–Revised Second Edition (as cited in Section 3.16) indicates that active devices with automatic gates should be considered when certain criteria are met. One criterion is if the expected accident frequency, as calculated by the U.S. Department of Transportation Accident Prediction formula, exceeds 0.075. As shown in Appendix L, *Vehicle Traffic Analysis*, no grade crossings would exceed this frequency using this formula.

Comment GP734-4

5. I find the standards identified for noise 'pollution' significantly insufficient when I find myself waking to the sound of train whistles nightly even though I live 1.5 miles from the tracks. The increased traffic and related noise interruption requires noise barriers be constructed when, at a minimum, schools and medical facilities are within .25 miles of the tracks.

Response GP734-4

Noise exposure values are reported as hourly equivalent sound level (L_{eq}[h]) for Category 1 and 3 land uses, including schools, and day-night average sound level (L_{dn}) for residential land uses (Category 2). The focus of the noise analysis in Draft EIS Chapter 3, Section 3.7, *Noise and Vibration*, is on L_{dn} for locations where people sleep. Daytime loudest-hour noise levels (in terms of L_{eq}) were not analyzed because the loudest hour at grade crossings and wayside locations would generally be characterized by a single train passby, which would be unchanged from existing conditions. The analysis uses the Federal Railroad Administration (FRA) adopted noise assessment methods developed by the Federal Transit Administration (FTA). Per these methods, noise-sensitive land uses are identified within approximately 500 feet of the PS&P rail line for wayside noise and within 1,000 feet of grade crossings for train horn noise.

Comment GP734-5

6. If crossing barriers and noise abatement tools are in place I would strongly suggest suspension, for those areas, of requirements for sounding 'whistles' as the train approaches controlled intersections.

Response GP734-5

Noise barriers were not considered for the proposed action. In general, barriers at grade crossings provide limited benefit to receptors due to noise flanking around barriers near a crossing. Section 3.7 identifies a proposed mitigation measure for the applicant to support local communities in applying for quiet zones at crossing where severe impacts from increased train horn soundings were identified. Where implemented, quiet zones would eliminate sounding of train horns at those crossings.

Comment GP734-6

7. I would strongly suggest that the requirements for availability of monies for 'emergency management' be increased (at least doubled) due to the nature of the product being transported by rail, local derailment incidents, and the recent documented experience of explosive crude derailments. Further, given the nature of the sponsoring companies as Limited Liability Corporations, it is suggested that related principle be held in escrow.

8. One specific and independent organization be identified with the responsibility for confirming (in a form supported by audit) compliance of all parties with the safety requirements of the project (to include, for example, insuring local school district compliance with evacuation plan requirements in case of derailment or leak.)

9. All of the new and incremental costs associated with the above issues (with the exception of the oversight organization noted in item 8) should be the sole responsibility of the businesses owning and/or shipping the related products.

Response GP734-6

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP734-7

10. I fully expect Westway, Imperium, and their related partners should (and therefore suggest that they be required) to estimate revenue and costs for the project, to include incremental short-term and permanent staffing numbers and costs. Such an estimate will confirm the on-going economic feasibility of the project (or not.) Thank you for supporting opportunity to comment on the project. Regards, Paul Stormo

Response GP734-7

Estimates for the short-term and long-term employment impacts associated with the construction and routine operation of the proposed action are provided in Draft EIS Chapter 7, Section 7.1, *Economics*.

GP735, **Street, Nancy**

Comment GP735-1

Thank you for the opportunity to address this panel. I am Dr. Nancy Street, and I live six blocks from the train tracks and two blocks from Eastern Washington University in Cheney, Washington.

The train, we have four intersections at Gray, and we hear the whistles or the horns two longs, a short and a long at every intersection. We happen to live on Kerr so we hear two of them; morning, afternoon, and night.

According to Gus Melonas at BNSF, there were 52 trains on average per day from BNSF going through Cheney. And we also have a Union Pacific track with 12 trains per day. This was information from 2013.

Now, BNSF has double tracks going down to Pasco. We also have a new grain terminal coming in, a high line grain terminal, and that's going to add more trains.

We do not need any more trains. It's very disturbing, the noise is terrible. Babies, senior citizens, patients at the Cheney Care Center, children at schools, high school, grade schools, students at Eastern Washington University are disturbed from their sleep. They develop more stress and anxiety, anger, and generally poor mental and physical health as a result of the trains.

Business owners along the tracks have to stop their business because of the noise of the train. There's just way too much noise. People have moved out of Cheney because of the noise, I know of some in particular.

to address noise pollution and I would like you personally to come over to Cheney and experience the trains. We have all hundred trains going all the time. Thank you very much.

Response GP735-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*. Chapter 6, *Cumulative Impacts*, address potential cumulative impacts.

GP736, **Street, Nancy**

Comment GP736-1

More trains reduce property values & increase fire insurance.

Response GP736-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based

on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3, *Cost-Benefit Analysis,* describes the benefits and range of associated costs that could be expected in general terms, including potential impacts on property values. Final EIS Section 7.3.4.2, has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP737, **Street, Nancy**

Comment GP737-1

Cheney has too many noisy trains now that affect students, babies, elderly businesses, etc. We don't want any more trains!

Response GP737-1

Comment acknowledged.

GP738, **Street, Nancy**

Comment GP738-1

Trains are too dangerous. They block intersections and prevent emergency vehicles from crossing. We don't need more trains!

Response GP738-1

Comment acknowledged.

GP739, **Streiffert, Dan**

Comment GP739-1

Hi, my name is Dan Streiffert, and I live in Kent, Washington. I'm a retired software engineer and currently a chair of the Audubon Society which covers Seattle, King County. There's a section in the DEIS, page 6-10 dealing with greenhouse emissions. Table 6-5 shows the estimated CO2 emission factors associated with combination of the products that will be shipped through the facilities.

From these it is estimated that this will result in an additional 26 million metric tons of CO2 per year. The report then states that this crude oil can only be transported to U.S. in pipelines, which are limited in capacity by law.

Therefore this oil will replace oil currently used in U.S. refineries and there will be no added increases in overall emissions. In fact, compared to the conventional oil drilling, the extraction of these oil Bakken sands is about 12 percent dirtier in terms of CO2 emissions.

So, it would appear that producing the same capacity of oil Bakken sands would, in fact, increase overall emissions. So it appears that the EIS conclusions in this section are incorrect. Furthermore, the House of Representatives is voting to lift the 40-year-old ban on oil exports.

Even if this vote is unsuccessful, if we are to have any hope at all in controlling the climate change, we need to reduce CO2 emissions not simply hold them at the current level. These projects are not carbon neutral and these permits must be denied.

Thank you.

Response GP739-1

Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources. Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

GP740, **Strid, Eric**

Comment GP740-1

Section 3.1 Earth Table 3.1-2 lists the probability of a 6.0 or stronger earthquake at 30-40% within a 50-year period. Under Strong Ground Shaking: "Ground shaking would be the strongest in areas underlain by soft soils or unconsolidated deposits such as sand and silt and least in areas underlain by solid rock. The Site Class Map of Grays Harbor County, Washington characterizes the project site as Site Class E, which is the highest level of expected ground shaking due to the type of underlying materials…" This general statement seems to avoid any quantitative analysis of the magnitude of shaking from Class E deposits, which sound like the most prone to instabilities during earthquakes.

Response GP740-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP740-2

The final EIS must include quantitative predictions of the shaking on Class E deposits for earthquakes of magnitude 6.0 through 9.0., along with detailed structural analyses of damage likely in the proposed storage tanks and the implied spills. Under Liquefaction: "The Hoquiam-Aberdeen shoreline, including the project site, is mapped as having a high liquefaction hazard… these areas are susceptible to liquefaction during a strong (6.0 or greater) earthquake." Amazingly, that is the entire analysis of the environmental impact of liquefaction from an incident with 30-40% probability during the project lifetime. Anyone who has witnessed the effects of liquefaction from an earthquake can imagine multiple tanks losing their foundations, rupturing, spilling, and likely catching fire.

The final EIS must include comprehensive quantitative analyses of the foundations of storage tanks and loading structures under liquefaction scenarios expected in earthquakes of magnitude 6.0 to 9.0.

Response GP740-2

Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these event and information about the iterative, ongoing risk assessment and design processes commensurate with the project's stage in development.

Comment GP740-3

Under Tsunamis: "Tsunami modeling by Walsh et al (2000) was used to develop hazard mapping for Washington State to characterize tsunami risks for planning purposes…. Based on the model used to develop the mapping, the first tsunami wave would reach Hoquiam in 1 hour, with a wave elevation of about 3.5 feet" and over 11 and 13 feet on the south and north spits. Then a 3,333-year event was said to be capable of waves of 21 to 26 feet height. These predictions compare to the detailed predictions of up to 40 feet in Astoria, 40-80 foot maximum wave elevations in Seaside, Oregon http://www.oregongeology.org/pubs/tim/Clat08_Gearhart_Seaside_Plate1_onscreen.pdf for tsunami evacuation purposes, and recorded maximum heights of 133 feet in the 2011 Tohoku earthquake, which is thought to be similar to a large CSZ event on the Oregon coast. This major discrepancy in the DEIS vs. extensive modeling done for the Oregon coast must be addressed.

Response GP740-3

Draft EIS Chapter 3, Section 3.1.4.3, *Geologic Hazards,* presents the tsunami wave inundation based on the tsunami modeling in Draft EIS Appendix C, *Tsunami Impact Modeling and Analysis*. Refer to the Master Response for Seismic Risk and Design Requirements for a description of the earthquake source model and hydrodynamic modeling method used in the site-specific tsunami analysis conducted for the project site and presented in Appendix C.

Comment GP740-4

The final EIS must comprehensively update and revise the expected maximum tsunami heights per more recent models; and then quantitatively model the effects on the proposed storage and terminal structures. Additionally, the effects of larger tsunami waves on marine vessels and loaded tank cars in the terminal must be assessed. These must address earthquake strengths of 6.0 to 9.0.

Response GP740-4

Refer to the Master Response for Seismic Risk and Design Requirements for a description of the earthquake source model and hydrodynamic modeling method used in the site-specific tsunami analysis conducted for the project site and presented in Draft EIS Appendix C, *Tsunami Impact Modeling and Analysis*. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce

potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP740-5

Under 3.1.7.1 Applicant Mitigation, the 150-foot pilings proposed are assumed to erase any liquefaction problems, and the implications of the listed standards are not explained and do not seem at all sufficient for the proposed structures in a large CSZ event. The final EIS should propose a site stabilization plan that is certified by at least two independent civil engineering firms to be capable of withstanding a 9.0 earthquake and tsunami without spills from containment structures.

Response GP740-5

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

The project design development and review would adhere to applicable building code requirements. The City of Hoquiam would oversee and review the proposed designs. The City would consider third-party expert review of the proposed geotechnical and seismic design prior to issuance of building permits.

Comment GP740-6

6.5.4 Rail Traffic 6.5.4.1 Study Area does not address the cumulative effects of trains carrying crude oil from oil fields to Centralia. This is a major hole in the DEIS, unless such cumulative effects are addressed elsewhere.

Response GP740-6

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 further describes the potential risks associated with rail transport in this area. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP741, **Strid, Eric**

Comment GP741-1

Good afternoon. My name is Eric Strid. I live in the Bakken blast zone in White Salmon, Washington and recreate in the Columbia River spill zone. The train fires in the Columbia Gorge in the dry season would burn down everything for miles because the only firefighting strategy is to evacuate.

An oil spill on the Columbia will contaminate the fish ladders of the dam. This would require millions to rebuild, and there's no effective method to clean an oil spill anywhere. But not to worry. There are studies of the petroleum consultants that have testified before Congress that hazardous material transported by rail arrives safely at its designation 99.99 percent of time.

The accident data we have clearly shows that BNSF averages one per year and once every 600,000 train miles. And that might sound good, but the 19 oil trains per week that pass near my house log about 600,000 miles every six months. So I checked to see if we had that many oil train derailments. Yes, Seattle last July; Frank, Alberta in February; Culbertson, Montana this July. About every five or six months.

So how could we keep from having derailments in the 160 miles the oil travels near the Columbia River? At the current 19 trains a week, BNSF will average one oil train derailment just along the Columbia once every four years.

Cumulative effect, an added 16 trains will double derailments, and adding another 28 trains to the proposal, on average, would mean one derailment per year along the Columbia. We don't need this oil. We drove here in an electric car, and electric cars keep getting cheaper. I believe by 2040 these terminals will be expended assets. We must stop the fossil fuel madness.

Thank you.

Response GP741-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

GP742, **Strong, Janet**

Comment GP742-1

I incorporate by reference the comments of Friends of Grays Harbor, Ron and Kim Figlar-Barnes, Arnold Martin, Washington Environmental Council, Sierra Club, WA Dungeness Crab Assoc., Physicians for Social Responsibility, Climate Solutions, Grays Harbor Oyster Growers Assoc., Brady Engvall, The Quinault Indian Nation, Dan Leahy, WA State Council of Firefighters, Grays Harbor Audubon Society and Everett Shoreline Coalition.

My personal comments will focus on the total inability of successful mitigation for train derailments on the way to the facilities; for leaks while transferring oil between train cars and storage tanks, or between tanks and ships, or at train car loading facilities; for train car breakage leading to fires, explosions and toxic contamination of air, land and water. It is impossible to mitigate any of these disasters due to the extreme volatility and explosive character of the oil being moved and stored; it is also due to the use of unit trains where each and every car is potentially leading to a chain reaction of explosion magnifying any initial disaster. Especially vulnerable are the cities of Hoquiam and Aberdeen, their citizens, their children (two nearby schools in Hoquiam), the 2500 acre Chehalis Surge-Plain Natural Area Preserve (through which the tracks run, unstable due to the wet soils here), the Chehalis and Columbia Rivers (along which the tracks run), the incredibly valuable fish, shellfish and other aquatic resources, the shorebirds who depend on these resources, the livelihoods of local fishermen, shellfish growers who also depend on these resources, and the Grays Harbor National Wildlife Refuge. Isn't this list long enough to merit denial of these permits? MITIGATION IS NOT POSSIBLE FOR ANY OF THE ABOVE RESOURCES if these storage terminals are constructed to hold millions of gallons of explosive material. MITIGATION IS NOT POSSIBLE for accidents stemming

from train derailments, an increasing number of which have occurred in the past few years. No fire department can be prepared to extinguish a potential fire and explosion. People in Hoquiam will die and homes and businesses will burn. The Port of Grays Harbor will be seriously damaged.

Response GP742-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP742-2

The economic merits of these projects are miniscule for the local communities compared with the very high risk to the people, the infrastructure, the long-run economy and, most importantly, the environment and natural resources of the Grays Harbor ecosystem. For the sake of all of the above, the City of Hoquiam and the Department of Ecology must DENY the permits for these two oil storage facilities and any others proposed in the near or far future. this is indeed a matter of life and death on many levels.

Response GP742-2

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP743, **Strong, Janet**

Comment GP743-1

Hello. My name is Janet Strong. I live in Eastern Grays Harbor County, near the town of McClary.

I'm a biologist, and I have had work as a volunteer at two oil spills, and I can certainly vouch for those comments.

I'm absolutely opposed to siting storage facilities for and bringing these highly flammable oils to to Grays Harbor County. Mitigation? It's impossible to mitigate the disaster that could and will happen.

I own property right along the rail line just east in Central Park, where the grain spill occurred not too long ago, and those soils -- it occurred probably because the soils are saturated. There's tidal action in that area, very active tower action all day every day. A spill, explosion, or fire of oil would reak havoc on this irreplaceable wetlands, old growth forests, sloughs, and then Grays Harbor eventually. This is the largest and best surge plain on the West Coast. I spill would be unmitigatable because of all of the complexity of that whole system.

Homes along here, too, in Central Park would certainly be disastrously affected, and that is unmitigatable.

Another flash point is the ten miles between Malone and Oakville. It's right beside Route 12, a major truck and travel corridor, right beside the Chehalis River, too. A major highway, the Chehalis River, several miles.

The Chehalis Land Trust at which I'm a 20-year volunteer, owns a piece of property right along the tracks between the railroad tracks and the river. Contamination of this river would be carried again to the harbor.

There is no way to mitigate a spill of these explosive crude oils, let alone the inevitable explosions and fires. The results are loss of human life -- oh, well. Please denies these permits. Thank you very much.

Response GP743-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

GP744, **Strump, Larry**

Comment GP744-1

Hi, I'm Larry Strump, and I live in Ocean Shores. And I heard a lot of people speak eloquently about the risks on these trains and granting permits, so I'm not going to belabor that point.

But what I would like to focus on very briefly is the design of this proposal. There's only a few beneficiaries we're talking about here. Two private corporations, a handful of people that they hire to do the work that needs to be done with the new jobs that are created, and the tax revenues that we'll get from the profits that are made.

And frankly, I find it deeply puzzling that the City of Hoquiam and the State Regulatory Agency is giving this serious consideration in the face of potential catastrophes that could happen. They set aside those calamities that are looming.

They will have a pretty serious impact on the quality of life for people that live in this region. Anybody who is out stuck on the wrong side of the train tracks in a Walmart parking lot knows what I'm talking about. I think it's a no-brainer. Please do not permit this. Thank you.

Response GP744-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP745, **Stuckert, Ben**

Comment GP745-1

October 8, 2015

Our city serves as the major rail hub on the Inland Northwest. We used to like that designation. It used to mean that local exporters could get their products to market faster. Being a rail hub used to mean you had an economic advantage. Unfortunately for us, it means we could be the location of the next environmental catastrophe. That rail hub designation is losing its value. The miles and miles of proposed fossil fuel trains are creating significant public safety risks. The alarming increase in mile long explosive oil trains coming through downtown Spokane put our citizens, our first responders, and our economic livelihoods at incredible risk. We've seen the terrifying video of explosions and derailments in North Dakota, West Virginia, and Alabama. I admittedly say that I am not confident our public safety teams and these railroad companies are logistically coordinated enough to handle something as devastating as what has happened in these other states. The bottom line is that we cannot sit idly by and let the next Quebec, Alabama, or North Dakota explosion happen in downtown Spokane, or King County, or any other community across this state. I ask that you thoroughly consider any and all impacts this project will have to the safety, health, and economic security of residents of Spokane.

Ben Stuckert

President Spokane City Council Spokane, WA

Response GP745-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP746, **Sturdivant, Lee**

Comment GP746-1

Our Salish Sea is one of the very few remaining clean inland waterways in the world. Now there is endless pressure from fossil fuel companies to spoil what remains.

We all see that we must leave fossil fuels in the ground if we are to keep this planet alive. The president made that clear by turning down the XL pipeline. You must find the courage to do the same on these oil ports. Future generations will appreciate your efforts to stop these ports.

Response GP746-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP747, **Sunde, Carol**

Comment GP747-1

Hi, I'm Carol Sunde. I live in Westport, Washington. To speak generally, many of us are very concerned about global warming and crude oil storage, and it certainly has implications for this problem. To be more specific, the long-term benefits of these projects are certainly -- the risks of the project far outweigh any benefits for the few.

Grays Harbor and Westport economies are based on the industries that are fishing, crabbing, tourism, which would be devastated when an oil spill, fire, explosion happens. And I say when because Grays Harbor is very vulnerable to earthquakes, storms, tsunamis, and human error.

And further, putting an oil storage facility near the internationally known Bowerman Basin, a premier flyway for shorebirds, seems incredibly irresponsible. I appreciate that a spill does happen and mitigation is planned for. However, according to the current environmental plans, the companies cannot make arrangements for the number of consequences that will happen when these projects, and if these projects, are approved.

I also wonder about how much insurance can and will be purchased to pay for any disasters which will happen.

Thank you.

Response GP747-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Draft EIS Chapter 4, Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP748, **Sunshine, Susan**

Comment GP748-1

It was with dismay that I read the EIS. In topic after topic area I read denial, denial of the very real possibility of the destruction of a rich and important ecosystem. Careful work had been done evaluating individual risks to individual impact areas. What I missed was the overall picture. Each particular facet could be properly assessed and most of the positive assessments, regardless of

category, ended with "unless there was an accident." I found this appalling, distressing, and baffling. It's like counting all the jig-saw puzzle pieces but never putting them together. I did not get the impression that the totality of the marine environment was ever considered, much less the combination of marine and terrestrial blending and interaction. There's a whole world in that harbor and the connecting rivers, islands, wetlands, and ocean environment. This wonderful primordial soup of life is not there for our use and convenience. It is not even there for the Quinault people; though their long interaction with it has been much healthier than what has occurred since Euro-American settlement. It is there because it is there. It is a part of the Pacific Northwest web of life that produces whales and snails, salmon and blackberries whether any humans want them or not. This bit of North American biodiversity is in turn a part of the whole web of planetary life that preceded humanity but may not outlast it at the rate we humans are destroying our very Mother who gives us life and upon whom we depend for air, for water, for food, and for the nurture of our souls. Maybe the EIS is a bureaucratic masterpiece; dotting the "T"s and crossing the "I"s consummately. To my admittedly less-than-objective way of feeling it is the product of a soul-deadened way of thinking that will allow destruction of a life-giving ecosystem by assuming that human being do not have "accidents" or err in their actions and calculations. An assumption based, of course, on our outstanding record of historic perfection in all we do. God help us.

Response GP748-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

GP749, **Sunshine, Susan**

Comment GP749-1

I write with a weary heart and a troubled mind. Washington in general and Grays Harbor most particularly deserve better than the current, disastrous proposal for oil terminals would give them. Whether you look at the rail shipments of oil or the marine shipments, there are too many risks to humans, to marine and terrestrial life, to entire ecosystems which could be destroyed by one false move at any point on the dangerous journey from well to refinery. The EIS cannot be based on what would happen in a perfect world where no accidents occur, no "acts of God", no human error occurs. We have to realistically assess the prospects for trouble-free construction and operation of the terminals, marine and rail safety, natural and unnatural events and what that can mean. Please do not put at risk all the web of life that has evolved and is functioning in the Grays Harbor area. The risks are too great and the rewards non-existent. What reward is there for burning more fossil fuel? It is abundantly clear to me, to you, to anyone with a functioning cerebral cortex that fossil fuels are killing us. So why should we risk destruction of a useful, productive, rich and diverse environment in order to facilitate the transport and use of a deadly substance that is being replaced by cleaner alternatives even while deliberations on these crazy oil terminals go on? Look to the future, not the

past. Recognize that all around us the fossil fuel industry is losing ground. Do not let the dying throes of a dirty and destructive industry take Grays Harbor down with it.

Response GP749-1

Refer to Response to Comment GP748-1. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP750, **Sunshine, Susan**

Comment GP750-1

I have written before with my worries that the Draft EIS is missing the big picture in estimating possible damage to Grays Harbor and Washington from the proposed oil terminals. Thanks to the work of Sightline Institute my worries are confirmed and increased. Their research on the damage and cleanup from the 1988 Nestucca oil spill is not encouraging. The disposal possibilities for oil and refuse is no better than in 1988 and it was not good then. The assistance for affected wildlife is actually worse now. Ecosystem restoration would largely, if not entirely, be paid for by Washington residents. In 1988 the damage was an anomaly today it is quite predictable with proposals for new oil terminals in Grays Harbor. Taking on this risk for the sake of profits for two companies and their enablers is foolish to the point of criminality. Your responsibility is to the people of Washington State not the CEOs and shareholders of private, for-profit-at-any-cost companies.

Response GP750-1

Refer to Response to Comment GP748-1.

Comment GP750-2

The other major concern researched by Sightline is the lack of adequate insurance by Genessee and Wyoming Railroad (G&W) and its local subsidiary Puget Sound and Pacific Line. G&W brought us the November, 2013 derailment and explosion of 90 oil cars in Aliceville, Alabama. That's their safety record. G&W is very secretive about their insurance but it is estimated to be not more than $500,000,000. Not much when one false move in Aberdeen could easily result in $5,000,000,000 in damages. Demand that G&W prove that their insurance coverage is adequate before considering approval of the terminals or that Westway and Imperium agree to be held accountable for any failings of G&W. Again, Washington residents should not pay for the damages incurred by private, for-profit companies; especially when the end result of their activities is climate change which is already causing destruction in our state.

[Attachments: Grays Harbor oil trains would be severly underinsured. October 19, 2015; Washington is (still) unprepared for a Grays Harbor oil spill and our beaches, birds, and pocketbooks would all pay the price. October 21, 2015]

Response GP750-2

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents

for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP751, **Suter, Alice**

Comment GP751-1

Those of us living in Oregon are affected by trains that travel through our beautiful and pristine Columbia Gorge on their way to terminals in Washington. This area is much too valuable for recreational and ecological purposes to have heavy volumes of transported oil going through them. Spills would be devastating. We are definitely opposed to expanding liquid storage terminals at these two sites.

Response GP751-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP752, **Swanson, Steve**

Comment GP752-1

My name is Steve Swanson and Aberdeen is my home. I would like to point out that environmental impacts can't be separated from social consequences and historically the impact of most environmental disasters falls first and most heavily on the poor and the powerless.

This is one of the reasons why it has hired investors to tempt one of the most economically challenged economies in western Washington. It makes perfect business sense to pose something so controversial and dangerous where economic desperation and lack of resources to limit the community's abilities to resist.

But nevertheless, the irony is we're not in a sacrifice zone. Our lives are tied together by our care for one another, and by the river, the harbor and the ocean. I've never seen another place where people stand in the Walmart parking lot for fish or salmon.

We belong to this place as much as it brings to us, but one slip, one accident with these trains and shiploads of poison will erase that connection and break our community for longer than most of us will live. Please do everything you can to make sure this doesn't happen.

Thank you.

Response GP752-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP753, **Swartz, Marilyn**

Comment GP753-1

I oppose these projects because I believe they will harm the local environment-particularly the birds in that area, as well as detrimental to the shoreline & water.

Response GP753-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP754, **Swett, Michael**

Comment GP754-1

I oppose the projects because they would pose a threat to the health and safety of the surrounding population in the form of air and water pollution, explosions and fires. These issues bear further study before the projects are approved.

The Columbia Gorge would lose its wildness which draws tourists from around the world. People making a living on the water would see their livelihoods threatened by the increased number of ships,barges and mile-long unit trains running along the river. It's a bad deal for all but a few.

Response GP754-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP755, **Sword, Carol**

Comment GP755-1

Lac-Megantac, a tragic lesson unlearned. Disaster in our Columbia Gorge. Greed stealing from the commons. Robbing the future with climate disasters. Ossified minds who cannot change.

Response GP755-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP756, **Sword, Carol**

Comment GP756-1

The two crude oil terminals proposed for Grey's Harbor should both be denied. Oil's time is over. Leave fossil fuels in the ground and pursue energy sources that don't contribute to climate change.

Furthermore, Grey's Harbor is a crucial fishing and crabbing habitat. Why endanger this beautiful place simply for someone's greed ? Sincerely, Carol Sword

Response GP756-1

Comment acknowledged.

GP757, **Taylor, Robert**

Comment GP757-1

Hello, I am concerned that the communities of Camas and Washougal, through which any trains supporting these terminals will pass, were not included i the Draft Environmental Impact Statement. These trains will pass through sensitive waterways and near many schools, residences and businesses. Given the problems seen it many other geographies, it seems short sighted to not discuss the potential impact the increased hazardous train traffic will have. What work will be done to analyze this impact? respectfully, Bob Taylor

Response GP757-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP758, **Teneau, Peter**

Comment GP758-1

Westway and lmperium Terminal Services Expansion Projects EISs

Let me express my absolute opposition to both the Westway and Imperium expansion projects as well as all associated rail facilities.

At the conclusion of my reading the EIS, I think it was insufficient in not highlighting the importance of an inevitable subduction earthquake and its simultaneous tsunami. To some extent the danger could be reduced with a robust terminal structure but the magnitude of R 7-8 event and the unpredictability of its consequences could well overwhelm any anticipatory efforts in design and construction. When one considers, in addition to the terminals, a ship dockside, oil trains serving the terminals and ingress and egress of ships in the channel the accumulated risk points toward catastrophe.

Loaded tank cars of Bakken crude entering, detanking and leaving the Port perhaps poses an even greater danger. There is simply no way at all that oil trains on the track can remain standing in a major quake entailing 3-5 minutes of complex ground movement.

Response GP758-1

Draft EIS Chapter 3, Section 3.1, *Earth*, addresses risks related to geologic conditions in the study area, including earthquakes and related hazards such as tsunamis and liquefaction. To inform the

risk of tsunamis at the project site, an updated tsunami model was completed and an updated assessment of tsunami risks specific to the project site is presented in Draft EIS Appendix C, *Tsunami Impact Modeling and Analysis*. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how building codes, engineering design standards, and proposed applicant mitigation would reduce impacts of earthquakes and related hazards.

Comment GP758-2

I would-also add, to the consequences of oil by rail, what a list of major cities and small towns from the fracking fields and tar sands to. Grays Harbor would suffer. There is not only life threatening endangerment from derailments; spills and explosions but a host of negative impacts to communities as a result of near capacity rail traffic, longer unit trains and track expansion projects. These are sometimes referred to as mitigation but their purpose is increasing traffic of a product that none of the affected communities will benefit from. Furthermore, I am informed that the lions share of the cost of these "improvements" or adjustments have in the past been borne by State and local governments-not the railroads. What may seem to benefit Grays Harbor is a huge accumulated cost to Native American's rights, livelihood and way of life while degrading the fishery.

A truly accumulative comprehensive analysis would take into account rail transportation, (mostly BNSF), that feeds the Grays Harbor projects. It would include a full assessment of the rail, infrastructure, operations and its plans for future expansion.

* Rail traffic is fast approaching its limit leading to congestion at choke points and exposing critical limitations. This has an impact already on tight scheduling and track use, even with Amtrak affected. The result is delays and rail bottlenecks in critical areas. Because of heavy track demand and usage track maintenance is exacerbated. Additional competition between oil, commodity and intermodal traffic can only raise the cost of the two latter modes. Bidding up prices only benefits BNSF and no one else.

* There are many reports regarding inadequate railroad regulation and inspection -to the dire detriment of safety.

* Negligent maintenance of hundreds of railroad bridges and trestles many reported as decrepit has a short wait to failure.

Regarding the matter of transportation of steam coal or oil and because the breadth of impact is on a regional scale, I consider the transportation of the product easily as important or even transcending that of the Port expansion itself. The impact is environmentally and socially regional.

My intention is not to criticize your effort in this EIS- I thank you for its details and the work put into it. However, my point is that the document does not treat rail transportation with full implications as an inseparable component of terminal expansion. That is not what this EIS does but it should. Will the GHRT EIS be broad enough to cover the region and range of impacts I present here?

To populations from Billings through Spokane, Pasco, the Columbia Scenic Gorge (endangering the river) on to Vancouver to Centralia.

* Splicing dozens of smaller towns between cities.

* Causing division, delay, disturbance, pollution and threat to life.

* Each passing unit train in an ever-increasing presence.

Oil and coal by rail is a ubiquitous affront to the Pacific Northwest both environmentally and its communities at large. Those who profit are not the people.

Fully recognizing the need for jobs in Grays Harbor the two projects along with the GHRT should not be permitted. A smattering of jobs after construction of the terminals and what is left-an oil port. Looking to the future how else may these two cities prosper with more diversification say in Green industry, handling alternative export products likely providing more jobs, while building on its natural assets, improving the environment and better preserving the fishery. This speaks to a better quality of life for all.

Please remember that permitting Westway and Imperium projects will hurt us in other cities and towns. So with the world considering that oil in its extraction, processing and transportation poisons the air we breathe, and despoils the earth leaving a legacy of deadening heat, storms and floods.

Sincerely,

Peter Teneau 2715 N. Terry Street Portland, Oregon 97217

November 24, 2015

Response GP758-2

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

GP759, **Tharp, Rod**

Comment GP759-1

The DEIS does not adequately address the impacts of a derailment of an oil train. The tank cars cannot be made crashworthy. Non-yard oil train derailment spills are guaranteed to happen in the

extended area several times per decade. There needs to be a complete impact study of the effects and cost of a major oil train crash. An oil spill would have significant and adverse impacts that cannot be prevented or mitigated. At best only 14% of the oil is recovered in a spill. Crude oil contains benzene which cannot be recovered from the water. All of this needs to be in the EIS.

Response GP759-1

Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport,* presents the analysis of risk of oil spills, fires, and explosions related to rail transport related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Section 4.5.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident along the PS&P rail line. Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including a discussion of the potential longer-term impacts. Final EIS Section 4.3, *Risk Considerations,* reflects additional information about factors influencing cleanup.

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

GP760, **Tharp, Rod**

Comment GP760-1

A proper EIS will take into consideration the effects of an oil train derailment along the whole length of the tracks that these trains will travel through Washington State. Every city, town, river or other water way, and every stretch of track needs to be included. This should include both oil spill and the flammability of this oil.

Response GP760-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP760-2

The oil vapor pressure cannot be lowered enough to prevent ignition. When tank cars are punctured during a derailment, gases rush out and find a spark. Non-yard derailment spills usually lead to fire. Oil train fires are likely to cause burns, deaths, and property damage. Burns, deaths, and property damage are significant adverse impacts that cannot be prevented or mitigated. This needs to be included in the final EIS.

Response GP760-2

Draft EIS Chapter 4, Section 4.5.2.2, *Fires or Explosions*, addresses potential risks related to fires or explosions associated with rail transport under the proposed action. Section 4.7, *Impacts on Resources*, describes potential impacts of fires and explosion.

GP761, **Tharp, Rod**

Comment GP761-1

The EIS should cover effects of an oil car exploding and the effects on person or animal with in 2 miles of the tracks.

Response GP761-1

Chapter 4, Section 4.7, *Impacts on Resources*, has been revised to more fully describe potential impacts on human health from an oil spill, fire, or explosion. This section also addresses potential impacts on animals.

Comment GP761-2

Until all the tank cars have thermal jackets and high capacity pressure relief valves, tank cars sitting in a pool fire, are likely to explode. Firefighters cannot protect the public in those cases. Oil train explosions will be impossible to prevent for nearly a decade.

Response GP761-2

Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport,* discloses voluntary measures and design features, proposed applicant mitigation, and other measures that would further reduce environmental health and safety impacts from rail transport related to the proposed action, in addition to regulatory compliance and best practices. To the extent possible, within the framework outlined in the Master Response for Mitigation Framework, measures addressing the need for more coordinated and focused planning include the role of the applicant as appropriate. However, as noted, no risks can be eliminated and, depending on the circumstances, significant impacts could occur.

GP762, **Tharp, Rod**

Comment GP762-1

The EIS needs to address the impact of oil trains blocking traffic including emergency vehicles. This impact need to be address for the entire route of these trains and also address as a cumulative impact with other oil train transportation. Oil trains block traffic. They interfere with commerce, emergency response and school buses. The adverse impacts will be significant. There is no practical way to mitigate for blocked traffic.

Response GP762-1

Draft EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, addresses potential impacts on vehicle delay and emergency vehicle access. Final EIS Section 3.16 clarifies mitigation and potential significant and unavoidable impacts.

GP763, **Tharp, Rod**

Comment GP763-1

The EIS needs to include extensive impacts from contaminated air around the terminals.On some days the oil terminal will stink, particularly if the vapor combustion units fail. Not only are these fumes smelly but they are also deadly.

Response GP763-1

As described in Draft EIS Chapter 3, Section 3.2, *Air*, the proposed action is subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping requirements for onsite stationary sources. Refer to the Draft EIS for a list of permit conditions and proposed applicant mitigation that would reduce potential impacts on air quality.

Comment GP763-2

The EIS needs to address the total environmental impact of air quality from every aspect of handling and storing this oil and include the impact on the health and economic consequences on the adjacent people and business.

Response GP763-2

Draft EIS Chapter 3, Section 3.2.5.2, *Proposed Action*, describes the air quality impacts that could occur in the study area as a result of construction and routine operation of the proposed action. Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, addresses economic considerations, social policy implications, and the costs and benefits associated with the proposed action.

GP764, **Tharp, Rod**

Comment GP764-1

The EIS needs to include the effects on the local economy including the decreased livability of the area due to the industrialization of the area which will affect the core of the town.

False Prosperity. An oil terminal can only begin the slide toward altering the landscape, river, and quality of life here. There will be no other direction once it begins. The construction unions in Texas oil towns have been starved to death. And once they've got their foot in the door, big oil is as happy as any other corporation to break unions. The prosperity we're being offered is a poison pill. This cannot be mitigated or avoided.

Response GP764-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4, *What are the costs of the proposed action?* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns*, has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

GP765, **Thevik, Karen Olivia**

Comment GP765-1

My name is Karen O. Thevik I reside in Ocean Shores Washington. My family has been supported by commercial fishing off of the coast of Washington for 45 years.

The preservation of a healthy resource environment is fundamental to the economic success of Grays Harbor and the Coast. The DEIS is painfully lacking in recognition and quantification of impacts and risks to our marine dependent coastal economies.

While the DEIS is deficient in this regard it is accurate when recognizing the fact that the risk from a fire, explosion, or major spill CANNOT be mitigated. If the risks from these projects cannot be mitigated they should not be permitted and should be denied under SEPA.

Response GP765-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP766, **Thevik, Karen Olivia**

Comment GP766-1

My name is Karen Olivia Thevik. I live in Ocean Shores. I am a lifetime resident of Washington State. I am a retired office manager. My husband has been a commercial fisher for 45 years. My families economic survival and way of life has been dependent on a healthy marine environment for decades. I spent three years crab fishing with my husband in the Gulf of Alaska. I have seen the bounty the ocean and our waterways can offer. The oil terminal projects in Gray Harbor pose a grave threat to the marine resource based economies of Grays Harbor and the Pacific coast. The DEIS does a terrible job of capturing the true impacts that making Grays Harbor into a major crude oil export hub would bring. There is a deep rooted and justified concern over the negative impact these projects will bring to our coastal culture, heritage and economies. The benefits will go elsewhere while the risks remain with us. The risks from a major spill or God forbid an explosion cannot be mitigated. The DEIS says as much. As the Public Works Coordinator for the City Of Ocean Shores I worked with the SEPA process. If the impacts are significantly adverse cannot be mitigated and therefore unacceptable the permits can and should be denied.

Response GP766-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP767, **Thevik, Karen Rae**

Comment GP767-1

My name is Karen Rae Thevik. I am a lifelong resident of Washington State. I am retired and recently moved to Grays Harbor. From my residence I have a panoramic view of the Grays Harbor estuary. I have always had an affinity for water and wildlife.

Grays harbor is one of four major staging areas for migrating shorebirds in the Pacific Flyway. It is designated as a Western Hemisphere Shorebird Reserve Network Site and recognized as an internationally significant shorebird habitat. The DIES does very little justice to the importance of protecting the Grays Harbor estuary and the wildlife dependent on it. The DEIS offers no serious mitigation in the event of a major spill event in Grays Harbor that would adversely effect sensitive habitat. The proposed mitigation for the Shorebird Festival is a joke and would have little benefit. The DEIS states several times that the impact of a major spill event cannot be mitigated. While the DEIS has many deficiencies the recognition that catastrophic spill events could occur and cannot be

mitigated should not be ignored. If the risks are significantly adverse and cannot be mitigated then the permitting agencies can and should deny the permits.

Response GP767-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or within Grays Harbor, respectively. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources,* describes the types of impacts that could result from an oil spill, fire, or explosion, including migrating birds.

Although ceasing vessel-loading operations for 2 weeks during the Grays Harbor Shorebird Festival would reduce risks related to oil spills that could affect migratory birds during this migratory season as well as other species in the area, the Final EIS clarifies that the applicant's primary intent in committing to this voluntary measure is to recognize the importance of the annual Grays Harbor Shorebird Festival to the community and those attending the festival and to eliminate the chance of a spill from vessel-loading operations during this time. The measure has been moved to Final EIS Chapter 3, Section 3.10, *Recreation*, to reflect this clarification.

GP768, **Thevik, Maxwell**

Comment GP768-1

My name is Maxwell C. Thevik. I am a student at Western Washington University. I was born in Seattle and am a lifetime resident of Washington State. I often visit Grays Harbor and our coastal beaches. I am very concerned with the transformative nature of the oil terminal projects being proposed in Southwest Washington. The volume of crude oil expected to move though all of the proposed projects, (in Grays Harbor and Vancouver,) will equal half of all crude oil moved through the nation by rail in 2014. In Grays Harbor alone upwards of 3 billion gallons annually. Our coastlines and waterways are a precious resource and all citizens have a right to their bounty and beauty. The mitigation proposed in the DEIS does not offer adequate protection in the event of a major fire, explosion or spill from these projects. The restricted study are does not reflect the true impacts of these projects across our region. Many statements of fact are wrong and the conclusion following false. My generation will inherit the future that follows this EIS process. And if these projects move forward my generation and those that follow will also inherit the unintended consequences and risks they bear. It is incumbent on us all to ensure the EIS process is thorough, robust, and an honest journey to the truth. The core truth of the DEIS cannot be ignored: That the risks from these projects cannot be mitigated. If the risks cannot be mitigated the permits must be denied.

Response GP768-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing

regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 to reduce the likelihood of a spill reaching the environment and the potential impacts if an incident occurs at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

For more information about the development, implementation, and enforcement of mitigation measures, refer to the Master Response for Mitigation Framework.

GP769, **Thevik, Maxwell**

Comment GP769-1

My name is Maxwell C. Thevik. I am a student at Western Washington University. I was born in Seattle and am a lifetime resident of Washington State. I often visit Grays Harbor and our coastal beaches. I am very concerned with the transformative nature of the oil terminal projects being proposed in Southwest Washington. The volume of crude oil expected to move though all of the proposed projects, (in Grays Harbor and Vancouver,) will equal half of all crude oil moved through the nation by rail in 2014. In Grays Harbor alone upwards of 3 billion gallons annually. Our coastlines and waterways are a precious resource and all citizens have a right to their bounty and beauty. The mitigation proposed in the DEIS does not offer adequate protection in the event of a major fire, explosion or spill from these projects.

The restricted study are does not reflect the true impacts of these projects across our region.

Response GP769-1

Refer to Response to Comment GP768-1.

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

Comment GP769-2

Many statements of fact are wrong and the conclusion following false.

Response GP769-2

The commenter does not provide sufficient details to allow for a response.

Comment GP769-3

My generation will inherit the future that follows this EIS process. And if these projects move forward my generation and those that follow will also inherit the unintended consequences and risks they bear. It is incumbent on us all to ensure the EIS process is thorough, robust, and an honest

journey to the truth. The core truth of the DEIS cannot be ignored: That the risks from these projects cannot be mitigated. If the risks cannot be mitigated the permits must be denied.

Response GP769-3

Refer to the Master Response for the Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP770, **Thomas, Anita**

Comment GP770-1

May I please request that someone tell me when the yellow lights come on. My name is Anita Thomas. I came up here from Vancouver, Washington, because the trains run by where I live. And it's not just me. I'm also concerned about you. I'm also concerned about those in this community that want these jobs that are desperate enough to take them.

My father was a pipeline welder. I grew up in oil territory as well. My father had us in Wichita Falls, Texas for most of my growing up years, so I know what that is like. And I really urge you, don't do this to your beautiful state. Don't do this.

The problem, one of the many, I'm afraid, with the DEIS impact statement is some of the things it has not covered. The questionability of that rail line that Genesee & Wyoming is running between here and Centralia, I would not trust that company. They were in charge of the rail line where the train in Alabama blew up, the first one in the U.S., November of 2012.

Response GP770-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP770-2

But it's not just that. One thing, even if you have the jobs, this will chase off more jobs than it brings.

And people will not forgive on that aesthetic thing that was left out of that impact statement is the smell. It sounds funny, but if you live next to something that smells that hideous, the people of your community will not forgive you. They will not re-elect you.

Response GP770-2

Final EIS Chapter 3, Section 3.2, *Air*, reflects the addition of a discussion of potential impacts related to odor. The only compound with sufficient emissions to have the potential to have a perceptible odor is hydrogen sulfide. The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, are expected to reduce emissions of air pollutants, including hydrogen sulfide, to below the odor threshold for the most sensitive individual.

GP771, **Thomas, Jan**

Comment GP771-1

Westway and Imperium are existing terminals that share the Terminal 1 Dock at the Port of Grays Harbor in Hoquiam. The proposed expansions would substantially increase terminals' capacity (Westway DEIS, p. 2-3, 2-7; and Imperium DEIS, p. 2-4, 2-9). I have the following concerns about the proposed terminal expansions: • Substantial disruption to tribal use of Grays Harbor: The combined Westway and Imperium expansions will result in Terminal 1 being in use nearly every day of the year (DEIS, p. S-30). This would limit access to the usual and accustomed fishing areas of the Quinault Indian Nation. The DEIS documents offer to mitigate these impacts by telling the tribe to "fish elsewhere" or "pull the nets in sooner" (DEIS, p. 6-26). This does not acknowledge nor respect the unique value of the tribe's reasonable access to fishing in Grays Harbor.

Response GP771-1

As stated in Draft EIS Chapter 3, Section 3.12.7.1, *Applicant Mitigation*, proposes several mitigation measures to reduce impacts of vessel traffic on tribal fishing. These include measures proposing that the applicant coordinate with the Quinault Indian Nation and Washington Department of Fish and Wildlife to support review and possible adjustments of docking schedules, work with stakeholders to establish procedures for announcing vessel arrival and departures, and initiate a process between stakeholders and Quinault Indian Nation tribal officials to discuss and identify additional mitigation measures.

Section 3.12.8, *Would the proposed action have unavoidable and significant adverse impacts on tribal resources?* states that implementation of the proposed mitigation measures would reduce but may not completely eliminate impacts on tribal resources.

Comment GP771-2

There will be more than a doubling of Grays Harbor County rail traffic to approximately 7 trains per day (DEIS, tables 3.15-4 and 6-2). Bakken oil is particularly volatile. Even with the responsible phasing in of safer rail tank cars, communities along the entire rail lines from North Dakota will still be exposed to the risk of derailment and explosion. Coupled with significant rail traffic congestion in places like Spokane, it is only a matter of time before there is a derailment that results in an explosion and/or spill.

Response GP771-2

The voluntary applicant measure calls for all new rail cars to meet or exceed the U.S. Department of Transportation Specification 117 design or performance criteria and the retrofitting of all existing tank cars in accordance with the U.S. Department of Transportation-prescribed retrofit design or performance standard (80 *Federal Register* 26643).

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*. Final EIS Chapter 5 reflects additional information characterizing potential

risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

Comment GP771-3

The proposed actions would release substantial amounts of carbon dioxide and other greenhouse gases (DEIS, Table 6-4) that contribute to climate change. However, the DEIS documents do not include any release estimates for the greenhouse gases during the refining and ultimate use of the crude oil. The final EIS should include such an analysis.

Response GP771-3

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively, in the context of emission inventories and reduction goals. Final EIS Section 3.2 and Section 6.5.1.2 have been revised emission estimates from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

Comment GP771-4

The proposed expansions would substantially increase the number of transport vessels on our rivers and coastal waters, increasing the risks to significant aquatic resources.

Response GP771-4

Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Final EIS Chapter 5, *Extended Rail and Vessel Transport*, and Chapter 6, *Cumulative Impacts*, have been revised to clarify the risks under existing conditions, the no-action alternative, and the proposed action in the extended study area. The chapters acknowledge that the proposed action could increase the likelihood of rail and vessel incidents involving an oil spill, fire, or explosion, both individually and cumulatively. However, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions or the no-action alternative. Therefore, the potential consequences are discussed in general terms and are similar to the impacts identified in Final EIS Chapter 4, Section 4.7, *Impacts on Resources*.

Comment GP771-5

After considering all aspects of the proposed expansions of the oil terminals along Grays Harbor, I urge the adoption of the No Action alternative. It is the only responsible way to save our precious Northwest environment.

Response GP771-5

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP772, **Thompson, Carey (Climate Working Group)**

Comment GP772-1

Kate Gesseit Climate Crisis Working Group 86070 Cougar Lane Eugene, OR 97402

Dear Maia Bellon, Director Washington Dept. of Ecology,

Please do not allow oil terminals to be built in Gray's Harbor. The conduits would be conduits of extremely dirty oil that from the time of extraction produce large quantities of greenhouse gases to wreck the atmosphere. In addition, Gray's Harbor is an area of great biological diversity that must be protected.

Sincerely yours,

Kate Gesseit Carey D Thompson Joan Kleba M. Gesseit Manetta O'Byrne Eric O'Byrne

Response GP772-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP773, **Thompson, Sherrie**

Comment GP773-1

My name is Sherrie Thompson. I live in Hoquiam in a blast zone.

My comment is the police department and the fire department are both in the blast zone. I would like to know who's the emergency team?

That's my comment. Thank you.

Response GP773-1

Draft EIS Section 4.2, *Applicable Regulations,* discusses the state and federal emergency response framework that would apply in the event of an incident and notes that local emergency responders would be first on the scene. Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

GP774, **Thrun, Nina**

Comment GP774-1

Testimony on oil shipments, Oct 8, 2015

My name is Nina Thrun

My profession is a Clinical Research Associate. I have worked in Clinical Research for over 18 years. I live in Camas, with my husband.

We moved to Camas 4 years ago from Texas, in order to live in an un-polluted, quiet area. My husband had a heart attack a few years ago and stopped smoking.

The oil trains traveling through Camas will release significant amounts of diesel particulate matter and they will also increase noise pollution.

A review of scientific literature shows that the human body, in particular the cardiopulmonary system, is not equipped to safely process the toxic side effects of air pollution any better than it is able to process cigarette smoke.

Data in medical journals shows that:

Diesel particulate matter

Diesel particulate matter is associated with increased cardiopulmonary mortality and increased heart attack rates. No safe threshold has been established. 1)

Noise pollution

In adults, short term and long term adverse health effects of noise pollution have been documented, including ischemic heart disease and strokes 2), 3)

We are building a house in what we thought was a quiet, unpolluted area. We plan to stay here for the rest of our lives. I am very concerned that the proposed oil trains will increase the cardiovascular adverse health effects on my husband and all Camas residents. Of course, there are many other adverse health effects of diesel particulate matter and noise pollution, but I have focused on one effect with concerns me deeply.

Please study the impact of the proposed oil trains on cardiovascular health and health in general.

References:

The following is a comprehensive review, by the American Heart Association, of 426 journal article references.

1) Particulate Matter Air Pollution and Cardiovascular Disease: An update to the Scientific Statement from the American Heart Association. Circulation 121:2331-2378 P.T.O

2) Selander J, Milsson ME, Bluhm G, Rosenlund M, Lindqvist, M Nise G, Pershagen G. Long-Term exposure to road traffic noise and myocardial infarction. Epidemiology 2009; 20(2) 22 – 279

3) Willich, SN, Wegscheider K, Stallmann Metal. Noise burden and the risk of myocardial infarction. Eur Heart J 206; 27: 276-282

Testimony, Nina Thrun, 612 NE Oak St, Camas, WA. Telephone 360 834 7950

Response GP774-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*, which presents a detailed analysis of potential impacts on air and noise in the study area related to the proposed action.

GP775, **Thrun, Nina**

Comment GP775-1

Hello, my name is Nina Thrun. I have a degree, Bachelor's of Science, in ecology. My profession is clinical research. I've worked in clinical research for over 18 years. I came to speak about the health effects, but I think these have been adequately addressed by previous speakers so I won't reiterate them. And talked about the health professionals, that was mentioned before, and the health risks of the significant amount of diesel particulate matter, and noise pollution, which will affect communities along the Gorge.

We live in Camas, Washington where my husband and I -- we moved to the Camas area from Texas. We wanted to live in a quiet, unpolluted area. I'm changing my speech.

I'm originally from England. And I know and understand the people here need jobs. I grew up in an industrial wasteland. We have had industries for centuries that have devastated our communities. We do not want that here in Washington state.

This is the most wonderful part of the country. Please keep it as it is. And jobs, the BlueGreen Alliance supports a great turning away from fossil fuels to create clean energy and will create jobs in green energy.

In the process, we can create many, many jobs using clean energy. From a personal level, we have built a house in Camas, in the Gorge. We don't want to hear more trains. Thank you for listening.

Response GP775-1

Refer to Response to Comment GP774-1. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP776, **Thurman, Mickey**

Comment GP776-1

I am against placing any crude oil terminals in Hoquiam or any surrounding community. Our ecosystem here is too fragile to risk spills. Increased train spills across the country indicate that improvements need to be made to trains and the containers that carry the oil.

Response GP776-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP777, **Tibbets, Ron**

Comment GP777-1

I'm Ron Tibbets. I live at 710 Monroe in Hoquiam. I'm a Hoquiam City Council person.

I've read most of the summary of the EIS and in every case they say that while the risks are low, the consequences of an event could be catastrophic, and I think that since we live on the Cascadia fault we have a very short geological history in this area that it's absolutely foolish to construct things that could be unmitigated. There is no mitigating a major tsunami or an oil ship being lost on the bar or along the coast. And, if the oil tanks could not survive being hit by a large tsunami, it would be bad enough with the tsunami hitting the harbor without having a coat of oil burning on top of it.

All along the Chehalis Valley, there are bluffs where the train would be knocked off even in a mild earthquake. It is absolutely not something that should ever be allowed in this area.

I believe the prime movers in this are the people who want to export oil. There's a big movement in Congress right now. They're looking at short-term gains to the detriment of the people that live here on the harbor.

Response GP777-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action.

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

GP778, **Tieger, Joseph**

Comment GP778-1

Westway and Imperium Projects EISs, c/o ICF International Attn: D. Butorac, B. Shay 710 Second Avenue, Suite 550 Seattle, Washington 98104

Electronic Transmittal-hard copy to follow Butorac@ecy.wa.gov

Dear Ms. Butorac and Mr. Shay:

Others have commented at length on other elements of the documents so I will limit my comments.

Fiscal Risk

Section 3.3 Laws and Regulations for Water and in other sections there are references to the Oil Pollution Act of 1990 (330.S.C.A. §§ 2701-2761) (OPA). As noted the OPA requires that the owner or operator of a vessel or facility establish, subject to certain limitations, evidence of financial responsibility so that funds will be available to respond to a release of oil.

One might ask why a reasonable person would propose to build and operate a facility storing 42 million, or 48 million, gallons of oil on a site subject to seismic soil liquefaction and/or a tsunami if they would be liable for the costs of any response action, the restoration of natural resources, and claims for damages from private parties.

The answer to this question can be found in the Oil Pollution Act at 330.S.C. Section 2703

Defenses to Liability

(A) Complete defenses A responsible party is not liable for removal costs or damages under section 2702 of this title if the responsible party establishes, by a preponderance of the evidence, that the discharge or substantial threat of a discharge of oil and the resulting damages or removal costs were caused solely by-

(1) an act of God;

Therefore the "person" owning or operating a facility that is the source of a catastrophic release caused by a seismic event or a tsunami that, even if the catastrophic release was predictable, is still "an act of god."

Private parties injured by the release would have no course of action under federal law, and possibly state law, for the recovery of damages.

Some measure of the extent of this liability can be found in the costs for these costs could be derived from the costs of the releases at the Kalamazoo River(approximately 793,000 gallons, or the Deepwater Horizon(4.9 million barrels).

If the agencies permitting the construction and operation of these facilities decide that the projects should proceed they will have essentially made the public the "liable party" for the response costs and the restoration of natural resources. It is not the project proponent that bears the fiscal risk of a catastrophic event, it is the public.

Response GP778-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP778-2

Environmental Risk

The EIS goes to great lengths to describe the "mitigation measures" such as training and positioning oil recovery equipment at and near the facilities.

However, as noted in the EIS –

"Average current velocity is about 1.9 knots on the flood and 2.8 knots on the ebb but velocities have been known to reach 5 knots. The direction of the current near the bar can be erratic, running north close inshore and south offshore. In the harbor, current velocities in the navigation channels seldom exceed 3 knots. The tidal cycle in Grays Harbor is mixed semidiurnal (two high tides and two low tides in a 24-hour period with varied heights), which means that tidal height relative to mean low water ranges from less than 1 foot to almost 9 feet twice a day"

This describes the water movement under ordinary conditions which would be more turbulent and difficult under flood or adverse weather.The fact of the matter is that, under the conditions described for Grays Harbor, a significant portion of a large volume of oil spilled into the Harbor will neither be contained, nor recovered. The Oil Spill modeling assumes that a significant portion of the spilled product will evaporate(which is questionable given winter water temperatures) or emulsify.

Grays Harbor, like all estuaries, receives considerable quantities of silt and suspended organic material from the inflowing rivers. In addition, as Grays Harbor is shallow, wind and tidal action re-suspend previously deposited sediment. Oil will attach to these particles creating an "oil particle aggregate" or OPA 1 (hereafter -Report).

"Traditional clean-up methods based on physical recovery of oil slicks on surface waters are ineffective for spilled oil once it submerges.""OPA formation increased with increasing salinity, and at 35 ppt almost11 of the oil was taken up in OPA formation." (Report page 8). Normal seawater is 35ppt.

In an estuary, suspended particles entering with the freshwater interact with the dissolved sodium and chloride ions and begin to aggregate forming a continuum of particle sizes. As noted in the EIS the freshwater being lighter flows over the sea water forming a gradient(a.k.a.-wedge). The suspended particles, including those coated with oil and other contaminants, move both vertically and horizontally with the tides and varying freshwater inflow. As is known by fisherman this mixing zone is an active area for fish and other organisms, large and small. It is also an area where larval fish and invertebrates concentrate to feed on the suspended particulates and where their ingestion and exposure to concentrated contaminants can be injurious.

Depending on inflow, tidal and weather conditions particles suspended in the wedge may remain there for more than one tidal cycle as will any oil entrained. This increases the risk of oil toxicity to the organisms occupying this area.

The OPA also sink to the bottom of the waterway "Recovery techniques for submerged oil and OPAs in freshwater and marine environments still in the development phase." "Where oil is deposited OPAs remains at concentrations that cause concerns for benthic organisms or excessive sheening occurs, dredging may be necessary." (Report page 21)Given the areal extent, varying depths, and other parameters the recovery of large quantities of oil from a release to Grays Harbor is problematic.

Response GP778-2

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and

vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. Refer to the Master Response for Oil Spill Modeling Methods for more information on the general approach and assumptions used in the impact analysis for oil spills.

Comment GP778-3

[Footnote: 1Oil-Particle Interactions and Submergence from Crude Oil Spills in Marine and Freshwater Environments -Review of the Science and Future Science Needs, Fitzpatrick, Faith A, Michel C. Boufadel et al. Open File Report, US Geological Survey 2015-1076]

RISK Assessment

"In general, this risk assessment considers the implementation of the proposed actions over a **20-year analysis** period from 2017 (anticipated start of operation) to 2037."

Unless the Project Proponents provide a legally binding assurance that they will cease operations and remediate the site in 20-years a 20-year assessment of the risk posed by this site is absurd. The use and transport of oil has continued since the discovery at Oil Creek Pennsylvania in 1859. It is possible that the use of petroleum will cease within 20-years however, unless provided a factual basis for this assumption, a longer period, 100-years for the risk assessment would be more realistic.

The EIs states:

> "Catastrophic failure of a storage tank is quite unlikely, with a release predicted once in 40,000 or 22,000 years, for Westway and Imperium, respectively."

However: the EIS also states that:

> "At the project site, a magnitude 6.0 earthquake has a 30 to 40% likelihood of occurring once in 50 years. An earthquake of magnitude 9.0 or greater has a lower likelihood of occurring, 6 to 8% chance within a 50-year window. "

And,

> "The 2014 USGS map shows that, for the study area, there is a 2% probability of an earthquake exceeding a PGA of 0.7 g in a 50-year period. As a generalization, this means that in any 50-year period, there is a 2% chance that an earthquake could occur that would result in severe shaking and moderate to heavy structural damage. Ground shaking would be strongest in areas underlain by soft soils or unconsolidated deposits such as sand and silt and least in areas underlain by solid rock. The Site Class Map of Grays Harbor County, Washington characterizes the project site as Site Class E, which is the highest level of expected increase of ground shaking due to the type of underlying materials (Palmer et al. 2004). Similar areas of soft soils also occur along the PS&P rail line and would be susceptible to ground shaking in the event of a magnitude 6.0 earthquake or higher."

And further that:

> The loss of support for overlying layers may result in these overlying layers subsiding or moving laterally(lateral spreading). Liquefaction also contributes to the loss of bearing capacity for shallow foundations. Subsidence or lateral spreading can damage building foundations or lead to building collapse.
>
> "During a CSZ earthquake, coseismic subsidence would occur almost instantaneously and the land in the study area would drop 5 feet or more. Substantial geologic evidence exists of these events in the Grays Harbor vicinity and in Grays Harbor specifically(Atwater 1992; Shennan et al. 1996; Atwater and Hemphill-Haley 1997; Wang et al. 2013). As noted above, the most recent CSZ earthquake and associated coseismic subsidence occurred January 26, 1700 (Atwater et al. 1995; Jacoby et al. 1997; Atwater et al. 2005). Wang et al. (2013) review CSZ earthquake subsidence analyses from a wide variety of CSZ sites from northern California to British Columbia. Based on two sites in the Grays Harbor area that they consider to provide the best basis for determining the amount of local coseismic subsidence from the event, Wang et al. (2013) approximate coseismic subsidence of approximately 2 to 5 feet."
>
> It was found that the berm surrounding the Westway Terminals LLC and Imperium Terminal Services will be overtopped.

Given that the probability of a seismic event severe enough to cause liquefaction is 30-40% every fifty years how is it possible that:

> Catastrophic failure of a storage tank is quite unlikely, with a release predicted once in 40,000 or 22,000 years, for Westway and Imperium, respectively?

What is the probability of a magnitude 6.0 earthquake which has a 30 to 40% likelihood of occurring **once in 50 years**. Or An earthquake of magnitude 9.0 or greater has a lower likelihood of occurring, 6 to 8% chance within a 50-year window" occurring in a 40,000 year or 22,000-year period?

The risks posed by the proposed oil terminals need to be restated. What must be understood is that seismic events and tsunamis are not probabilities but certainties. It is not a question of "if" these events will occur, it is only a matter of when. The physical, fiscal, and environmental risks to the public posed by these proposals are enormous.

It is clear is that the information presented in the DEIS does not present those responsible for authorizing the construction of these facilities, or the public, with a reasonably complete presentation of, or concise analysis of, the fiscal and environmental risks posed by the proposed projects.

Joseph E. Tieger 3412 N. 30th Street Tacoma, WA 253-212-2148

Response GP778-3

As noted in Final EIS Chapter 3, Section 3.0, *Introduction*, the EIS analyzes the impacts that could occur over the lifetime of the proposed facilities. Where evaluated quantitatively, potential impacts were considered for 2017—the anticipated first year of operation—and 2037 to account for future growth and development. This approach provides context to decision-makers about how the impacts of operations would evolve over a reasonably foreseeable period. This is particularly relevant for transportation- and risk-related impacts that can evolve over time because of reasonably foreseeable increased growth, planned infrastructure changes, and phased regulatory requirements for improved transportation efficiency and safety.

Draft EIS Chapter 4, Section 4.4, *Environmental Health Risks—Terminal (Onsite),* describes the risk and potential for storage failure. Appendix M, *Risk Assessment Technical Report,* describes the data sources for the assumptions used to conduct the risk assessment for storage tank failure. As noted in Appendix M and in the Master Response for Risk Assessment Methods, the risk assessment addresses any single causal event but considers the risks of selected release scenarios regardless of the causal event. The tank failure rate developed for the analysis is based on studies that analyzed historical data of previous storage tank releases caused by a variety of different factors including weather-related factors.

Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events.

The likelihood that a seismic event would occur is unchanged as the result of the proposed action; however, as noted in Section 3.1, *Earth,* there is the potential for increased risk of harm to property and people as the result of the proposed action. The increased potential for exposure to crude oil is addressed in Section 4.4. As discussed in Section 4.7, *Impacts on Resources,* depending on the specific circumstances of an incident, the potential environmental impacts could vary but do have the potential to be significant. Final EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, reflects the addition of information on the range of impacts—including societal costs—that could occur in the event of an incident.

GP779, **Tim**

Comment GP779-1

I'm Tim. I work through the Local 737 in Portland, Oregon and I live in Stevenson, Washington. Stevenson is a little town along the tracks. We have businesses, community buildings, and elementary school, and water supply around them. The Post Office and volunteer fire department are within a few feet of the tracks as well. There's probably a lot of towns, like us, along the various routes, kids growing up in these towns.

We've been experiencing higher temperatures, lower water levels than normal. This isn't normal. This is insane. The tankers along Puget Sound or the Gorge, anywhere else can kill or maim a lot of people if they set off a wild fire.

We've had fires and even though they were miles away, the smoke was thick enough we had to stay inside. And it was terrifying the possibility that the forest ground would be next.

Please consider this impacts everybody upstream from them. Also if the trains are here and ask the support of globalization and Free Trade Agreement allowing companies to outsource employment for living wage jobs to factories exporting goods through those ports to be built with substantial emissions and safety standards in places with unregulated death trap factories, subsistance wages and no emission regulation result in carbon emissions, water pollution and the like, huge increase in barge traffic, which is four times...

Response GP779-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

GP780, **Tinnerstet, Darryl**

Comment GP780-1

Westway & Imperium Expansion Proposals Draft EIS Comments Darryl Tinnerstet, McCleary WA Public Hearing Comments

RECEIVED oct 1 2015 For the record I have written, reviewed, and edited over 45 major EISs over a 26 year period. The largest, on a very complex project, was I believe about 300 pages. Had I turned out an 1800 page document, let alone two of them for basically the same project, my career would have been considerably shorter.

1. These two EISs should have been combined, along with the third one. WAC 197-11-060(3)(b) states "Proposals or parts of proposals that are related to each other closely enough to be, in effect, a single course of action shall be evaluated in the same environmental document." Both of these documents, despite supposedly different proponents, were prepared by the same consultants. Both involve crude oil storage and shipping facilities in a common area, and shipping by rail on the same tracks. Please explain in detail why they were not combined, along with the third project, into a single, concise, readable document. The fact that a third project follows these two is classic segmentation - spreading out similar impacts over separate documents to make them appear smaller. Please explain how this is not segmentation.

Response GP780-1

Refer to the Master Response for Connected or Similar Actions.

Comment GP780-2

2.These documents should have been made available in hard copy. Historically NEPA and, I believe, SEPA EIS documents have been circulated in printed form to potential commenters. Please explain why the proponents were not required to do so, at their and not Ecology's expense. I repeatedly requested, and was refused, printed copies from Ecology unless I was willing to pay $540 for a copy. Adequate review of technical documents of this scale is virtually impossible online or from CDs. There is no way to easily flip back and forth within one of them or between them that way. Some of us do not have state of the art computers and have a very difficult time compiling comments while simultaneously trying to read online.

Response GP780-2

Printed copies of the Draft EIS were available for review at the following locations: Washington State Department of Ecology, Lacey; City Hall, Hoquiam; Aberdeen Timberland Library, Aberdeen; Centralia Timberland Library, Centralia; Hoquiam Timberland Library, Hoquiam; Lacey Timberland

Library, Lacey; Olympia Timberland Library, Olympia; McCleary Timberland Library, McCleary; and Ocean Shores Public Library, Ocean Shores.

Comment GP780-3

3.WAC 197-11-425 states "The text of an EIS (WAC 197-11-430(3)) normally ranges from thirty to fifty pages and may be shorter. The EIS text shall not exceed seventy-five pages; except for proposals of unusual scope or complexity, where the EIS shall not exceed one hundred fifty pages. Appendices and background material shall be bound separately from the EIS if they exceed twenty-five pages..." Likewise the SEPA Handbook FAQs state "the text of an EIS shall not exceed 75 pages, except for proposals of unusual scope or complexity, which shall not exceed 150 pages [WAC 197-11-425(4)]. If appendices and background material exceed 25 pages and together the entire EIS would exceed 100 pages, they must be bound in a separate volume." Obviously the intent was for printed and bound copies to be circulated, albeit much smaller in size. WAC 197-11- 504 says nothing about providing electronic copies only. Can you point to specific Ecology guidelines which say that is no longer required? This should not be an FOIA Public Disclosure issue - these documents are specifically intended for public circulation and comment. Please explain how refusing to provide printed copies in accordance with state law, Ecology regulations, and common practice should not be viewed as an effort to stifle detailed comments. Of course the cost would be excessive, because the proponents were allowed to make the two documents 24 times the legal size.

Response GP780-3

The length of the Draft EIS reflects the amount and complexity of information deemed adequate for the full disclosure of impacts. Due to the size, other materials such as the *Summary* and fact sheets were prepared to convey impacts in a more condensed format. See response to previous comment regarding printed copies.

Comment GP780-4

4.As noted above, SEPA regulations limit the size of an EIS to 150 pages at most. Please explain why these documents were allowed to exceed that by 12 times each. Segmentation is a major issue with these J., not 2 projects. Issuing 2 EISs at once doubled the amount to be reviewed, and the repetitious format compounds the problem. I for one had 10 pages of comments before finally getting to sections that partially answered them. As you read each document you are given the impression that these are the only impacts -then you finally get to Cumulative Impacts in Chapter 6 and find some of the total impacts. Economics, Social Policy, and Cost-Benefit Analysis, in Chapter 7, is not even included in Cumulative Impacts. The result is 24 times as much to review in only twice the normal time, requiring the constant comparison of the two huge documents. Please explain how expecting review of 24 times more pages in only twice the normal time is reasonable, rather than an effort by the proponents to deter review and stifle comments.

Written comments will also be provided.

Response GP780-4

See Response to Comment GP780-3.

Pursuant to WAC 197-11-455, the lead agency for a SEPA proceeding shall provide 30 days for review of and comment on a Draft EIS. This may be extended by 15 days upon request. The co-lead

agencies issued an extended 60-day comment period that was then extended to 90 days based on public requests to provide additional time for review and comment.

GP781, **Tinnerstet, Darryl**

Comment GP781-1

Westway Expansion Project

Draft EIS Comments

Darryl Tinnerstet, McCleary WA

RECEIVED NOV 17 2015

General Comments

1.These two EISs should have been combined, along with the third one. WAC 197-11- 060(3)(b) states "Proposals or parts of proposals that are related to each other closely enough to be, in effect, a single course of action shall be evaluated in the same environmental document." Both of these documents, despite supposedly different proponents, were prepared by the same consultants. Both involve crude oil storage and shipping facilities in a common area, and shipping by rail on the same tracks. Please explain in detail why they were not combined, along with the third project, into a single, concise, readable document. The fact that a third project follows these two is classic segmentation - spreading out similar impacts over separate documents to make them appear smaller. Please explain how this is not segmentation. Please explain how producing 3800 pages of repetitive text, much of it meaningless boilerplate, was not an effort to prevent meaningful review.

Response GP781-1

Refer to the Master Response for Connected or Similar Actions.

Comment GP781-2

2.These documents should have been made available in hard copy. Historically NEPA and, I believe, SEPA EIS documents have been circulated in printed form to potential commenters. Please explain why the proponents were not required to do so, at their and not Ecology's expense. I repeatedly requested, and was refused, printed copies from Ecology unless I was willing to pay $540 for a copy. Adequate review of technical documents of this scale is virtually impossible online or from CDs. There is no way to easily flip back and forth within one of them or between them that way. Some of us do not have state of the art computers and have a very difficult time compiling comments while simultaneously trying to read online. I was, ultimately, able to obtain printed copies, but only because I knew how to work the system.

Response GP781-2

Printed copies of the Draft EIS were available for review at the following locations: Washington State Department of Ecology, Lacey; City Hall, Hoquiam; Aberdeen Timberland Library, Aberdeen; Centralia Timberland Library, Centralia; Hoquiam Timberland Library, Hoquiam; Lacey Timberland Library, Lacey; Olympia Timberland Library, Olympia; McCleary Timberland Library, McCleary; and Ocean Shores Public Library, Ocean Shores.

Comment GP781-3

3.WAC 197-11-425 states "The text of an EIS (WAC 197-11-430(3)) normally ranges from thirty to fifty pages and may be shorter. The EIS text shall not exceed seventy-five pages; except for proposals of unusual scope or complexity, where the EIS shall not exceed one hundred fifty pages. Appendices and background material shall be bound separately from the EIS if they exceed twenty-five pages..." Likewise the SEPA Handbook FAQs state "the text of an EIS shall not exceed 75 pages, except for proposals of unusual scope or complexity, which shall not exceed 150 pages [WAC 197-11-425(4)]. If appendices and background material exceed 25 pages and together the entire EIS would exceed 100 pages, they must be bound in a separate volume." Obviously the intent was for printed and bound copies to be circulated, albeit much smaller in size. WAC 197-11-504 says nothing about providing electronic copies only. Can you point to specific Ecology guidelines which say that is no longer required? This should not be an FOIA Public Disclosure issue - these documents are specifically intended for public circulation and comment. Please explain how refusing to provide printed copies in accordance with state law, Ecology regulations, and common practice should not be viewed as an effort to stifle detailed comments. Of course the cost would be excessive, because the proponents were allowed to make the two documents 24 times the legal size.

Response GP781-3

The length of the Draft EIS reflects the amount and complexity of information deemed adequate for the full disclosure of impacts. Due to the size, other materials such as the *Summary* and fact sheets were prepared to convey impacts in a more condensed format. See response to previous comment regarding printed copies.

Comment GP781-4

4.As noted above, SEPA regulations limit the size of an EIS to 150 pages at most. Please explain why these documents were allowed to exceed that by 12 times each. Segmentation is a major issue with these J, not 2 projects. Issuing 2 EISs at once doubled the amount to be reviewed, and the repetitious format compounds the problem. As you read each document you are given the impression that these are the only impacts -then after 561 pages you finally get to Cumulative Impacts in Chapter 6 and find some of the total impacts. Economics, Social Policy, and Cost-Benefit Analysis, in Chapter 7, are not even included in Cumulative Impacts. The result is 24 times as much to review in only twice the normal time, requiring the constant comparison of the two huge documents. Please explain how expecting review of 24 times more pages in only twice the normal time is reasonable, rather than an effort by the proponents to deter review and stifle comments.

Response GP781-4

See Response to Comment GP781-3.

Comment GP781-5

Westway Expansion Project

<u>Specific Comments</u>

1.Fact Sheet, Page 2, under "State" -Doesn't EFSEC have approval jurisdiction under RCW 80.50.020(12)(d)? They are not mentioned anywhere.

Response GP781-5

The Energy Facility Site Evaluation Council (EFSEC) determined that the proposed action did not fall under EFSEC jurisdiction. On February 12, 2015, EFSEC dismissed a petition filed by the Quinault Indian Nation requesting that EFSEC declare jurisdiction over the proposed action (Council Order No. 14-001).

Comment GP781-6

2.Fact Sheet, Page 6 -"Printed copies of the Draft EIS can be made available through the Washington State Department of Ecology for a fee." That fee has always in the past been no more than the mass printing costs of a reasonable size (150 page) document. As noted above, repeated requests to obtain a printed copy from Ecology were denied unless requested under the FOIA public disclosure process at a cost of $0.15/page - $270 per EIS! Please explain why this document, produced specifically for public comment, was not made readily available in a readable form besides electronically, which is unsuitable for many reviewers. RCW 197-11-440(2)(1) states the fact sheet must include the cost of the document, not "for a fee".

Response GP781-6

As stated above, the Draft EIS was made available for public review at local libraries or, as acknowledged by the commenter, for the cost of printing.

Comment GP781-7

3.S-1, Summary -Clearly disclose who the proponent of this project is - include parent companies, relationship if any to the Imperium proponent and rail carrier, railway ownership, etc. Make it clear who benefits from this project and all of its impacts. The Summary must state the Purpose and Need of the project (WAC 197-11-440(4)).

Response GP781-7

Final EIS Chapter 2, *Proposed Action and Alternatives*, reflects the addition of information directly below the project objective, specifying the purpose and need to which the proposal is responding.

Comment GP781-8

4.S-1, footnote -"were to could come from"?? Please explain.

Response GP781-8

As noted in the Master Response for Project Objectives and Alternatives, the proposed action is a private project and the objectives and proposal are defined by the applicant. Draft EIS Chapter 2, *Proposed Action and Alternatives*, describes the type of material and approximate volumes to be transported based on this information.

Comment GP781-9

5. S-2, Alternatives - SEPA requires the inclusion of alternatives to the proposed action (WAC 197-11-440(5)(a & b) -other than No Action, where are those alternatives presented?

Response GP781-9

Refer to the Master Response for Project Objective and Alternatives for an explanation of the alternatives evaluated in the Draft EIS.

Comment GP781-10

6.S-3, 4th par. -Actual unit train trips per day would be closer to 1.30. See later comments at Table 6-9. Under Significant Areas of Concern, 5th line -"hazards and costs related to potential oil spills..."- Just where are the costs of spills, fires, or explosions described? Not in Chapter 4.

Response GP781-10

As stated in Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, existing train traffic along the PS&P rail line is between 3.0 and 3.1 trains per day on average. The PS&P rail line has a maximum capacity of 12 trains per day and is currently operating well below capacity. Operation of the proposed action at maximum throughput would add 458 unit train trips per year, or 1.25 trips per day on average, along the PS&P rail line.

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP781-11

7.S-4, Significant Areas of Concern - Scoping comments clearly indicated the concern of cumulative impacts of all 3 oil terminal projects. Explain why analysis of the impacts of the Grays Harbor Rail Terminal Expansion Project was not included, and why this is not clearly segmentation.

Response GP781-11

Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of the incremental addition of impacts from the proposed action to impacts from past, present, and reasonably foreseeable future actions—including the REG (formerly Imperium Terminal Services) Expansion Project and the Grays Harbor Rail Terminal Project.

Comment GP781-12

8.S-5, 2nd par. -These oil trains do not magically appear in Centralia. This document should expand its study area all the way to their source in North Dakota (or Montana or Canada), as all communities in between will suffer from the same increases in risk and exposure to hazardous materials.

Response GP781-12

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP781-13

9.S-5, Impacts -Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. The applicable laws prevent the targeting of low income or minority areas with high impact projects. Provide a thorough analysis of how this project, by routing these highly explosive trains through Grays Harbor instead of by current routes to refineries in Anacortes or elsewhere, is not targeting a depressed area. Explain how siting these terminals in Aberdeen/Hoquiam is not targeting a minority population.

Response GP781-13

Draft EIS Chapter 7, Section 7.2, *Social Policy*, includes an analysis of impacts on minority and low-income populations. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP781-14

10.S-6, Onsite Operations -"storage tanks could also become rupture (sic) and result in a leak of bulk liquids into the environment. The proposed action would be designed to meet local building codes and standards." Please document that local building codes are even remotely up to date regarding the latest predictions of severe magnitude earthquakes and accompanying tsunami waves, which in Chile 9/17/15 were from 15 to 36 feet in height (these projects are at water's edge, and the tanks will not be attached to their bases). "The applicant would be required to study the possibility of designing the proposed facilities to reduce the impacts of a large-scale tsunami event Mitigation would be required if it was deemed reasonable and feasible." Please document what will be done for mitigation, not just studying possibilities.

Response GP781-14

Prior to issuance of permits, a complete site-specific geotechnical investigation would be required to support engineering design decisions. Final EIS Chapter 3, Section 3.1.7.1, *Applicant Mitigation*, clarifies expected post-seismic and post-tsunami performance of the proposed storage tanks. Refer to the Master Response for Seismic Risk and Design Requirements.

Comment GP781-15

11.S-9, bottom, S-10 top -If vessel loading and transport operations are to be stopped for 2 weeks every year, what happens to the corresponding rail shipments? Are they suspended all the way back to N. Dakota/Canada? Unlikely as that would disrupt operations there. Are some 46 trains, with 5,520 tanks cars, just parked somewhere, waiting? That's 3.9 million barrels of crude, and the two

projects together will provide some 1.7 million barrels of storage tank volume. Where will that two-weeks-worth be stored?

Response GP781-15

Federal regulations prevent tank cars loaded with oil from being left unattended. Trains would not be loaded until they are ready to be shipped. Trains would not be shipped until an order is placed. Storage of crude oil before shipment would depend on the source of the oil. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

Comment GP781-16

12.S-13, Land Use, Operations -"Implementation of the proposed action would require land use permits from the City of Hoquiam and the City of Aberdeen". The City of Aberdeen is on record opposing this project. Please address that resolution and its effect on the approval of this project.
13.S-17, Rail Traffic - See #6 above.

Response GP781-16

The resolutions and subsequent changes to the city codes would not affect the proposed action, because they were not approved prior to the start of the environmental review process for the proposed action.

Comment GP781-17

14.S-18, Rail and Vessel Transport -"this time would increase to up to 77 minutes" - Where does that number come from? Table 3.15-10 says 22 minutes per train; Table 3.15-11 says 1hour 30 minutes per day. And that is just with one Westway train.

Response GP781-17

Page S-29 of the Draft EIS *Summary* states that the amount of vehicle delay would increase from 13 minutes four times per week for the no-action alternative to 22 minutes for the proposed action and up to 77 minutes for the REG (formerly Imperium Terminal Services) Expansion Project. The delay time in the Final EIS *Summary* has been revised to 71 minutes to represent the 13 minutes of existing vehicle delay plus the 58 minutes of proposed action delay at the Port Industrial Road crossing.

Comment GP781-18

15.S-23, Risk of Fire or Explosion -Please address the known deficiencies related to the condition of the PS&P rail line, including studies and photos, both official and volunteered, which show the lack of maintenance, failing 119- to 126-year-old structures, and other hazards which will be acerbated by increased rail traffic. Please describe the recent derailments that occurred near Aberdeen - location, train speed, cause, repairs, and environmental impacts. Include an estimate of what those damages would have been had the derailment included oil tankers which ruptured. Also, address the likelihood of, and preventive measures and security that will be included to prevent vandals or terrorists from targeting the rail structures, rail lines, or storage facilities.

Response GP781-18

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Recent derailments along the PS&P are presented in Final EIS Section 4.5.1.1, *Risk of Spills for Existing Conditions and No-Action Alternative*. The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values.

Comment GP781-19

16.S-24, Figures S-4 & S-5 -Please explain how, under any circumstances, the levels of Risk and Potential Environmental Impact under the middle or lower spill scenarios are even remotely acceptable.

Response GP781-19

For the reasons discussed in the Master Response for Risk Assessment Methods, the figures depicting risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, have been removed from the Final EIS.

Comment GP781-20

17.S-26 - Table S-3 needs to include under Human Health the significant loss of life demonstrated in other recent oil train accidents.

Response GP781-20

Final EIS Chapter 4, Section 4.7, *Human Health*, has been revised to more fully describe potential impacts on human health related to an incident. Final EIS *Summary* reflects updates as well.

Comment GP781-21

18.S-27, Air - This discussion needs to include the greenhouse gas emissions related to the 2 billion gallons of crude oil proposed to be transported through these facilities per year. As for "no flooding from sea level rise is predicted at the project site."-just how high above sea level are these terminals? Do not most recent studies claim that catastrophic sea level rise is imminent?

Response GP781-21

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively, in the context of emission inventories and reduction goals. Final EIS Section 3.2 and Section 6.5.1.2 have been revised to include emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. Regarding flooding, Final EIS Section 6.5.1.2 and *Summary* clarify predictions of sea level change in the study area and potential for flooding at the project site. With sea level in the study area predicted to rise 1.57 feet by 2050, the project site would remain approximately 5 feet higher than the projected high tide and would not be subject to flooding even during extreme storm events.

Comment GP781-22

19.S-27, Noise and Vibration - Explain why the affected residents of Centralia are not included. What is the average estimated length in feet, miles, and number of cars for the 4.3 trains per day attributed to these projects compared to the existing 3.4 (1235/yr, Page 3.15-14) trains per day? Estimated weight? How does that compare to the current train size in total weight? Please explain how only 10 residences are affected when these 7.65 (not 7.25) trains pass daily through the length of Elma. Even slow speed noises are very disturbing.

Response GP781-22

Draft EIS Chapter 3, Section 3.7, *Noise and Vibration*, provides a detailed analysis of noise and vibration related to the proposed action that would occur in the study area, including impacts of train noise in Centralia. Section 3.15, *Rail Traffic*, provides information on the length and number of cars of trains under existing conditions and with the proposed action. Train weight is not considered in the noise and vibration analysis; primary factors are horns, number of locomotives and cars, and length of train. The reference to 10 residences is unclear. Receptors located adjacent to several grade crossings in Elma would be exposed to severe and moderate impacts, as indicated in Table 3.7-6.

Comment GP781-23

20.S-28, Tribal Resources -Listed impacts are limited to those of normal operation. What about the impacts of spills, fires, collisions, derailments, leaks, etc.?

Response GP781-23

Draft EIS Chapter 4, Section 4.7, *Impacts on Resources*, addresses the potential impacts on tribal resources that could result from an oil spill, fire, or explosion during terminal (onsite) operations or

rail and vessel transport. Because the consequences of an incident would vary based on the specific circumstances, the impacts on tribal resources are discussed in general terms. Final EIS Section 4.7 has been revised to further clarify the potential for impacts. For more information about the analysis of risks, refer to the Master Response for Environmental Health and Safety Analysis.

Comment GP781-24

21.S-28, Rail Traffic -Existing rail traffic is consistently understated throughout the document as "3/day" when in fact it is 1,235/yr or 3.4/day (p. 3.15-14). Address the documented lack of maintenance and failing structures on the PS&P line, and how a 125% increase in rail traffic will affect the risk of derailment and catastrophic failure.

Response GP781-24

Final EIS Chapter 3, Section 3.15, *Rail Traffic*, Table 3.15-4 and associated text have been updated to improve clarity. As explained in the table, some trains only travel a portion of the line. Therefore, the typical daily rail traffic is 3.0 trips between Centralia and Elma and 3.1 trips between Elma and Aberdeen. Regarding the comment to evaluate rail infrastructure, refer to Response to Comment GP781-18.

Comment GP781-25

22.S-28, Vehicle Traffic and Safety -"the chance of encountering a blocked grade crossing would remain relatively low." With 7.65 trains per day, on average that is one about every three hours. With crossing delays of up to 52 minutes at Olympic Gateway Plaza, the unobstructed crossing time span is therefore reduced to just over 2 hours. That assumes the 7.65 trains are evenly spaced over a 24 hour period. If they are less frequent at night, then the unobstructed crossing period becomes even shorter. Please justify how that would be considered "relatively low".

Response GP781-25

The reference to the 52-minute passing time is in Aberdeen and not between Centralia and Aberdeen. As described in Chapter 6, *Cumulative Impacts*, the approximate total vehicle delay in 2017 in a 24-hour period for grade crossings between west of Centralia and east of Aberdeen would vary from approximately 19 to 56 minutes daily, depending on the grade crossing, compared to 7 to 17 minutes daily under the no-action alternative. Therefore, the total daily blockage time at grade crossings due to the cumulative project trains would increase by approximately 12 to 39 minutes in a 24-hour period for all trains, or a blockage time increase of up to approximately 2.7%, which is qualitatively described as relatively low. Even though there would be an increase in total daily vehicle delay, an increase in train trips on the PS&P rail line would not substantially increase the average vehicle delay at most PS&P rail line grade crossings compared to the no-action alternative. This is because vehicle traffic along most of the PS&P rail line is relatively low and the chance of a substantial number of vehicles encountering a train would remain relatively low. In other words, most individual drivers would not likely notice a substantial change in delay at grade crossings.

Comment GP781-26

23.S-29, Vehicle Traffic and Safety -Please explain mitigation measures, for heart attack victims, childbirth, accidents, crimes or fires, which will be provided when trains will block all entrances and exits to Olympic Gateway Plaza (and other cut off sites) for up to 52 minutes at a time. Explain the

mitigation for emergencies at Home Depot, which will be cut off for up to 1hour 17 minutes and has no alternative access. Explain how ‘‘the applicant would ensure that sufficient emergency service equipment is available to local emergency service providers” will enable timely transport of those victims when all access is cut off for that long. Explain how grade crossings are now only blocked “four times per week” when directly above it is stated the current traffic is “3 trips per day” (actually 23.8 per week). Explain how the projects would increase that by “19 times per week” when above it is stated that the increase due to these projects is “4.25 trips per day” [29.75 per week]. Explain how increasing wait times from the current “13 minutes four times per week” to 15 times per week and 77 minutes is not a significant unmitigatable impact. Mitigation that may be offered by other future projects is pie-in the-sky and should not be included here. “[U]navoidable and significant adverse impacts on vehicle delays from trains blocking crossings in the Olympic Gateway Plaza and Port areas of Aberdeen” -what about the effect of 7.65 trains per day through Elma, Montesano, and Centralia? Lower traffic volumes do not mean that each person needing to cross is not affected in the same way -stopped is stopped, whether one vehicle or hundreds.

Response GP781-26

The purpose of the Draft EIS *Summary* is to provide a high-level description of potential impacts of the proposed action. Refer to Final EIS Chapters 3 through 6 for a detailed description of potential impacts under the proposed action.

The proposed mitigation measures for emergency response are provided in Final EIS *Summary*, Table S-1 and Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*.

Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

As described in the text, the reference to 1 hour and 17 minutes is related to the REG (formerly Imperium Terminal Services) Expansion Project, and therefore is not an impact related to the proposed action. For additional information on how mitigation was identified, refer to the Master Response for Mitigation Framework.

Final EIS Chapter 3, Section 3.16.8, *Would the proposed action have unavoidable and significant adverse impacts on vehicle traffic and safety?* clarifies that while implementation of proposed mitigation could reduce impacts on vehicle traffic, average and peak hour vehicle delays at the following grade crossings in Aberdeen would remain significant.

- Average hour: East Heron Street and Newell Street (Olympic Gateway Plaza area).
- Peak hour: Washington Street (Port of Grays Harbor area).

The reference to times per week was revised to improve clarity in the Final EIS. Chapter 6, *Cumulative Impacts*, describes potential impacts along the PS&P rail line related to the cumuatlive projects.

Comment GP781-27

24.S-30, Vessel traffic -Since the predicted number of vessels to be berthed exceeds the capacity of Terminal 1, what is the likelihood that these projects will necessitate the expansion of terminals? Isn't that another undocumented cumulative impact of this project?

Response GP781-27

The proposed action does not include the construction of additional vessel berths. As noted in Draft EIS Chapter 6, Section 3.17.5.2, *Proposed Action, Operation, Berth Capacity*, the analysis assumed 100% tank barges for the cumulative projects, which results in a conservative estimate of the most days of berth occupancy.

Comment GP781-28

25.S-30, Environmental Health and Safety -In light of the known substandard condition of the PS&P rail line, and the reported 16+ major oil train derailments in North America in only the last 2 years, stating "The likelihood of a large spill or related fire or explosion is relatively low" is absurd. Please explain how that statement can possibly be justified, especially in light of the 10/13/15 LA Times article which lists 31 oil train derailments since 2013. Please list the number of gas stations, chemical plants, and other hazardous or explosive material sites that are within 114 mile of either side of the tracks throughout the corridor. All add to the risk with an explosive derailment. Also list the number of schools, apartment buildings, churches, nursing homes, large employers, etc. that are within 1/4 mile of each side of the tracks. . .

Response GP781-28

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

Comment GP781-29

26.S-31, Economic Impacts on the City of Hoquiam -Why were economic impacts on Centralia, Elma, Montesano, and Aberdeen ignored?

Response GP781-29

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP781-30

27.S-31, Social Impacts, Operations -Please address the impacts of increased rail traffic and delays to the cities of Elma, Rochester, and Oakville, where every north/south street has a grade crossing of the tracks. Address the impacts to all of the at-grade intersections in Centralia. Address the impacts of nearly 54 trips per week on the struggling businesses at Olympic Gateway Plaza, where all 7 grade crossings would be affected at once leaving no other access. Address the impacts of 54 train trips per week closing the only access to State Highway 107 and points south at Montesano. And even more significantly, address the loss of property value and ability to sell to all of the homes and businesses adjacent to the entire rail corridor due to the risk and noise of 54 rail trips per week of highly explosive products.

Response GP781-30

Draft EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, and Chapter 6, Section 6.5.5, *Vehicle Traffic and Safety*, address potential impacts on vehicle delay at grade crossing in the study area related to the proposed action and cumulative projects, respectively. Draft EIS Chapter 7, Section 7.3, Cost-Benefit Analysis, provides an analysis of the costs and benefits of the proposed action, relevant to the City of Hoquiam. Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, describes the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP781-31

28.S-32, Table S-4, Costs -Why is there such a wide range of costs? Explain who is liable for the increased costs shown. If not the proponents, why not? Why should the community bear the costs of delays, accidents, and training for a private project? Will they be required to maintain liability insurance sufficient to offset major claims? Despite the title of this table "Benefits and Cost of the Proposed Action to the City of Hoquiam" please clarify that the benefits shown are to the City, but all of the costs shown are borne by the affected individuals. Cost of Fire Department training should be estimated, and clarified that it will be the responsibility of the proponents.

Response GP781-31

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP781-32

29.S-33, Permits, City - The City of Aberdeen is on record opposing these projects. Please address that resolution and its effect on the permit approval for this project.

Response GP781-32

The resolutions and subsequent changes to the city codes would not affect the proposed action, because they were not approved prior to the start of the environmental review process for the proposed action.

Comment GP781-33

30.S-34, Tribal Resources -Impacts shown are only related to vessel traffic. Explain in detail the impacts related to potential spills, fires, accidents etc. and how they would affect tribal resources for generations.

Response GP781-33

Draft EIS Chapter 4, Section 4.7, *Impacts on Resources*, addresses the potential impacts on tribal resources that could result from an oil spill, fire, or explosion during terminal (onsite) operations or rail and vessel transport. Because the consequences of an incident would vary based on the specific circumstances, the impacts on tribal resources are discussed in general terms. Final EIS Section 4.7 has been revised to further clarify the potential for impacts. For more information about the analysis of risks, refer to the Master Response for Environmental Health and Safety Analysis.

Comment GP781-34

31.S-34, Vehicle Traffic and Safety -Itis more than just Aberdeen that will be significantly affected. Please address and include the unmitigated impacts of 7.65 slow moving, 1.25- mile-long, trains per day on the grade crossings in Centralia and Elma, and even in Montesano.

Response GP781-34

Draft EIS Chapter 6, Section 6.5.5, *Vehicle Traffic and Safety*, describes vehicle delay in the study area from rail activity related to the cumulative projects.

Comment GP781-35

32.S-34, Environmental Health and Safety -Please add the statement from Appendix M, Page 7-4 which says the overall chance of a rail train accident is "once in 1.7 years". Please justify the statement that the likelihood of a spill or explosion is low, in light of the documented substandard condition of the PS&P rail line, its failing 119- to 126-year-old structures, its recent derailments, and the reported 16+ major oil train derailments and barge founderings in North America in only the last 2 years.

Response GP781-35

The reference in the comment to an incident occurring once in 1.7 years is for the no-action alternative and as noted in Appendix M, *Risk Assessment Technical Report*, does not represent the likelihood that a spill would occur but rather the chance than any incident might occur regardless of the potential for a release. Similar estimates for rail and vessel transport related to the proposed action are given on Draft EIS pages 4-8 and 5-6, respectively. These numbers represent the incremental chance of any incident associated with the proposed action. Similarly, they do not represent the equivalent chance of a spill. The combined risks of a spill are not presented in the Draft EIS for the reasons discussed in the Master Response for Risk Assessment Methods.

Comment GP781-36

33.S-37, 3.1 Earth, Risk of Rupture in a Tsunami -Recent studies strongly indicate that western Washington is overdue for a major destructive earthquake. The quake in Chile 9/17/15 generated waves from 15 to 36 feet in height. Please explain in detail the methods to be used to protect over 72 million gallons of hazardous and highly explosive products from waves of this magnitude, at facilities that are basically at sea level, and with tanks that are not anchored to their bases. "Will conduct a study" does not guarantee that anything will be done.

Response GP781-36

The site-specific tsunami risk analysis in Draft EIS Appendix C, *Tsunami Impact Modeling and Analysis,* describes assumptions regarding tide levels during a tsunami. Refer to the Master Response for Seismic Risk and Design Requirements for a description of the earthquake source model and hydrodynamic modeling method used in the site-specific tsunami analysis conducted for the project site and presented in Draft EIS Appendix C. The master response also provides an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events and for more information about the iterative, ongoing risk assessment and design processes associated with a project commensurate with its stage in development. Final EIS Section 3.1.8, *Would the proposed action have unavoidable and significant adverse impacts on earth resources and conditions?* acknowledges that a large-scale tsunami would cause unavoidable and significant adverse impacts if the facility was not constructed to withstand it.

Comment GP781-37

34.S-37, 3.2 Air - This section only addresses operation impacts of equipment. Please address the greenhouse gas impacts related to the 2 billion gallons per year of crude oil proposed to be transported through these facilities.

Response GP781-37

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively, in the context of emission inventories and reduction goals. Final EIS Section 3.2 and Section 6.5.1.2 have been revised to include emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

Comment GP781-38

35.S-39, 3.4 Plants/3.5 Animals -This mitigation only addresses impacts of ballast water discharges. Include mitigation for all spills, leaks, and explosions throughout the entire corridor, including in remote areas where support vehicle access is very limited. The last column should indicate "Yes" for significant adverse impacts.

Response GP781-38

Draft EIS Chapter 3, *Affected Environment, Impacts, and Mitigation,* addresses the potential impacts from construction and routine operations. Draft EIS Chapter 4, *Environmental Health and Safety*, addresses the potential for increased risk of oil spills, fires, and explosions. Final EIS Chapters 3 and 4 have been revised to clarify that the mitigation proposed in Chapter 4 would also help to reduce the potential impacts on the resources identified in Chapter 3, including plants and animals.

Comment GP781-39

36.S-39, 3.5 Animals - See #11above concerning the 2 week halt of operations.

Response GP781-39

Refer to Response to Comment GP781-15.

Comment GP781-40

37.S-40, 3.7 Noise and Vibration -Please explain how the only viable mitigation for the noise and vibration of 7.65 1.25-mile-long trains per day is to trade off the increased risk of vehicle crossing accidents for reduced use of locomotive horn soundings.

Response GP781-40

Implementation of a quiet zone is subject to approval by the Federal Railroad Administration and includes measures to maintain the level of safety while reducing noise.

Comment GP781-41

38.S-40, 3.10 Recreation -"could result temporarily disrupt access"?? In addition to operational impacts, this section should also address the impacts of leaks, spills, and explosions to recreational resources and facilities.

Response GP781-41

Chapter 3, *Affected Environment, Impacts, and Mitigation*, addresses potential impacts from construction and routine operation of the proposed action. Increased risk of incidents (e.g., storage tank failure, train derailments, vessel collisions) with the potential to result in the release of crude oil are addressed in Chapter 4, *Environmental Health and Safety*. Section 4.7, *Impacts on Resources*, describes the general types of impacts that could occur as a result of an oil spill, fire, or explosion, including impacts on recreation.

Comment GP781-42

39.S-41, 3.11Cultural Resources - Should include the potential for impacts to historic resources including the Breakwater Seafoods building and possibly historic RJR structures due to derailments, leaks, or explosions?

Response GP781-42

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms, including impacts on cultural resources.

Comment GP781-43

40.S-42, 3.12 Tribal Resources -The mitigation intended needs to address more than just tribal fishing. All of their cultural resources, traditions, and history are at risk.

Response GP781-43

Draft EIS Chapter 3, Section 3.12.7.1, *Applicant Mitigation,* proposes measures to reduce potential impacts on tribal fishing. Mitigation to reduce the likelihood of a spill reaching the environment and the potential impacts of an incident, including impacts on tribal resources, are presented in Draft EIS Chapter 4, *Environmental Health and Safety*, Sections 4.4.3, 4.5.3, and 4.6.3. Final EIS Chapter 4 reflects additional proposed mitigation measures.

Comment GP781-44

41.S-43, 3.14 Hazardous Materials -Incredibly, this section only addresses the impacts of construction. The risks due to leaks, spills, and explosions to humans, wildlife, plant life, and the general economy and well-being are immense, and must be included. Showing “No” in the last column under significant adverse impacts is absurd and must be changed to “Yes”.

Response GP781-44

As noted in the Draft EIS, the potential for increased risk of oil spills, fires, and explosions are addressed in Chapter 4, *Environmental Health and Safety.*

Comment GP781-45

42.S-45, 3.16 Vehicle Traffic and Safety -All mitigation shown is for Aberdeen and Hoquiam. Please show the mitigation planned for the 125% increase in rail traffic at crossings in Elma, Montesano, Rochester, Oakville, Centralia, and all points between. Include analysis of how small communities are expected to deal with increased costs due to this private project. The last column should indicate "Yes" for significant adverse impacts.

Response GP781-45

Final EIS Chapter 3, Section 3.16.8, *Would the proposed action have unavoidable and significant adverse impacts on vehicle traffic and safety?* clarifies that while implementation of proposed mitigation could reduce impacts on vehicle traffic, average and peak hour vehicle delays at the following grade crossings in Aberdeen would remain significant.

- Average hour: East Heron Street and Newell Street (Olympic Gateway Plaza area).
- Peak hour: Washington Street (Port of Grays Harbor area).

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP781-46

43.S-51, 4.5 Environmental Health Risks, Rail Transport -The need for upgrading the 119- to 126-year old PS&P facilities needs to be included. The acting administrator of the FRA is on record as stating that the newer tank cars are only marginally improved over the old DOT-1 11cars, and will not survive a derailment over 16-18 MPH. Therefore, this project must include restricting rail speeds to below that speed. Please indicate if that has been included, and if not, why.

Response GP781-46

As stated in Draft EIS Chapter 3, Section 3.15.4.2, *PS&P Rail Line Track Conditions and Physical Characteristics*, PS&P is required to adhere to the applicable speed limits set by the Federal Railroad Administration.

Comment GP781-47

44.S-52, 4.5 Environmental Health Risks, Rail Transport -Please detail how these plans would have helped reduce the damage and loss of life at Lac-Megantic and the other 15+ sites of major derailments, spills, and leaks within the last two years in North America.

Response GP781-47

The purpose of the EIS is to consider the environmental impacts of the proposed action. Refer to the Master Response for Purpose and Focus of the EIS for additional information about the scope of the EIS.

Comment GP781-48

45.S-58 -Why was section 4.7, with its significant impacts, left out of the summary table?

Response GP781-48

Significant unavoidable and adverse impacts are discussed in the EIS in terms of the potential for impacts related to terminal operations, rail transport, and vessel transport, and are presented in Sections 4.4, 4.5, and 4.6, respectively. The mitigation measures identified in Table S-1 address three types of impact for each mode of operation: the potential for an incident to occur, the potential for environmental damage to occur, and the potential to exceed local emergency response capabilities. All the mitigation measures identified in these sections would help to reduce the potential impacts related to increased risk of an oil spill, fire, or explosion, including the potential for impacts described in Section 4.7 and any impacts that might affect the resources described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Comment GP781-49

46.S-58, 6.5.1 Air - This mitigation is only for operation. It needs to also address the greenhouse gas emissions related to the 2 billion gallons of crude oil proposed to be transported through these facilities every year.

Response GP781-49

Refer to the Master Response for Mitigation Framework for a description of the development of mitigation.

Comment GP781-50

47.S-60, 6.5.2 Noise and Vibration - Please explain how the only viable mitigation for the noise and vibration of 7.65 1.25-mile-long trains per day is to trade off the increased risk of vehicle crossing accidents for reduced use of locomotive horn soundings.

Response GP781-50

Implementation of a quiet zone is subject to approval by the Federal Railroad Administration and includes measures to maintain the level of safety while reducing noise.

Comment GP781-51

48.S-61, 6.5.3 Tribal Resources - The mitigation intended needs to address more than just tribal fishing. All of their cultural resources, traditions, and history are at risk.

Response GP781-51

Refer to Response to Comment 781-43. Mitigation proposed in Chapters 3 and 4 would also reduce cumulative impacts.

Comment GP781-52

49.S-61, 6.5.5 Vehicle Traffic and Safety - All mitigation shown is for Aberdeen and Hoquiam. Please show the mitigation planned for the 125% increase in rail traffic at crossings in Elma, Montesano, Rochester, Oakville, Centralia, and all points between. Include analysis of how small communities are expected to deal with increased costs due to this private project.

Response GP781-52

Refer to Response to Comment GP781-45. Mitigation proposed in Chapter 3, Section 3.16 would also reduce cumulative impacts.

Comment GP781-53

50.S-63, 6.5.7 Environmental Health and Safety -Incredibly, this mitigation only applies to vessel-related impacts. Please show mitigation planned for the impacts to humans, wildlife, plant life, and the general economy and well-being due to leaks, spills, and explosions.

Response GP781-53

Exclusion of proposed mitigation to reduce risk related to onsite and rail operation from the Draft EIS *Summary* was unintentional. The Final EIS *Summary* has been streamlined to reduce repetition. Mitigation proposed in Chapter 4 would also reduce cumulative impacts.

Comment GP781-54

51.S-66, Economics -Liaisons and reports will do nothing to mitigate the real and potential economic impacts of increased rail traffic, depressed property values, inability to sell adjacent properties, loss of access at grade crossings, etc. These issues need to be addressed, along with mitigation, if any, for the potential losses related to leaks, spills, and catastrophic explosions and fires. Had these impacts been fully examined, the last column should have been "Yes".

Response GP781-54

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP781-55

52.Contents, Page xxi - Why was US 2 included? Do the writers know that US 2 is almost 200 miles from this project?

Response GP781-55

The typo has been corrected in the Final EIS to specify US 12.

Comment GP781-56

53.Section 1.1 - Since this is a private undertaking, the full identity of the proponent should be disclosed, including any parent companies, relationship with the Imperium proponents, PS&P ownership, etc. This is necessary to clarify just who is profiting from projects where the local citizens only get the impacts, not any benefits.

Response GP781-56

Draft EIS Chapter 2, *Proposed Action and Alternatives*, acknowledges that PS&P is owned and operated by Genesee and Wyoming, Inc. Final EIS Chapter 2 reflects additional information about Westway Terminal Company LLC incorporation and ownership.

Comment GP781-57

54.Section 1.3 -Chapter 2, Proposed Action and Alternative -Where are alternatives (plural) to the proposed action discussed? No where, but they should be (WAC 197-11- 440(5)(a & b)).

Response GP781-57

Refer to the Master Response for Project Objective and Alternatives for an explanation of the alternatives evaluated in the Draft EIS.

Comment GP781-58

Under Chapter 3 - Economic impacts, from depressed property values, inability to sell adjacent properties, the effect of loss of access on businesses, noise etc., as well as the potentially extreme losses due to spills, leaks, and explosions, need to be included.

Response GP781-58

Final EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns*, reflects additional information on the economic and social costs of oil spills. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP781-59

55.Chapter 2, Proposed Action and Alternative -Again, where are alternatives (plural) discussed? Other locations? Shipping via trucks? Directly to the refineries?

Response GP781-59

Refer to the Master Response for Project Objective and Alternatives for an explanation of the alternatives evaluated in the Draft EIS.

Comment GP781-60

Proposals need to be defined in ways that encourage consideration of alternatives, not preferred solutions. Where is the Purpose and Need stated?

Response GP781-60

Final EIS Chapter 2, *Proposed Action and Alternatives*, reflects the addition of information directly below the project objective, specifying the purpose and need to which the proposal is responding.

Comment GP781-61

Is EFSEC certification required (RCW 80.50.020(12)(d))?

Response GP781-61

The Energy Facility Site Evaluation Council (EFSEC) determined that the proposed action did not fall under EFSEC jurisdiction. On February 12, 2015, EFSEC dismissed a petition filed by the Quinault Indian Nation requesting that EFSEC declare jurisdiction over the proposed action (Council Order No. 14-001).

Comment GP781-62

56.Section 2.1.1 -These same loaded trains come all the way from North Dakota, Montana, and Canada. Please explain why the logical eastern terminus is Centralia. "No changes to the PS&P rail line are proposed as part of the proposed action."

Response GP781-62

Refer to the Master Response for Geographic Scope of the EIS for an explanation of the scope of analysis in Chapter 5, *Extended Rail and Vessel Transport*.

Comment GP781-63

Please explain how a rail line with 119- to 126-year-old structures and documented poor maintenance can possibly hold up to this magnitude of increased traffic, which it was never designed to accommodate. Explain why upgrade of the line is not included in this project, but the impacts along it are.

Response GP781-63

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP781-64

57.Section 2.1.2.1 -What is the elevation of the facility compared to the adjacent water? What is the height of the existing tanks?

Response GP781-64

Draft EIS Chapter 3, Section 3.1.4.1, *Geology and Soil Conditions*, identifies the project site elevation. Final EIS Section 3.1.4.1 has been updated to state more precisely that the project site has an average elevation of approximately 11 feet above mean sea level. Chapter 2, Section 2.1.2.1, *Existing*

Facilities, describes the existing storage tanks. The Final EIS reflects the addition of the height (40 feet) and diameter (120 feet) of the existing tanks.

Comment GP781-65

58.Section 2.1.2.2 -If 36 million gallons of methanol is received and 33.3 million gallons is shipped out, what happens to the other 2.7 million gallons?

Response GP781-65

An initial volume is pumped into each of the dry tanks upon the intiation of operations and that volume must be retained to maintain the internal floating roofs. Therefore, this volume cannot be shipped out and represents the difference in received and shipped methanol.

Comment GP781-66

59.Section 2.1.3.2, Onsite operations -Why is this project even necessary? Why is the crude oil not transported directly to the refineries? Why is it not refined nearer to the source?

Response GP781-66

As a private undertaking, the applicant determines the objectives of the proposal. The purpose of the SEPA review is to evaluate the potential impacts associated with the underlying action, which in this case, is the potential issuance or denial of the land use permit by the City of Hoquiam. Refer to the Master Response for the Purpose and Focus of the EIS.

Comment GP781-67

"[C]rude oil would be unloaded into a central collection area and then pumped to the storage tanks." What is this central collection area? Where is it described in detail? What are its safety features?

Response GP781-67

The containment area is described in Draft EIS Chapter 2, Section 2.1.3.1, *Proposed Facilities, Storage Tanks*. Detailed designs would be developed during the project's engineering and design phase.

Comment GP781-68

Under Rail -"it could come... from oil sands from Alberta, Canada." -Why don't the proponents know where their product is coming from, or going? The source makes a huge difference when discussing ha7.ardous impacts, production impacts, train routes, etc. Also, see #6 above.

Response GP781-68

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for more information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

Comment GP781-69

60.Section 2.1.4.1 -Please explain how failure to attach the tanks to the concrete is reasonable in light of seismic and tsunami events that are predicted, especially with tanks that may be only partially filled.

Response GP781-69

The applicant's current designs assume that tanks would sit on top of the foundation without mechanical attachment to the slab and that the weight of the tanks themselves would hold them in place. However, final design and construction would be based on detailed geotechnical analysis and civil design in accordance with current building and fire codes and associated standards and requirements.

Comment GP781-70

61.Section 3.0.1 -The list of impact areas studied needs to include Economics. This chapter also needs to include a qualitative analysis of crude oil extraction and refining impacts. That would mean that the geographic locations of the sources and refineries would need to be clearly defined, which has not been done.

Response GP781-70

Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources and for information on the likely destinations of crude oil shipped through the proposed facilities.

Comment GP781-71

62.Section 3.1.2 -Do the local building codes adopted in 2012 reflect the 2014-2015 predictions of overdue catastrophic seismic events?

Response GP781-71

Refer to the Master Response for Seismic Risk and Design Requirements.

Comment GP781-72

63.Page 3.1-13, 2nd par. -The list of streams should include the Wishkah River, one of the larger that is crossed.

Response GP781-72

Final EIS Chapter 3, Section3.1.4.3, *Geologic Hazards*, reflects the addition of the Wishkah River to the list of major stream crossings of the PS&P rail line.

Comment GP781-73

64.Page 3.1-15 -Recent articles about predicted major seismic events and associated tsunamis indicate that the risk is far greater in both timing and impact than earlier predictions. Experts now

claim that the west coast is overdue for a major 8.0 or greater quake ("We are 300 years into a 240 year cycle."). The methodology used here for the tsunami predictions appears to date from 2011and earlier. Please address those current concerns in light of the 2014-2015 predictions.

Response GP781-73

Refer to the Master Response for Earthquake Probabilities for an explanation of how the probabilities of strong earthquakes reported in the Draft EIS relate to those identified in recent studies.

Comment GP781-74

65.Page 3.1-20, 1st and 2nd pars. -There is no Section 3.1.7.2 as referenced. Also, under "Landslides and Slope Instability" it says the railroad "is separated from the adjacent hillslope by US 12, a two-lane highway that is between 40 to 70 feet wide and often divided by a concrete barrier, as well as a vegetated median of varying width." The section of US 12just east of Aberdeen is 4-lane with a barrier. The only part of US 12 with a vegetated median is from Montesano to Elma, none of which separates the RIR from any slopes. From Elma SE to Centralia US 12 is two-lane with no median or barrier.

Response GP781-74

The reference to the applicant mitigation section has been corrected in Final EIS Chapter 3, Section 3.1, *Earth*, and the description of US12 has been updated.

Comment GP781-75

66.Page 3.1-21 -It is well known that the rail line east of Aberdeen to near Montesano is on unfirm soils, to the point that existing train speeds have been reduced The 125% increase in rail traffic, increased train length and weight, and presence of highly volatile crude oil would dramatically increase the risk due to seismic incidents. Please address this increased risk correctly.

Response GP781-75

As noted in Draft EIS Chapter 3, Section 3.1, *Earth*, the proposed action would not change the likelihood of a seismic event; however, there is the potential for increased risk of exposure of people and property to harm if a seismic event occurred during rail transport. The increased risk of oil spills, fires, and explosions during rail transport is addressed in Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport*. As noted in the Master Response for Risk Assessment Methods, the risk assessment does not consider any single causal event but rather determines the likelihood of each release scenario to occur related to the proposed action and generally described the potential impacts in Section 4.7, *Impacts on Resources*. As noted in Chapter 4, *Environmental Health and Safety*, no measures would eliminate the risk and depending on the specific circumstances of each incident, there is a potential for significant environmental impacts.

Comment GP781-76

67.Page 3.1-22, 4th par. -A 55% increase in vessel trips due to just this one of 3 projects is more than just "a small, incremental increase". Please correct that statement or justify it.

Response GP781-76

The statement referenced by the commenter is specific to the potential for impacts associated with wake from the addition of tank vessels under the proposed action compared to the no-action alternative.

Comment GP781-77

68.Page 3.1-23, top par. -Again, a 55% increase with just one of the 3 projects proposed is more than a "slight" increase. Please correct that statement or justify it.

Response GP781-77

Comment acknowledged.

Comment GP781-78

69.Section 3.1.6, Permits -The City of Aberdeen is on record as being against these projects. Considering that, what is the likelihood they will approve the ones listed here?

Response GP781-78

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP781-79

70.Page 3.1-24, "International Building Code 2012" -Please note that this building code pre-dates the recent studies predicting major seismic events for this area.

Response GP781-79

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP781-80

71.Section 3.1.8 -Please address reports publicized in 2014 and 2015 that show the likelihood of a major seismic event is high, not low -"300 years into a 240-year cycle".

Response GP781-80

Refer to the Master Response for Earthquake Probabilities.

Comment GP781-81

72.Section 3.2.3.2 -The impact analysis should also address the greenhouse gas emissions related to the 2 billion gallons of crude oil proposed to be transported through these facilities every year.
73.Page 3.2-7, Parks -Need to include Vessey and Fleet Parks in Montesano.

Response GP781-81

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively, in the context of emission inventories and reduction goals. Final EIS Section 3.2 and Section 6.5.1.2 have been revised to include emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

Final EIS Section 3.2, *Air*, Table 3.2-4 has been revised to add John W. Vessey Memorial Ball Park and Fleet Park.

Comment GP781-82

74.Section 3.2.5.2 -Need to include odors as well as toxic pollutants (WAC 197-11- 444(b)(ii)).

Response GP781-82

Final EIS Chapter 3, Section 3.2, *Air*, reflects the addition of a discussion of potential impacts related to odor. The only compound with sufficient emissions to have the potential to have a perceptible odor is hydrogen sulfide. The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, are expected to reduce emissions of air pollutants, including hydrogen sulfide, to below the odor threshold for the most sensitive individual.

Comment GP781-83

75.Page 3.2-12, Rail - See #6 above.

Response GP781-83

Refer to Response to Comment GP781-10.

Comment GP781-84

76.Page 3.2-13, top -This analysis assumes train traffic is moving as scheduled. What is the history of unplanned stoppages along this corridor? What is the average duration? What is the likelihood that unplanned stoppages will increase with a 125% increase in rail traffic?

Response GP781-84

Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, addresses rail traffic along the PS&P rail line.

Comment GP781-85

77.Page 3.2-14, 1st full paragraph -The second sentence makes no sense at all. Please explain this statement.

Response GP781-85

The sentence describes Washington State Department of Ecology's thresholds for toxic air pollutants, referred to as small quantity emission rates and acceptable source impact levels (ASILs).

Comment GP781-86

78.Page 3.2-15, bottom par. -Comparing the increase in rail traffic to a 3.5% increase in truck traffic is deceptive at best. This section needs to acknowledge and address the 125% increase in rail traffic

Response GP781-86

The comparison is intended to provide context for understanding the amount of diesel particulate matter emissions that would result from rail transport related to the proposed action in the study area.

Comment GP781-87

79.Page 3.2-19 -The mandate is to reduce, not increase GHG. How can this project possibly be acceptable when it increases GHG emissions?

Response GP781-87

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP781-88

80.Page 3.2-20 - "there is reason to believe that much of the crude oil being transported to the new facility would replace crude oil that was previously transported by tank ship. The Washington 2014 Marine & Rail Oil Transportation Study stated the following (Washington State Department of Ecology 2014b). ...historically, 90% of crude oil bound for Washington's refineries was delivered here by tank ship from Alaska or from other international sources of oil. Today pipeline and rail delivery of crude oil make up more than 30% of our imports, while vessel delivery is reduced to less than 70%. Crude oil transportation is rapidly shifting to delivery by rail and pipeline." The implication of this statement is that vessel traffic will be reduced. Please clarify that, since all of this crude is destined to leave the terminal by ship, it will in fact increase vessel traffic and associated impacts.

Response GP781-88

The quoted text is related to the discussion of greenhouse gas emissions attributable to the proposed action. As stated throughout the Draft EIS, operation of the proposed action at maximum throughput would add 238 tank vessel trips to projected vessel trips in the study area.

Comment GP781-89

81.Page 3.2-20, bottom, continued to p. 3.2-21 -"The majority of the crude oil handled at the facility is expected to be Bakken crude oil, which, because it can only be transported to U.S. refineries, would replace oil currently in U.S. refineries. Because U.S. refineries capacities are limited by law, existing refineries would not increase their capacity ..." Please explain why this Bakken crude is not

being shipped directly to the existing refineries. If it is simply replacing crude already refined there, then it should not increase traffic on existing rail lines serving those refineries. Please explain why this statement does not completely negate the need for these facilities.

82.Page 3.2-21, 2nd full paragraph -The fact that this project represents a "very small segment of the crude oil market in the United States" is irrelevant The impacts associated with these 3 projects are being brought into an area where they do not presently exist. Please explain how this is not a violation of Environmental Justice by targeting a lower income and minority population.

Response GP781-89

As stated in Draft EIS Chapter 3, Section 3.2.5.2, *Proposed Action*, *Operation, Greenhouse Gas Emissions,* much of the crude oil that would be transported to the new facility would likely replace crude oil previously transported by tank ship.

The quoted statement is intended to provide context for the amount of crude oil that would move through the proposed facilities. Draft EIS Chapter 7, Section 7.2, *Social Policy*, presents the analysis of potential disproportionate impacts on low-income and minority populations.

Comment GP781-90

83.Page 3.2-22, bottom bullets, and next page, top bullet -Does the applicant have the authority or ability to make these changes to PS&P equipment? Unlikely.

Response GP781-90

Final EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, have been updated, based on information received from PS&P, to reflect that the types of locomotives described in the cited measure would be used to transport trains related to the proposed action.

Comment GP781-91

84.Figure 3.3-2 -The scale of this map is too small to show any of the wetlands noted on page 3.3-16.

Response GP781-91

The freshwater forested, scrub-shrub, and emergent wetlands are collectively shown as the palustrine wetlands and the open water areas are collectively shown as riverine and lacustrine waters on Draft EIS Figure 3.3-2. Final EIS Chapter 3, Section 3.3.4.3, *Wetlands,* has been revised to clarify this.

Comment GP781-92

85.Page 3.3-16, 2nd par. -Where are these wetlands shown? Figure 3.3-2 is too small scale to show them.

Response GP781-92

The freshwater forested, scrub-shrub, and emergent wetlands are collectively shown as the palustrine wetlands and the open water areas are collectively shown as riverine and lacustrine

waters on Draft EIS Figure 3.3-2. Final EIS Chapter 3, Section 3.3.4.3, *Wetlands*,has been revised to clarify this.

Comment GP781-93

86.Section 3.3.4.4 -WAC197-11-444(c)(iii) requires the analysis of flood impacts, which is not necessarily the same as Floodplains.

Response GP781-93

As described in Draft EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, the project site is not subject to flooding even during extreme storm events. Draft EIS Chapter 4, Section 4.3.2, *What environmental factors contribute to potential impacts from an incident?* acknowledges flooding as an environmental factor that can contribute to potential impacts from an oil spill incident. Section 4.5.2.1, *Oil Spills,* addresses the movement of spilled oil in the Chehalis River during flood conditions; this information was incorporated into the oil spill model (Appendix N, *Oil Spill Modeling*).

Comment GP781-94

87.Page 3.3-17, 2nd par. -Where are these floodplains shown?

Response GP781-94

The floodplains are shown in Appendix E, *FEMA Flood Insurance Rate Maps*.

Comment GP781-95

88. Page 3.3-23 bottom, 3.4-15, 3.5-21, 3.7-14, 3.10-12, 3.12-19, 3.16-15, Rail -Please note that additional rail traffic is 1.3, not one, and current rail traffic is 3.4, not 3. Please correct this throughout rather than consistently downplaying these numbers.

Response GP781-95

References to trip numbers throughout the Draft EIS are rounded for comparison and consistency. As shown in Draft EIS Table 3.15-4, under existing conditions there are an average of 3.1 rail trips per day west of Elma and 3.0 trips per day east of Elma.

Comment GP781-96

89.Page 3.3-27, Section 3.3.7 -This sentence makes no sense.

Response GP781-96

The sentence is missing the word “describes” between the words “section” and “the”. Final EIS Chapter 3, Section 3.3.7 *What mitigation measures would reduce impacts on water?* has been revised.

Comment GP781-97

90.Page 3.4-18, Section 3.4.6 -The entire site will be paved. Just where are 105 trees to be planted - on someone else’s property?

Response GP781-97

If the proposed action is approved, the tree planting plan and planting location would be determined at a later time when the applicant submits the development permit applications to the City of Hoquiam, which would ensure compliance with Hoquiam Municipal Code 10.05.065.

Comment GP781-98

91.Page 3.5-18, bottom par., continuing to next page -Same comment as above -how will this planting be accomplished "outside of the project site"?

Response GP781-98

The tree-planting plan and planting location would be determined when the applicant submits their development permit applications to the City of Hoquiam, which would ensure compliance with Hoquiam Municipal Code 10.05.065.

Comment GP781-99

92.Section 3.5.7.1 - See # 11above, concerning halting operations for 2 weeks.

Response GP781-99

Refer to Response to Comment GP781-15.

Comment GP781-100

93.Page 3.7-7, Figure 3.7-2 -This document needs a detailed map of all R/R crossings, particularly in Centralia and Elma. There is no way to evaluate those impacts without one.

Response GP781-100

Draft EIS Chapter 3, Section 3.7, *Noise and Vibration*, Figure 3.7-2 depicts locations of grade crossings along the PSP&P rail line. Table 3.7-6, *Estimated Counts of Moderate and Severe Noise Impacts on the PS&P Rail Line—Proposed Action*, identifies the grade-crossing street names, locations, and numbers where severe and moderate impacts are predicted to result from the proposed action.

Comment GP781-101

94.Page 3.9-6, Figure 3.9-1 -Do the numbers on this figure correspond to the photos that follow? If so they should be so noted.

Response GP781-101

Draft EIS Chapter 3, Section 3.9, *Aesthetics, Light, and Glare*, Figures 3.9-2 through Figure 3.9-17 correspond to the representative photo location numbers provided in Figure 3.9-1. Final EIS Figures 3.9-2 through 3.9-17 captions have been revised to identify the representative photo locations.

Comment GP781-102

95.Pages 3.9-8 to 3.9-16 -These photos would be much more useful with the proposed tanks shown on them. As is, they really show nothing.

Response GP781-102

Draft EIS Chapter 3, Section 3.9, *Aesthetics, Light, and Glare*, Figure 3.9-2 through Figure 3.9-17 are meant to show the existing visual conditions in the project area. The figures demonstrate that the visual character of the project area consists of a mix of industrial, commercial, residential, and recreational uses. To see a schematic of the proposed features, refer to Draft EIS Figure 2-2, *Project Site*.

Comment GP781-103

96.Page 3.9-20, 2nd and 4th par. -There is no Section 3.9.7.2 as referenced. 97.Page 3.9-21, Rail and Vessel, 2nd par. -Current train traffic is 3.38 trains per day and 1,235 per year. Why is it that the current and proposed train traffic is always stated lower than it really is?

Response GP781-103

The reference to the section has been corrected in the Final EIS. The estimate of existing rail trips is based on data from a typical month, which indicates 3.1 trips west of Elma and 3.0 east of Elma. Based on these daily trips estimates, there are approximately 1,100 trips annually. References to the annual estimate have been corrected in the Final EIS.

Comment GP781-104

98.Page 3.11-5, Historic Context -Are any of the 119- to 126-year-old R/R structures historic? The Breakwater Seafoods building adjacent to the track west of the Wishkah River in Aberdeen is on or eligible for the national register. Please confirm.

Response GP781-104

The PS&P rail line is an existing, active railroad corridor that already carries a relatively high volume of railroad traffic between the port and the BNSF main line in Centralia, Washington. The anticipated volume of railroad traffic required by the proposed action is not expected to exceed existing amounts of noise and vibration already created by railroad traffic along this corridor. For this reason, it is considered unlikely that the proposed action's operations would affect historic resources along the railroad in a manner that would adversely affect their historical significance.

Comment GP781-105

99.Pages 3.12-4 & 3.12-6 -Maps showing the Quinault and Chehalis reservations would be a big help in determining impacts beyond those just related to fishing. For example, with no clear maps it is impossible to determine the proximity of the Chehalis Reservation to the PS&P track.

Response GP781-105

Figure 3.12-1, in Draft EIS Chapter 3, Section 3.12, *Tribal Resources*, shows the location of the Chehalis Indian reservation in the map inset. The Quinault Indian Nation reservation's southern boundary is north of the study area.

Comment GP781-106

100.Page 3.12-7 -There are likely many more impacts to tribal interests than just the fishing described here. I suspect the Tribe will provide comments to that, but in any case the impacts section needs to be greatly expanded.

Response GP781-106

The tribal resources described in Draft EIS Chapter 3, Section 3.12, *Tribal Resources*, are not limited to fishing, but also include gathering of plant materials, hunting, and access to traditional areas.

Comment GP781-107

101.Pages 3.12-19 & 3.12-21, top pars. -There is no Section 3.12.7.2 as referenced.

Response GP781-107

The section reference has been corrected in the Final EIS.

Comment GP781-108

102.Pages 3.12-21 & 3.12-22, Section 3.12.7.1 -Mitigation listed pertains only to fisheries.

Response GP781-108

Comment acknowledged.

Comment GP781-109

103.Page 3.13-1 - Should Public Transit and schools be included here? Delays, spills, and explosions would certainly affect them.

Response GP781-109

Draft EIS Chapter 3, *Affected Environment, Impacts, and Mitigation,* addresses the potential impacts from construction and routine operations. Draft EIS Chapter 4, *Environmental Health and Safety*, addresses the potential for increased risk of oil spills, fires, and explosions. The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms, including potential impacts on public services and human health. Final EIS Chapter 4 has been revised to include an additional applicant mitigation measure to improve local emergency planning and response that includes development of a geographic information system (GIS) layer that identifies schools, hospitals, community centers, and parks within 0.5 mile of

the rail line to be provided to the Local Emergency Planning Commission, local fire departments, and Ecology. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP781-110

104.Page 3.14-8 - Operations would also include the transport by rail and vessel of some 17.9 million barrels of highly explosive crude oil per year. That needs to be included here.

Response GP781-110

Draft EIS Chapter 3, Section 3.15, *Hazardous Materials*, addresses hazardous material storage and handling at the project site. Risks related to the transport of crude oil to and from the project site by rail and vessel are addressed in Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport*, and Section 4.6, *Environmental Health Risks—Vessel Transport,* respectively.

Comment GP781-111

105.Page 3.15-8, top bullet -This is a very important statement -the PS&P rail infrastructure improvements touted throughout this document as mitigation are (1) only if rail traffic increases up to 10 trains per day, and (2) ARE NOT FUNDED OR PROGRAMMED. In other words, they have nothing to do with this project and should not be cited.

Response GP781-111

Although these rail infrastructure improvement projects are not currently funded or programmed for implementation they are considered reasonably foreseeable by 2037 per Genesee & Wyoming which owns and operates the PS&P rail line.

As stated in Draft EIS Chapter 3, Section 3.15.4.7, *Current PS&P Rail Line Capacity and Operations*, the rail modeling analysis indicated that the existing PS&P rail line has a capacity of 12 train trips per day. This capacity estimate was used to identify potential impacts of the proposed action on rail transportation in the Draft EIS. The rail modeling assumptions and creation of stringlines to calculate daily individual train trips is described in Draft EIS Appendix K, *Rail Traffic Technical Information* (Section K.2). As stated in Section 3.15, *Rail Traffic*, existing train traffic along the PS&P rail line is between 3.0 and 3.1 trains per day on average. Operation of the proposed action at maximum throughput would add 458 unit train trips per year, or 1.25 trips per day on average, along the PS&P rail line. Therefore, this addition, there would be approximately 4.25 train trips per day along the rail line, which is approximately one-third of the capacity of the line. PS&P's capital improvement program, as described in Section 3.15.4.5, *Ongoing Maintenance and Inspections*, outlines several rail maintenance and improvement projects to be completed across the rail line to accommodate existing and future train traffic.

Comment GP781-112

106.Page 3.15-8, Section 3.15.4.1, 2nd par. -According to page 3.15-11 the PS&P line is a Class 2. Is this a different system of designation?

Response GP781-112

As stated in Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, the PS&P rail line is considered a Class III, shortline railroad by the Surface Transportation Board and is based annual revenue. The Federal Railroad Administration classification of railroads is based on the number of mainline tracks and operating speed. The PS&P tracks are registered as Class 2 tracks with an overall maximum speed of 25 miles per hour for freight trains.

Comment GP781-113

107.Pages 3.15-9 & 3.15-10 -The west end of the rail line is variously described as MP 70.0, 72.6, 74.2, and 75.2.

Response GP781-113

Draft EIS Chapter 3, Section 3.15.4.2, *PS&P Rail Line Track Conditions and Physical Characteristics*, states that the portion of the PS&P rail line analyzed in the Draft EIS extends from Centralia at milepost 0.00 to the Port of Grays Harbor at milepost 70.0. The PS&P rail line extends to milepost 74.2 with right-of-way to milepost 75.2.

Comment GP781-114

108.Page 3.15-10, Rail Bridges -What is the age and condition of each of these bridges? Where exactly does the rail line cross the Chehalis River? As noted correctly on p. 3.3-8 the track does not cross it. How can the Wishkah River Bridge be at MP 68.24 when the McDonalds driveway to the east is at MP 68.31?

Response GP781-114

Refer to Response to Comment GP781-18.

Comment GP781-115

109.Page 3.15-11- As noted at the top the PS&P rail line is a Class 2, the second lowest in condition, speed limits, etc. This is an important fact to remember. In the 3rd bullet, where is it documented that this structure will be repaired? The 4th and last bullets hint to the lack of maintenance that needs to be better disclosed. And the Wishkah Bridge, at least, is a swing bridge not a drawbridge. Nowhere in this document is it stated that the rail line also crosses the Hoquiam River -decent maps would help. Under “Rail Yards” no good mapping of the Centralia or Elma yards is included anywhere.

Response GP781-115

The information in Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, came from PS&P and the rail transportation study provided by the applicant. The type of bridge has been corrected. The PS&P line crosses the Hoquiam west of the project site, and therefore is not in the study area. Figures 3.15-2 and 3.15-3 illustrate the rail yards in the study area.

Comment GP781-116

110.Page 3.15-12, top par. -Throughout this document locations such as Cedar Creek, Elma Yard, Centralia Yard and Blakeslee Junction Yard are thrown out with no supporting maps to show where they are. Please add adequate mapping to show all impacted locations.

Response GP781-116

Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, Figures 3.15-2 and 3.15-3 illustrate the rail yards. Final EIS Section 3.15 has been revised to reference Blakeslee Yard rather than Blakeslee Junction. Section 3.15.4.2, *PS&P Rail Line Track Conditions and Physical Characteristics*, describes the location of the Cedar Creek siding.

Comment GP781-117

111.Page 3.15-13 - I take strong exception to the first statement. FR.A Class 2 standards are to 25 MPH, and as noted on pages 3.15-10 and 3.15-11much of this line is restricted to as low as 5 MPH due to ‘‘maintenance condition”. As noted on this page FR.A does not inspect bridges, and it is only “assumed that these maintenance projects ...would occur within the 20-year analysis period”. Please provide an honest and thorough description of the railway condition and what improvements are programmed and funded, and within what time period. This is one of the most significant shortcomings of this entire EIS analysis.

Response GP781-117

Refer to Response to Comment GP781-18.

Comment GP781-118

112.Table 3.15-4 -Please note that 1,235 trains annually/365 = 3.4 trains daily, not 3.0. This small but conveniently lower error is repeated throughout the document and should be corrected.

Response GP781-118

As explained in the table, some trains only travel a portion of the line. Therefore, the typical daily rail traffic is 3.0 trips between Centralia and Elma and 3.1 trips between Elma and Aberdeen. Based on these daily trips estimates, there are approximately 1,100 trips annually. References to the annual estimate have been corrected in the Final EIS.

Comment GP781-119

113.Page 3.15-15, 5th par. -If the theoretical capacity is 12 train trips per day, what prevents the volume from increasing to that once these projects are operational? It isn’t tank capacity as they could just bring in more ships to move it out. This is an important question as the planned 7.65 trains per day could just be the proverbial “foot in the door”. The state and other regulators have no control over the volume once this is approved.

Response GP781-119

As noted in the Master Response for Project Objectives and Alternatives, the proposed action is a private project and the objectives and proposal are defined by the applicant. Draft EIS Chapter 2,

Proposed Action and Alternatives, describes the type of material and approximate volumes to be transported. The City of Hoquiam would specify maximum throughput in the conditions of a shoreline development permit. In addition, other permit approvals could identify the maximum allowable (permitted) throughput of the facility. Any increase in annual throughput capacity would require revised or new permits or plans.

Comment GP781-120

114.Figures 3.15-4 & 3.15-5 -Where are similar maps showing crossings in Elma and Centralia? Both cities have a large number of at-grade crossings.

Response GP781-120

As described in Draft EIS Chapter 3, Section 3.15.4.7, *Current PS&P Rail Line Capacity and Operations*, grade crossing occupancy times are most severe at grade crossings in Aberdeen from the breakdown and buildup of trains. Therefore, the discussion of rail impacts including figures is focused on Aberdeen.

Comment GP781-121

115.Page 3.15-21, 2nd par. -Since the projects identified by PS&P in Section 3.15.3.2 are neither funded nor programmed, they should not be included as planned mitigation. In Section 3.15.5.2 under Operations -see #6 above.

Response GP781-121

Although these rail infrastructure improvement projects are not currently funded or programmed for implementation they are considered reasonably foreseeable by 2037 according to Genesee & Wyoming, which owns and operates the PS&P rail line.

As stated in Draft EIS Chapter 3, Section 3.15.4.7, *Current PS&P Rail Line Capacity and Operations*, the rail modeling analysis indicated that the PS&P rail line has a capacity of 12 train trips per day. This capacity estimate was used to identify potential impacts of the proposed action on rail transportation in the Draft EIS. The rail modeling assumptions and creation of stringlines to calculate daily individual train trips is described detail in Draft EIS Appendix K, *Rail Traffic Technical Information* (Section K.2). As stated in Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, existing train traffic along the PS&P rail line is between 3.0 and 3.1 trains per day on average. Operation of the proposed action at maximum throughput would add 458 unit train trips per year, or 1.25 trips per day on average, along the PS&P rail line. Therefore, with this addition, there would be approximately 4.25 train trips per day along the rail line, which is approximately one-third of the capacity of the line. PS&P's capital improvement program, as described in Draft EIS Section 3.15.4.5, *Ongoing Maintenance and Inspections*, outlines several rail maintenance and improvement projects to be completed across the rail line to accommodate existing and future train traffic.

Comment GP781-122

116.Table 3.15 8 -The average weekly trains would be 9.2 since, as noted at Page S-9 and elsewhere, transport of crude oil is to be suspended for 2 weeks per year (458/50 = 9.16) and daily trips would be 1.30. For footnote "a" -Notice is made that Appendix L, at page L-15, describes these oil trains as

"7,419 feet in length" (1.4 mile) so apparently the 1.25 mile length is not guaranteed after all? What is the combined weight of a 120-car (or longer, apparently) oil train?

Response GP781-122

The Draft EIS analyzes potential impacts of the proposed action without mitigation based on the average number of trips. The 2-week suspension of terminal activities is a voluntary mitigation measure. Refer to the Master Response for Mitigation Framework for a discussion on how mitigation was identified for adverse impacts.

The 7,419-foot unit train length is an estimation based on 122 rail cars and three locomotives. The actual length of the unit train would vary depending on the types of locomotives used and number of tank cars. The average weight could be as much as 4,500 tons based on the 7,419-foot unit train.

Comment GP781-123

117.Page 3.15-22, Rail Capacity, 2nd par. -There is no such heading in Section 3.15.5.1. And nowhere else does it say the PS&P improvements, which are not programmed or funded, would increase the capacity to 19 trains per day. Is that the real plan once these projects are approved? The statement in the next to last sentence on this page can not be substantiated, and is in fact totally untrue in light of the other two projects - one more obvious reason they should have been combined in one EIS.

Response GP781-123

As stated in Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, existing train traffic along the PS&P rail line is between 3.0 and 3.1 trains per day on average. The PS&P rail line has a maximum capacity of 12 trains per day and is currently operating well below capacity. Operation of the proposed action at maximum throughput would add 458 unit train trips per year, or 1.25 trips per day on average, along the PS&P rail line. Therefore, with this addition, there would be approximately 4.25 train trips per day along the rail line, which is approximately one-third of the capacity of the line. PS&P's capital improvement program, as described in Section 3.15.4.5, *Ongoing Maintenance and Inspections*, outlines several rail maintenance and improvement projects to be completed across the rail line to accommodate existing and future train traffic. Section 3.15, page 3.15-22 states that the planned infrastructure projects would increase the theoretical capacity of the line from 12 to 19 trains per day to accommodate existing and future train traffic. To be conservative, the analysis considers current and future capacity of the PS&P rail line at 12 trains per day and does not use the theoretical maximum of 19 trains per day. Chapter 6, *Cumulative Impacts*, discusses the potential cumulative rail impacts of the proposed action and two other reasonably foreseeable actions.

Comment GP781-124

118.Page 3.15-24, bottom par., and Figures 3.15-6 & 3.15-7 -Are these numbers per train? Per day? The most meaningful way to show crossing delay would be per train, and then how many times per day. For example, Table 3.15-5 is per train; Table 3.15-9 is per day, which is confusing.

Response GP781-124

The train times presented in Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, Figures 3.15-6 and 3.15-7 are the passing time for each train event. The Final EIS has been revised to clarify the information presented in these figures.

Comment GP781-125

119.Page 3.15-27 -The maximum occupancy times (Table 3.15-10) should be labeled "per train crossing" to differentiate from the average daily occupancy times shown on Table 3.15-11. Also the last sentence in the 2nd par. is incomplete and meaningless

Response GP781-125

Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, Table 3.15-10 has been revised to address this comment.

Comment GP781-126

120.Section 3.15.7.2 -Maybe PS&P should consider but they are not the proponent and have little incentive to do so.

Response GP781-126

Refer to the Master Response for the Mitigation Framework. The measure identified is a measure to be considered.

Comment GP781-127

121.Section 3.15.8 -As oil train numbers increase, will general rail cargo be forced to decline? There is no factual support that the rail lines are safe. In fact, recent articles such as posted by the LA Times 10/13/15 conclude that oil train safety is many times worse than general rail traffic.

122.Section 3.16.4.1 -Again, a map showing all crossings in detail needs to be included.

Response GP781-127

Refer to Response to Comment GP781-18.

Comment GP781-128

123.Page 3.16-9 -In the top par., last line - grade separations are deemed unfeasible as noted on page 3.16-29. Also, in Section 3.16.5 -where are the impacts of unplanned stoppages discussed? Where are the impacts to heavy commercial truck traffic at Junction City discussed?

Response GP781-128

Grade separation was not deemed reasonable as mitigation for impacts related to the proposed action, as described in Section 3.16, *Vehicle Traffic*. The Final EIS section has been revised for clarity.

Heavy truck traffic is included in the annual average traffic data used to analyze the vehicle delay

Heavy truck traffic is included in the annual average traffic data used to analyze the vehicle delay impact at each at grade crossing. The vehicle delay at the Junction City crossing is illustrated in Appendix L, *Vehicle Traffic Analysis*.

Comment GP781-129

124.Page 3.16-13 -The first sentence is ridiculous. The current speed is 5 MPH, not 10 MPH, and the "infrastructure improvements" are neither programmed nor funded. Same applies to the next to last par. In the last par. where "as noted above" is it stated that all access to Gateway Plaza is blocked for 35 minutes four times per week? What about emergency access to Junction City industrial sites, juvenile detention center etc. with unplanned stoppages or accidents at Gateway Plaza -there is no alternative access.

Response GP781-129

Final EIS Section 3.16, *Vehicle Traffic and Safety*, has been revised to reflect the current speed of 5 miles per hour. Although these rail infrastructure improvement projects are not currently funded or programmed for implementation, they are considered reasonably foreseeable by 2037 according to Genesee & Wyoming, which owns and operates the PS&P rail line.

Regarding the 35-minute reference, Final EIS Section 3.16 has been revised to improve clarity.

Final EIS Section 3.16 reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Junction City areas. Trains going to or from the project site would be moving at the Junction City crossing except for unplanned stoppages. Final EIS Section 3.16, reflects the following information provided by PS&P: trains would not stop on the tracks during routine operations and a high-line truck would be used before each train to ensure the tracks are clear.

Comment GP781-130

125.Page 3.16-14, Vehicle Safety, 2nd par. -The "planned improvements" assumed to be implemented by 2037 are neither programmed nor funded and should not be assumed

Response GP781-130

Although these rail infrastructure improvement projects are not currently funded or programmed for implementation, they are considered reasonably foreseeable by 2037 according to Genesee & Wyoming, which owns and operates the PS&P rail line.

Comment GP781-131

126.Page 3.16-20, top line, plus pages 3.16-21, 24, 25, 26 -There is no Section 3.16.6.3 as referenced. At the 3rd bullet, again these are not programmed or funded, so why even mention them? And why is the 4th bullet even included? Why would 50% throughput be a consideration?

Response GP781-131

Regarding the first point, Final EIS Section 3.16, *Vehicle Traffic and Safety*, has been revised.

Regarding second point, the purpose of this text is to disclose that the analysis was conservative because it did not assume any new rail infrastructure improvements.

Regarding the last point, as described, the purpose of the sensitivity analysis is to determine potential vehicle delay impacts if only half the throughput of the proposed action is transported by rail in the assumed first year of operations (2017).

Comment GP781-132

127.Table 3.16-7 -These queue length increases look highly suspicious. For example, the Pearl Street crossing already exceeds available storage length (Table 3.16-4). The delay is increased due to the project by 13 minutes (from 26 minutes to 39, Table 3.15-9). Pearl Street has an ADT of 13,775 which equates to 9.6 vehicles per minute. Multiplying 9.6 vehicles per minute times 13 minutes equals 125 vehicles per day; divided by 4.7 trains per day (existing and Westway) would make around an additional 26.6 vehicles per train crossing queue at Pearl Street. Likewise, Industrial Road, with an ADT of 5,795, has 4 cars per minute. With an increase of delay time from 13 minutes per train to 22 minutes (Table 3.15-10) that would seem to equate to an additional 36 (22-13x4) vehicles delayed, not the 14 shown. Please demonstrate how my math is faulty and you arrived at much lower numbers. If it is because I am looking at cumulative numbers, then that proves my point at my very first comment -these documents needed to be combined to fairly assess the impact of both (or all 3) projects.

Response GP781-132

The numbers in Draft EIS Section 3.16, *Vehicle Traffic and Safety*, Table 3.16-7 represent the average increase in directional (per lane) queue length per train crossing. Increased train crossing occurrences do not affect this calculated queue, because the difference in average vehicle queues for three or four equivalent train crossings (all crossings have equal downtime) would be zero, even though the total vehicles delayed per day, total gate downtime per day, and total vehicles delayed per day would increase. The increase in queue length between scenarios is caused by the trains that increase the gate down time.

Comment GP781-133

128.Pages 3.16-23, bottom par., 3.16-24 top two par., 3.16-27 top -PS&P infrastructure improvements are neither programmed nor funded, so their inclusion is speculation at best.

Response GP781-133

Although these rail infrastructure improvement projects are not currently funded or programmed for implementation they are considered reasonably foreseeable by 2037 according to Genesee & Wyoming, which owns and operates the PS&P rail line.

Comment GP781-134

129.Page 3.16-24, Emergency Vehicle Access -Please include a discussion of the heavy truck traffic, industrial sites, and juvenile detention facility in Junction City, and what the effect of delays or unplanned stoppages to that area would be considering there is no alternative access

Response GP781-134

Refer to Response to Comment GP781-129.

Comment GP781-135

130.Pages 3.16-24, 25, 26 -There is no Section 3.16.6.3. as referenced.

Response GP781-135

The reference has been corrected in Final EIS Section 3.16.

Comment GP781-136

131.Page 3.16-25 -At the first bullet, the paved path is only 5 feet wide at the Junction City end (measured 10/8/15) and has sharp turns with a circle just west of there. Any heavy aid vehicle attempting to use this path in wintertime for access would instead sink to its axles in the adjacent soil. In the second bullet the underpass has a current height of only 7 feet (measured 10/8/15) which could possibly be increased to 8 feet with some work.

Response GP781-136

Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

Comment GP781-137

132.Page 3.16-26, top -Unless the emergency vehicles are bicycles or golf carts they will not fit as noted above. Also, when visited 10/8/15 any potential vehicular access to the underpass was blocked by construction/remodeling debris stacked at the end of the hotel - a situation the proponents of this project would have no control over.

Response GP781-137

Refer to response to previous comment.

Comment GP781-138

133.Page 3.16-26, 4th par. -"State Route 520 (SR 520) construction site" is another reference to a site which is not identified on any mapping. Please provide maps showing such sites.

Response GP781-138

Comment acknowledged.

Comment GP781-139

134.Page 3.16-27, 2nd par. -The last sentence makes no sense. This is the Proposed Action section, so why the reference to "under the no-action alternative"? What about under the Proposed Action?

Response GP781-139

The reference has been corrected in the Final EIS.

Comment GP781-140

135.Page 3.16-27, bullets -Who says the cities and Port "will approve proposed measures"? What guarantee is there of that? Also, these two bullet paragraphs are identical. Why not change the first line to read "operations of or related to..." and avoid repetition?

Response GP781-140

Draft EIS Chapter 3, Section 3.16.7.1, *Applicant Mitigation*, states that the applicant will work with organizations and cities on proposed mitigation measures.

Comment GP781-141

136.Page 3.16-28 -At the second bullet, just what kind of modem emergency vehicle has a 7 (not 8) foot clearance, and can manage the sharp turns involved with using the path? Certainly not a fire truck. At the 3rd bullet -this is the first mention of "unplanned stoppages". What is the history and predicted frequency of such stoppages? Why was this not evaluated or even mentioned elsewhere? At the 4th bullet -aren't such signs already required? Why hasn't PS&P already installed them?

Response GP781-141

Refer to Response to Comment GP781-134 and 136.

Final EIS clarifies that signage at grade crossings is required under federal and state law; the mitigation measure has been removed from the Final EIS.

Comment GP781-142

137.Section 3.16.7.2 -"Other Measures to be Considered" are meaningless if not part of the proposed project. But beyond that, ensuring that MUTCD guidance is followed, installation of gates etc. where warranted, and improving sightlines at crossings should already be done, and if not is another sign of a lack of maintenance by PS&P.

Response GP781-142

Refer to the Master Response for Mitigation Framework for the approach to identifying mitigation measures.

Comment GP781-143

138.Section 3.16.8 -The first paragraph only discusses impacts in Aberdeen. What about all the vehicular impacts in Centralia and Elma where there are numerous (but not clearly described or mapped) grade crossings? At the first bullet, the last sentence states grade separation is not reasonable, yet this future mitigation is repeated throughout this document as a possibility.

Response GP781-143

Draft EIS Section 3.16, *Vehicle Traffic and Safety*, indicates that impacts on vehicle delay in Aberdeen would be significant and. Appendix L, *Vehicle Traffic Analysis*, provides detailed information on the results of the analysis.

Refer to Response to Comment GP781-128 regarding the discussion of grade separation.

Comment GP781-144

139.Page 3.16-30, 4th line -Section 3.16.7.2 is not "Applicant Mitigation". The second paragraph again includes grade separations as possible mitigation when they have already been deemed "not reasonable". The last par. concludes "no unavoidable and significant impacts" based largely on mitigation like grade separation or other unreasonable or "possible" measures which are not, in fact, even a part of this proposal. This conclusion needs to be re-evaluated.

Response GP781-144

Grade separation was not deemed reasonable as mitigation for impacts related to the proposed action, as described in Section 3.16, *Vehicle Traffic*. The Final EIS section has been revised for clarity. Final EIS Chapter 3, Section 3.16.8, *Would the proposed action have unavoidable and significant adverse impacts on vehicle traffic and safety?* clarifies that while implementation of proposed mitigation could reduce impacts on vehicle traffic, average and peak hour vehicle delays at the following grade crossings in Aberdeen would remain significant.

- Average hour: East Heron Street and Newell Street (Olympic Gateway Plaza area).
- Peak hour: Washington Street (Port of Grays Harbor area).

Comment GP781-145

140.Page 3.17-26 -In the top paragraph the last two sentences are repetitive. In the second paragraph what kind of shifts do the 3 pilots work that would guarantee two would be available at any time, presumed to mean 2417?

Response GP781-145

Final EIS Chapter 3, Section 3.17.5.1, *No-Action Alternative*, has been revised. RCW 88.16.103 establishes mandatory rest periods for pilots. According to this statute, Grays Harbor pilots, after completing an assignment or assignments that are at least 7 hours, will receive a mandatory rest period of 7 hours.

Comment GP781-146

141.Pages 3.17-31, 2nd full par., and 3.17-32, 181 and 2nd par. -There is no Section 3.12.7.2 as referenced.

Response GP781-146

The reference has been corrected in the Final EIS.

Comment GP781-147

142. Section 4.2.1.2, 2nd par. -"Existing tank cars must be retrofitted on a prescriptive retrofit schedule" is meaningless, evasive, and non-committal. What tanks cars WILL be used for this project? Even the new cars will burst if derailed over 18 MPH -see comment #43.

Response GP781-147

Draft EIS Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* acknowledges the voluntary applicant measure for all new rail cars to meet or exceed the U.S. Department of Transportation Specification 117 design or performance criteria and that all existing tank cars be retrofitted in accordance with the U.S. Department of Transportation-prescribed retrofit design or performance standard (80 *Federal Register* 26643). However, as noted in Section 4.5.4, *Would the proposed action result in unavoidable and significant adverse environmental impacts related to rail transport*? the risks cannot be eliminated.

Refer to the Master Response for Mitigation Framework.

Comment GP781-148

143.Section 4.3.1.2 -Bakken and diluted bitumen are two very different materials with different hazards and cleanup procedures. This project needs to be specific about what will be transported and in what quantities in order to properly assess impacts and proposed mitigation

Response GP781-148

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Modeling*, refer to the Master Response for Oil Spill Modeling Methods. To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill.

Comment GP781-149

144.Section 4.4.2.1, 2nd par. -"west coast oil spill data for 2014 reported 1,193 spills, of which 15 spills were over 10,000 gallons" is a mind-boggling statement which is just thrown out. Please expand on this, detailing environmental damage, cost of cleanup, lingering effects, etc.

145.Section 4.5.1 -The last sentence in the first paragraph is ridiculous -the proposed action in this document is Westway; obviously Imperium and GHRT are "likely" to increase rail trips significantly. Plus, what guarantee is there that crude oil transport and subsequent rail traffic won't grow beyond the 7.65 trains per day already planned? The state has no control over the volume once these projects are approved, does it?

Response GP781-149

Final EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns*, reflects additional information on the economic and social costs of oil spills. This includes information on derailments and other accidents involving trains carrying crude oil and information on a crude oil spill during marine transport.

Final EIS Chapter 4, Section 4.5.1, *What are the existing risks?* has been revised to clarify the potential existing risks and response capabilities. Because Section 4.5.1, as referenced in the comment, pertains to existing risks, the statement that additional train trips other than those related to the proposed action are not likely has been deleted.

As noted in the Master Response for Project Objectives and Alternatives, the proposed action is a private project and the objectives and proposal are defined by the applicant. Draft EIS Chapter 2, *Proposed Action and Alternatives*, describes the type of material and approximate volumes to be transported based on this information.

Comment GP781-150

146.Page 4.5-3 -The number of rail cars transporting crude oil has increased by 68 times in only six years. That alone makes reliance on historic risks untenable. In the second full paragraph the recent accidents have been more than "significant'' -they have been environmentally and socially devastating. This document needs to acknowledge that and not soft-sell these risks. At the bottom shouldn't the bulleted list include structure condition and integrity? Some of these structures are so bad the trains must slow to 5 MPH to cross them. Isn't that an obvious sign of lacking maintenance and upgrades?

Response GP781-150

Refer to Response to Comment GP781-18.

Comment GP781-151

147.Page 4.5-4, top par. -Please provide a map showing where rail traffic for this project crosses the Hoquiam River. In the 2nd par. -1.30 trains per day planned, added to 3.4 trains currently. In Section 4.5.2.1 please elaborate on the causes of these derailments how does ''track separation" happen? "Wide gauge"? "Thermal misalignment" in May?? "Track geometry design"? Are these all related to lack of proper maintenance? What happens when 3.4 trains per day becomes 7.65 (or more) longer, heavier crude oil trains? Please add a discussion of the 10/13/15 LA Times article which describes officials' concerns with the impact of longer, heavier oil trains on railroad infrastructure.

Response GP781-151

Chapter 3, Section 3.15, *Rail Traffic*, presents maps of the PS&P rail line in the study area (Figures 3.15-2 and 3.15-3) and discusses rail operations. For information about how the risk assessment considers data specific to crude oil train operations, refer to the Master Response for Risk Assessment Methods.

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not

completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP781-152

148.Page 4.5-5, bullets at bottom -Regarding "rail car improvements", the acting director of FRA is on record stating that the "improved" tank cars are only slightly better than the old ones, and in fact "There is not a tank car at this moment or even the new version of the tank car we've proposed that will survive a derailment above, say, 16 or 18 miles an hour" (Sarah Feinberg, 3/20/15 transcript). She also notes that most recent derailments have been at low speed, and says, "I would prefer that none of this stuff [Bakken crude] be traveling by rail". Please be honest and acknowledge that sentiment by FRA leadership in this document. Also, according to the above noted LA Times article, there are 3 derailments per day in the US. That, coupled with the added stress on the rails caused by longer, heavier oil trains, makes these figures highly suspicious.

Response GP781-152

As noted in Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport*, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion. Section 4.7, *Impacts on Resources*, has been updated to include all the crude oil spills that have occurring during rail transit per the National Transportation Safety Board over the past 10 years.

Comment GP781-153

149.Page 4.5-6, par. below table -In light of an increase of crude oil tank traffic of 68 times in 6 years, over 16 documented major spills and explosions in the last 2 years, 4 derailments on PS&P in 2 months in 2014, the disclosures by the LA Times, and the statements by Ms. Feinberg, how can you make the statement that risk "would remain relatively low"?

Response GP781-153

For the reasons discussed in the Master Response for Risk Assessment Methods, the figures depicting risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, have been removed from the Final EIS.

Comment GP781-154

150.Page 4.5-7, 3ro bullet -Why was this included when the current speed limit is 25 at best?

Response GP781-154

The referenced text presents the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration's final rule that defines and regulates high-hazard flammable trains (49 Code of Federal Regulations [CFR] 171–180) and notes that trains already operate at lower speeds on the PS&P rail line.

Comment GP781-155

151.Page 4.5-10 -The risk of fire or explosion is grossly understated. "long-term historical data" has little bearing on an industry that has increased by a factor of 68 times in only 6 years. The statement that "the chance of an extreme derailment is very limited in the study area because of the slow speeds" contradicts the opinion of the FRA director, who 162.Pages 5-12 bottom and 5-13 top - Locations such as Wishram, Hinkle, and Beatrice should be shown on a map if important enough to mention in the text.

Response GP781-155

Derailments can occur at any speed as noted; however, they are likely to involve more cars at higher speeds. The quoted statement is specifically about extreme derailments. Refer to the Master Response for Risk Assessment Methods.

Comment GP781-156

163.Sections 5.4.3.3, 5.5.1.1 -This is the Extended Rail section but all discussion is of routes in WA only.

Response GP781-156

Final EIS Chapter 5, *Extended Rail and Vessel Transport*, reflects additional information about the BNSF rail segments from Williston Basin to the Idaho/Washington border.

Comment GP781-157

164.Figure 5-10 -This figure, like many others, is unreadable in either electronic or printed format.

Response GP781-157

The figure (now 5-6) has been replaced with a higher-resolution version in the Final EIS.

Comment GP781-158

165.Page 5-27, 2nd par. -There is no Section 5.4.2.1 as referenced. Why is there no discussion of just transporting the crude oil directly to the refineries and not through fragile Grays Harbor?

Response GP781-158

The section reference has been updated in the Final EIS. As noted in the Master Response for Project Objectives and Alternatives, the proposed action is a private project and the objectives and proposal are defined by the applicant.

Comment GP781-159

166.Page 6-1 -Why did it take reading some 561 pages to get to the only section that really matters? Please explain why this should not be interpreted as an effort to keep readers, especially inexperienced ones, from even getting this far.

Response GP781-159

The structure of the Draft EIS for the Westway Terminal Expansion Project is typical of EISs for projects of this scale. A *Table of Contents* and EIS *Summary* have been included in the Draft EIS and Final EIS to assist readers with locating sections that are most relevant to their area of interest, expertise, and/or jurisdiction.

Comment GP781-160

167.Section 6.4.1, 2nd bullet -According to page 3.15-11 PS&P is a class 2 R/R and according to page 5-11BNSF is a class 4.

Response GP781-160

PS&P is a Class III railroad and BNSF is a Class I railroad based on the Surface Transportation Board classification system. The commenter is citing the Federal Railroad Administration-defined track class of the rail.

Comment GP781-161

168.Section 6.4.2 -Were requests for information not sent to Centralia? Or Rochester? And please correct the spelling of McCleary.

Response GP781-161

The cities where requests were sent to are identified in Draft EIS Chapter 6, Section 6.4.2, *Ongoing and Reasonably Foreseeable Future Actions*. The spelling has been corrected in Final EIS Section 6.4.2.

Comment GP781-162

169.Table 6-2 - Since transport of crude oil is supposed to be halted for 2 weeks, the annual figures for Westway, Imperium, and GHRT should be divided by 50 to show the weekly numbers and 351 for the daily numbers -Westway 1.30 and 9.16; Imperium 2.08 and 14.60; and GHRT 1.04 and 7.30, with totals of 4.42 and 31.06 (since some were carried out to 2 decimal places, all should be). Please make these changes consistently throughout all six documents.

Response GP781-162

The Draft EIS analyzed potential impacts without proposed mitigation.

Comment GP781-163

170.Page 6-8, top -There is no limit to expansion of throughput once these projects are approved. How can it be stated that violations of standards would not likely occur?

Response GP781-163

As noted in the Master Response for Project Objectives and Alternatives, the proposed action is a private project and the objectives and proposal are defined by the applicant. Draft EIS Chapter 2, *Proposed Action and Alternatives*, describes the type of material and approximate volumes to be

transported based on this information. The City of Hoquiam will specify maximum throughput in the conditions of a shoreline development permit.

Comment GP781-164

171.Figures 6-2, 6-3, 6-4 - Shouldn't GHRT be shown on these cumulative impacts maps?

Response GP781-164

The Grays Harbor Rail Terminal Project site is 3 miles west of the project site. The study area include the PS&P rail line between Centralia and the Westway project site on which the proposed action could have additive impacts. Refer to the Master Response for Cumulative Analysis.

Comment GP781-165

172.Table 6-4 -How can projects that add nearly 104,000 metric tons of C02 possibly be in conformance with state and federal requirements to lower emissions?

Response GP781-165

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP781-166

173.Page 6-13, bottom par. -If this oil replaces oil currently used in US refineries, why not just ship it directly to them? Why is this not discussed anywhere, besides that fact that it is not the proposal being pushed by these particular companies?

Response GP781-166

As noted in the Master Response for Project Objective and Alternatives, the proposed action is a private project and the objectives and proposal are defined by the applicant.

Comment GP781-167

174.Table 6.6 -According to Table 6-2 the annual rail trips would be 458, 730, and 365 for the three projects. Assuming half of the time they are empty; oil throughput will cease for two weeks per year; and each unit train of 120 cars carries 85,680 barrels of oil (120 cars x 714 barrels per car), the daily throughput should be 458/2/351 days (365-14) x 85,680 = 55,692 barrels per day for Westway; 730/2/351 x 85,680 = 89,107 for Imperium; and 365/2/351 x 85,680 = 44,554 for GHRT, for a daily total of 189,353 barrels. Please correct these totals wherever they are used.

Response GP781-167

The Draft EIS analyzes potential impacts of the proposed action without mitigation based on the average number of trips. The 2-week suspension of terminal activities is a voluntary mitigation measure. Refer to the Master Response for Mitigation Framework for a discussion on how mitigation was developed.

Comment GP781-168

175.Section 6.5.2, 2nd par. -The analysis cited in Section 3.7 was for one project. This analysis needs to include all 3 projects to be adequate.

Response GP781-168

The analysis in Draft EIS Chapter 6, Section 6.5.2.2, *Cumulative Impacts*, considers the combined traffic of the cumulative projects. The reference noted in the comment indicates the methods used in the analysis of cumulative impacts are the same as described in Section 3.7, *Noise and Vibration*.

Comment GP781-169

176.Table 6-7, Segment J-Itis hard to believe there would be zero wayside impacts within the 11Aberdeen crossings. At the very least the hotel on the east side of the Wishkah River would seem to be impacted by 7.65 trains per day with nearly hour long passing times.

Response GP781-169

Draft EIS Chapter 6, Section 6.5.2, *Noise*, identifies no moderate or severe impacts in that area related to wayside noise.

Comment GP781-170

177.Table 6-8 -None of the many crossings in Centralia, Aberdeen, Oakville or Rochester are affected? Pretty hard to believe. Again, a detailed map of the crossings in the cities besides Aberdeen would help a lot.

Response GP781-170

As explained in Draft EIS Chapter 6, *Cumulative Impacts*, Table 6-8 illustrates the grade crossings exposed to the highest noise increases from train horn noise. All public at-grade crossings in the study area were analyzed.

Comment GP781-171

178.Section 6.5.2.3, 2nd bullet -This does not sound very practical for cities like Centralia or Elma with many at-grade crossings (how many is unclear since no detailed maps are included, even in appendices). Are residents expected to trade off decreased safety for a little less noise?

Response GP781-171

Appendix G, *Noise Data,* provides a table of all the grade crossings in the study area and estimated number of moderate and severe noise impacts at sensitive receptors. Implementation of a quiet zone is subject to Federal Railroad Administration approval and would include measures to maintain the level of safety while reducing noise.

Comment GP781-172

179.Page 6-28, Rail Traffic -According to my math 2,788/365= 7.64 trips per day (or even higher if divided by 351 [365 - 2 weeks closure]). This number and the “3” or “3.1” (actually 3.38) for existing

traffic have been consistently and conveniently understated throughout this document. In Table 6-9 change the number of proposed trips as noted in #169 above. Change the existing rail traffic to 3.38 daily and 23.75 weekly. Under "Capacity for Additional Trains" again change 3 to 3.38 or at least 3.4. The last sentence completely ignores the fact that these will be longer, heavier trains, but it does confirm that PS&P has no intention of improving this line.

Response GP781-172

Final EIS Chapter 3, Section 3.15, *Rail Traffic*, Table 3.15-4 and associated text have been revised to clarify trips for the proposed action. As explained in the table, some trains only travel a portion of the line. Therefore, the typical daily rail traffic is 3.0 trips between Centralia and Elma, and 3.1 trips between Elma and Aberdeen. Final EIS Chapter 6, Section 6.5.4.2, *Rail Traffic*, has been revised to improve clarity with no revisions to the average unit train trips.

Comment GP781-173

180.Page 6-29 -In the paragraph above Table 6-11"(existing trains from the cumulative projects)" makes no sense -existing trains would be the same as No Action. Table 6-11 is labeled "Maximum Daily Occupancy Time" but the same numbers are found on Table 3.15-5 which says "for Each Train Transit". So which is correct -per day, or per train?

Response GP781-173

Final EIS Chapter 6, *Cumulative Impacts*, has been revised to clarify that existing trains would be the same as no-action trains. Table headings in this section have been revised to improve clarity.

Comment GP781-174

181.Table 6-12 -Why are the Average Daily times shown here higher than the Maximum Daily times shown on Table 6-11? Are these numbers just plucked out of the air at random?

Response GP781-174

Draft EIS Chapter 6, *Cumulative Impacts*, describes the differences between the tables. Table 6-11 presents the maximum daily occupancy time from the passage of one train. Table 6-12 illustrates the average daily occupancy time. For example, at Fleet Street, the maximum amount of time a train would block the crossing under the no-action alternative is 37 minutes (Table 6-11). On average, the Fleet Street crossing would be blocked by trains 49 minutes each day under the no-action alternative (Table 6-12). Final EIS Chapter 6 has been revised to improve clarity.

Comment GP781-175

182.Section 6.5.4.4 -A tripling of occupancy times is not a significant impact? Only if you don't use those streets. Why is it necessary to repeat the reference to Section 3.16 again when stated just above?

Response GP781-175

Draft EIS Section 6.5.4.4, *Unavoidable and Significant Adverse Environmental Impacts,* describes why there are no unavoidable and significant adverse impacts on rail traffic. Final EIS Section 6.5.4.4 has been revised to improve clarity.

Comment GP781-176

183.Page 6-31, bottom par. -The first sentence makes no sense -25 trips? 184.Page 6-32, 3ro. par., 5th line -The reference should be to Table 6-12 where those numbers are shown. It should also be pointed out that Industrial Road will be blocked for 3 hours 23 minutes, up from the current 43 minutes.

Response GP781-176

Final EIS Chapter 6, Section 6.5.5, *Vehicle Traffic and Safety*, has been revised.

Comment GP781-177

185.Page 6-36, 1st bullet -The Wishkah Bridge improvements are neither programmed nor funded. The current speed is 5 MPH, not 10 MPH, due to lack of repair. Grade separations have been deemed not feasible (p. 3.16-29) but keep being implied as future mitigation.

Response GP781-177

Final EIS Chapter 6, *Cumulative Impacts*, has been revised to state that the current speed on the Wishkah Bridge is 5 miles per hour. Grade separation is feasible but was not deemed reasonable as mitigation for the proposed action as described in Draft EIS Chapter 3, Section 3.16, *Vehicle Traffic*. Refer to the Master Response for Mitigation Framework.

Comment GP781-178

186.Table 6-17 -As noted at # 127 above these queue length numbers look highly suspicious. Pearl street queue already exceeds available storage. At an ADT of 13,775 it has 9.6 vehicles per minute. According to Table 6-10 the delay will be 42 minutes longer; 42x9.6=403 cars, divided by 7.65 trains per day = 53 additional cars per queue, not 23. Please explain why my math is not correct.

Response GP781-178

Draft EIS Appendix L, *Vehicle Traffic Analysis*, provides detailed information on and methods for conducting the vehicle transportation analysis.

Comment GP781-179

187.Page 6-39, 2nd bullet -These infrastructure improvements are not programmed or funded and should not be continually listed as mitigation. Likewise in the paragraph following the 3ro. bullet. And “efforts to evaluate” will not “help to mitigate” in any real world situation.

Response GP781-179

Draft EIS Chapter 3, Section 3.15, *Rail Traffic,* identifies the infrastructure improvements as planned improvements by 2037. These improvements are not considered mitigation for the proposed action. Refer to the Master Response for Baseline and No-Action Alternative for additional information.

Comment GP781-180

188.Page 6-41, both bullets -"Westway ...0.6 times per day" and "Imperium ... 1.0 time per day"? These times reflect only trains operating in one direction, and do not include GHRT or existing train traffic. That is highly misleading and speculative at best. And 7.65 trains per day are going to block off Home Depot for up to 1hour 17 minutes at a time? This is the first acknowledgement of that impact. What are the plans for emergency access in case of a robbery, fire, heart attack or unscheduled birth there?

Response GP781-180

As described in Draft EIS Chapter 6, *Cumulative Impacts*, the impacts are only applicable to loaded trains for the proposed action and the REG (formerly Imperium Terminal Services) Expansion Project. The impacts from empty (eastbound) trains for the proposed action and REG Expansion Project would be at the Olympic Gateway Plaza area. As described in the text, the 1 hour 17 minutes of blockage time only applies to REG loaded trains. Section 6.5.5.3, *Mitigation Measures*, describes the proposed mitigation measures.

Comment GP781-181

189.Page 6-42 -"will work with", ''will ensure", agencies "will approve" is nebulous and speculative at best. What actual measures will be funded and accomplished? At the 3m bullet what modern "pumper and ambulance" combination with a clearance considerably less than 8 feet (current clearance is 7 feet) will be provided? Where will it be kept - on private property south of the tracks? At what cost? Has this been coordinated with the property owners? Where is the mitigation for emergency access concerns at Home Depot? At the 5th bullet -aren't these measures already required at crossings? Why are they not in place?

Response GP781-181

Refer to Response to Comment GP781-136. Final EIS clarifies that signage at grade crossings is required under federal and state law; the mitigation measure has been removed from the Final EIS.

Comment GP781-182

190.Section 6.5.5.4 - Since this section only mentions Aberdeen, is the reader to assume there are no significant delays or safety concerns in Centralia? Elma? In the second paragraph grade separations are again offered up, even though they were deemed not feasible.

Response GP781-182

Final EIS Chapter 6, Section 6.5.5.4, *Unavoidable and Significant Adverse Environmental Impacts*, clarifies that while implementation of the mitigation measures described in Chapter 3, Section 3.16,

could reduce impacts on vehicle traffic, average and peak hour vehicle delay at the following grade crossings would remain significant.

- Average hour: All six crossings in the Olympic Gateway Plaza area (Aberdeen) and three crossings (Industrial Road, North Maple Street, and West 1st Street in the Port area (Aberdeen).
- Peak hour: Washington Street in the Port area (Aberdeen).

Refer to Response to Comment GP781-128 regarding the discussion of grade separation.

Comment GP781-183

191.Table 6-18 -Please explain why the numbers for baseline tank vessels are different from Table 3.17-11. The "b" footnote gives a clue, but is not very explicit. Unlike the baseline, project trips are assumed the same in 2037 as in 2017. What guarantee is there than train trips, and subsequently vessel trips, will not increase once these projects are approved? The paragraph following the table references Table 6-1 which does not appear related to 2-hour windows or depth as implied

192.Page 6-45, last line - So if Terminal 1capacity is exceeded, what will happen -terminal expansion? Where are the details of this cumulative impact discussed?

Response GP781-183

Draft EIS Chapter 6, *Cumulative Impacts*, Table 6-18 compares vessel trips in 2017 and 2037 with and without the cumulative projects. Vessels trips under the no-action alternative include existing vessels calling at Terminal 1 for REG (formerly Imperium Terminal Services). Because the REG Expansion Project represents total facility throughout rather than additive throughput, existing vessel counts are included in the proposed counts. Therefore, existing REG vessels have been deducted from the baseline vessel trips considered in cumulative so as to not double-count these vessels.

Comment GP781-184

193.Section 6.5.7 -All of the tables and numbers cited in this section need to take into account the poor condition of the PS&P line, as evidenced by the reduced speeds east of Aberdeen and across the Wishkah River Bridge. There is no evidence that was done at all -more like volumes were just plugged into a standard formula.

Response GP781-184

The methods used to determine PS&P rail line capacity include existing infrastructure and speeds. Refer to Draft EIS Section 3.15.4.7, *Current PS&P Rail Line Capacity and Operations*.

Comment GP781-185

194.Page 6-53, top -"extreme failure ... every 9,000 years" seems totally inconsistent with recent studies claiming we are "300 years into a 240 year cycle" for a major catastrophic seismic event.

Response GP781-185

Draft EIS Chapter 4, Section 4.4, *Environmental Health Risks—Terminal (Onsite),* and Chapter 6, Section 6.5.7, *Environmental Health and Safety*, describe the risk and potential for storage failure for

the proposed action and cumulative projects, respectively. Appendix M, *Risk Assessment Technical Report,* describes the data sources for the assumptions used to conduct the risk assessment for storage tank failure. Because storage tank failure could result from different factors, the analysis does not assume any one cause of tank failure. The tank failure rate developed for the analysis is based on studies that analyzed historical data of previous storage tank releases caused by a variety of factors, including weather-related factors.

Comment GP781-186

195.Page 6-54, par. following bullets -The total trains per day is closer to 7.65. As noted at #148 above, the director of FRA would probably disagree with "a derailment does not mean a spill will happen". At the end of the next paragraph "the risk of very large releases remains relatively low" seems rather optimistic in light of a 68 times increase in crude rail trains in 6 years, deteriorating rail lines and structures, poor maintenance, 16 major accidents in 2 years, and tank cars that rupture at derailments over 18MPR Please re-evaluate that claim.

Response GP781-186

Regarding the number of trips, as explained in Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, Table 3.15-4, some trains only travel a portion of the line. Therefore, the typical daily rail traffic is 3.0 trips between Centralia and Elma, and 3.1 trips between Elma and Aberdeen and the number of cumulative trips (7.35 trips) is accurate. Regarding the last point, Final EIS Chapter 6, *Cumulative Impacts,* has been revised to improve clarity.

Comment GP781-187

196.Page 6-56, 2nd par. -Speeds may be slower, but that is largely due to the poor condition of the railway, which should be a major factor in the likelihood of a major calamity. And as noted in #148 the director of FRA stated that most recent derailments have been at low speed, not high speed.

Response GP781-187

The text is discussing extreme derailments and the greatest chance of a fire or explosion, not the potential for derailments.

Comment GP781-188

197.Page 6-58, bottom -The impact to homes, businesses, public services, and peoples' lives should be included.

Response GP781-188

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4, *What are the costs of the proposed action?* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* has been updated to provide additional information about economic and social

costs of oil spills. Final EIS Section 4.7, *Impacts on Resources*, has also been revised to more fully describe the potential human health impacts.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP781-189

198.Section 6.5.7.3 -All mitigation listed is related to oil spills. What about emergency access? Also there is not a word about railway improvements, but then that isn't part of this project anyway.

Response GP781-189

The mitigation measures listed are for the subsection *Environmental Health and Safety*. Emergency service response is addressed in Draft EIS Chapter 6 Section 6.5.5, *Vehicle Traffic and Safety*. Mitigation related to impacts of the proposed action on vehicle traffic and safety is presented in Final EIS Chapter 3, Section 3.16. These measures would also reduce cumulative impacts. As described in Section 6.5.4, *Rail* Traffic, there would be sufficient capacity to accommodate the increase in rail traffic and no mitigation is needed. Refer to the Master Response for Mitigation Framework.

Comment GP781-190

199.Section 6.5.7.4 -Please supplement these bullets with information relative to the FRA Director's statement noted in #148 above.

Response GP781-190

Refer to Response to Comment GP781-152.

Comment GP781-191

200.Section 6.5.8.1 -In the second par., 4th line, there is no Table 5-8 in Chapter 5. Even though this is the Extended Study Area section, statements in the second and third paragraphs refer only to Washington State. And the footnote refers to 5.5 additional rail trips per day -isn't it 4.40?

Response GP781-191

Final EIS Section 6.5.8, *Extended Rail and Vessel Transport*, has been revised to reflect a fuller discussion of the entire rail route, where available. Trip numbers have been clarified in the Final EIS.

Comment GP781-192

201.Chapter 7 -Why was this information not included in Cumulative Impacts? Without knowing the combined impacts of all 3 projects this information is worthless.

Response GP781-192

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for an explanation of the basis for the scope of the analysis in Draft EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP781-193

202.Page 7-7, 4th par. -"Essentially, all business taxes and net business income related to onsite operations and income earned by rail and vessel operators would leave Grays Harbor County and would not result in regional employment or income." That statement says a lot about the perceived benefits to the local economy, doesn't it? Where are the economic impacts of spills, leaks, and explosions quantified? Also the reduction in property values and ability to sell?

Response GP781-193

Refer to Response to Comment GP781-188.

Comment GP781-194

203.Page 7-11-Need to add the impacts to heavy commercial traffic, industries, and the juvenile detention center at Junction City, which has no alternative access at all.

Response GP781-194

Refer to Response to Comment GP781-129.

Comment GP781-195

204.Figure 7-1 -Need a much larger scale map that clearly shows the grade crossings in Centralia, Rochester, Oakville, and Elma.

Response GP781-195

Draft EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, Figure 7-1, presents the specific access limitations or areas where access is completely blocked by a passing train. It is not intended to show all grade crossings in all communities along the PS&P rail line, and as such, no revisions are necessary.

Comment GP781-196

205.Page 7-16 -This project clearly targets an area of low income and/or minority residents. Please explain how that is not a violation of environmental justice regulations.

Response GP781-196

Draft EIS Chapter 7, Section 7.2, *Social Policy*, includes an analysis of impacts on minority and low-income populations. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP781-197

206.Page 7-21, Rail- See #169 above. The cumulative rail traffic would be 7.65 trains per day, 4.40 of which would be longer than current That is why this discussion should have been included in Cumulative Impacts - saying "one unit train" grossly understates the real impact. In the last paragraph "the chances of encountering and having to wait for a passing train would not notably change compared to the no-action alternative" is untrue when you have a 125% increase in train traffic and longer trains.

Response GP781-197

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for an explanation of the basis for the scope of the analysis in Draft EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP781-198

207.Page 7-22, par. following bullets -As noted many times the cited mitigation is pie-in-the sky, not programmed or funded. It should not be listed. Under Vessel, again cumulative impacts should be described.

Response GP781-198

Draft EIS Chapter 7, Section 7.2, *Social Policy*, includes an analysis of impacts on minority and low-income populations. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP781-199

208.Page 7-24, 4th par. - Same comment -mitigation is not a sure thing at all. The two sentences directly above "Vessel" are profound and need to be emphasized elsewhere.

Response GP781-199

Comment acknowledged.

Comment GP781-200

209.Section 7.2.5.1, 3rd bullet -Only to Hoquiam?

Response GP781-200

Draft EIS Chapter 7, Section 7.2, *Social Policy*, includes an analysis of impacts on minority and low-income populations. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP781-201

210.Section 7.3, footnote -These risks and impacts should have been included in the cost benefit analysis, as should other areas besides Hoquiam.

Response GP781-201

Draft EIS Chapter 7, Section 7.2, *Social Policy*, includes an analysis of impacts on minority and low-income populations. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP781-202

211.Page 7-30, 3rd par. -The PS&P rail line is located entirely in Aberdeen? Since when?

Response GP781-202

The referenced text is in Draft EIS Chapter 7, Section 7.3.2.2, *Impact Analysis*, and discusses impacts from the proposed action including noise and vibration effects. The Final EIS section clarifies that the portion of the PS&P line that would be used by crude oil trains travelling to and from the project site is located in or east of Aberdeen.

Comment GP781-203

212.Section 7.3.3.1 -Does this section assume that the skills to build massive tanks are available locally? That seems unlikely.

Response GP781-203

Refer to Draft EIS Chapter 7, Section 7.3.3.1, *Employment and Income*, for an estimate of the proportion of employment and income likely to benefit the City of Hoquiam.

Comment GP781-204

213.Page 7-32, 2nd par. -Only 15 jobs, and only 3 to 4 of them from Hoquiam? And for that the city is willing to accept the huge risks associated with this project? Incredible.

Response GP781-204

Comment acknowledged.

Comment GP781-205

214.Page 7-40, Environmental Health and Safety -The cost of training for Hoquiam, as well as the other affected jurisdictions, needs to be estimated and included.

Response GP781-205

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based

on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP781-206

Comments on Westway Volume 2 are not provided as there is just too much here to review in the given timeframe.

Westway Volume 3

215.Appendix J, P. 7-3, PS&P Rail Line -Why was the 119- to 126-year-old rail line not surveyed? At the very least its structures are probably historic. Also, on the west side of the Wishkah River adjacent to the track is the Breakwater Seafood building which is on or eligible for the historic register. When the bridge ultimately fails under the load of 1.25 mile-long crude oil trains it will possibly affect this structure.

Response GP781-206

The PS&P rail line is an existing, active railroad corridor that is already trafficked by a relatively high volume of railroad traffic between the Port and the BNSF main line in Centralia, Washington. The anticipated volume of railroad traffic required by the proposed action is not expected to exceed existing amounts of noise and vibration already created by railroad traffic along this corridor. For this reason, it is considered unlikely that the proposed action's operations would affect historic resources along the railroad in a manner that would adversely affect their historical significance.

Refer to the Master Response for Geographic Scope of the EIS and the inventory of cultural resources described in Draft EIS Appendix J, *Cultural Resources Technical Report*.

Comment GP781-207

216.Appendix L, Table L-6, Glenn Road, Newman Creek Road, Calder Road -US 12 mileposts would be nowhere near those shown. US 12 begins at the junction with US 101 in Aberdeen -MP 0.0 to 0.27 would only bemile east of there, not east of Montesano where these roads are.

Response GP781-207

The table has been revised in the Final EIS Appendix L, *Vehicle Traffic Analysis*, based on comments from Washington State Department of Transportation.

Comment GP781-208

217.Page L-14, last par. - Streets such as Maple, Main, and Locust need to be shown on a detailed map as was done for Aberdeen.

Response GP781-208

Comment acknowledged.

Comment GP781-209

218.Page L-15, 3rd line -This is the first reference to the oil trains being as long as 1.4 mile. As stated earlier there is no state regulation limiting the number or length of oil trains once these projects are permitted. These projects are just the foot-in-the-door for bringing crude oil through a sensitive area where it does not currently exist.

Response GP781-209

As noted in the Master Response for Project Objectives and Alternatives, the proposed action is a private project and the objectives and proposal are defined by the applicant. Draft EIS Chapter 2, *Proposed Action and Alternatives*, describes the type of material and approximate volumes to be transported based on this information. The City of Hoquiam will specify maximum throughput in the conditions of a shoreline development permit. In addition, other permit approvals could identify the maximum allowable (permitted) throughput of the facility. Any increase in annual throughput capacity would require revised or new permits or plans.

Comment GP781-210

219.Page Ll-3, bottom par. -This paragraph implies that the following table shows all of the affected at-grade crossings, when in fact it only shows 25 of the 81 (p. L-13) modeled.

Response GP781-210

Draft EIS Appendix L, *Vehicle Traffic Analysis*, accurately states that the crossings that would experience a decrease in level of service are shown in Table L-7. Tables 11 through 43 in Attachment L-1 show detailed information for all 81 crossings.

Comment GP781-211

220.Attachment L-1, Tables 2-8 -These tables should at the very least include the Devonshire Road and Industrial Road crossings. # 18 Sargent Blvd/Junction City Rd should settle on one name as they are the same road.

Response GP781-211

The study in Draft EIS Appendix L, *Vehicle Traffic Analysis*, Attachment L-1,Tables 2 through 8 were identified in coordination with the Washington State Department of Transportation as the study crossings on which to focus the vehicle delay analysis. Devonshire Road is included in Tables 10, 12, 14, 16, 18, 20, 22, 24, 26, 28 for vehicle delay and Tables 32, 34, 36, 38, 40, and 42 for predicted accident frequency. Industrial Road is included in Tables 11, 13, 15, 17, 19, 21, 23, 25, 27, and 29 for vehicle delay and Tables 33, 35, 37, 39, 41, and 43 for predicted accident frequency. All remaining crossings along the PS&P rail line analyzed in detail for potential impacts to vehicle delay and predicted accident frequency are displayed in Tables 11 through 43.

The naming convention Sargent Blvd/Junction City Rd is used to help readers better identify the roadway if they are only familiar with one of the road names.

Comment GP781-212

221.Attachment L-1, Figures 1-4 -Please spell "Chehalis" correctly. I have tried to not point out the numerous misspellings and other typos, but some just jump out.

Response GP781-212

The Final EIS has been revised to correct the spelling of Chehalis.

Comment GP781-213

222.Appendix M,P. 4-5, bullets -As noted above in #147 the causes of the derailments need better explanation than "wide gage" or "track geometry design". Were they due to poor maintenance? Age of the railway? Vandalism? This is important - please give a detailed assessment of the causes.

Response GP781-213

The explanations for the derailments described in the Draft EIS Appendix M, *Risk Assessment Technical Report*, were provided by the PS&P Railroad.

Comment GP781-214

223.Appendix M, Page 4-6 -In Table 6 and the paragraph that follows it is noted that the accident rate on the PS&P line is ten times that of the nationwide average for class 2 track (actually 27 times the average for mainline class 2 track). This fact needs more disclosure than being buried in an appendix. This needs at the very least to be disclosed in Volume I. And the results at the bottom and next page obviously do not take into account the condition of the railway and structures, which is so bad it reduces track speeds from the class 2 norm of 25 MPH to 10 MPH east of Aberdeen and 5 MPH at the Wishkah River Bridge. This is a major under-assessment of this study.

224.Appendix M, Page 6-2, 4th par. -"circumstances ...are less likely...because the speeds...are so low" is totally contrary to logic and the opinion of the FRA director cited above, and the evidence cited in the LA Times article. "Although the rates of accidents on this line are greater than the national average" is a gross understatement -they are 10- 27 times higher. "implementation of the stronger rail cars" will provide only marginal improvement, again according to the FRA director.

Response GP781-214

Final EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport,* has been revised to add information about the assumptions used in the risk scenarios presented in Appendix M, *Risk Assessment Technical Report*. For additional information about the approach, assumptions, and data sources used, refer to the Master Response for Risk Assessment Methods.

Comment GP781-215

225.Appendix M, Page 7-4, bottom - "The overall chance of an accident...is once in 1.7 years"! I don't recall seeing this very telling statement anywhere in the Volume 1text. It needs to be prominently repeated there. Once in 1.7 years is much worse than we were lead to believe there.

Response GP781-215

The reference in the comment to an incident occurring once in 1.7 years is for the no-action alternative and as noted in Appendix M, *Risk Assessment Technical Report*, does not represent the likelihood that a spill would occur but rather the chance than any incident might occur regardless of the potential for a release. Similar estimates for rail and vessel transport related to the proposed action are given on Draft EIS pages 4-8 and 5-6, respectively. These numbers represent the incremental chance of any incident associated with the proposed action. Similarly, they do not represent the equivalent chance of a spill. The combined risks of a spill are not presented in the Draft EIS for the reasons discussed in the Master Response for Risk Assessment Methods.

Comment GP781-216

226.Appendix 0, page 3, 4th par. -Vessels are shown as 260 when the correct number is 319 plus another 60 for GHRT (Vol. 1, Table 6-18).

227.Appendix 0, Page 4, Westway -"receive approximately 9.6 million barrels ...and store 800,000 barrels"? Volume 1at page 2-8 states 19.2 million barrels to be shipped and page 2-7 shows 1million to be stored. The last paragraph again states 9,600,000 barrels to be shipped on 60 barges and vessels, contrary to the 119 ships listed on page 6.6, and lists four new tanks rather than 5.

228.Appendix 0, Page 5, top par. -Technically, the Imperium site is 22.9 ac., of which this project will develop 10.9 ac. In the 5th pararagraph, the unit trains are estimated at 120 cars, not 105 (Imperium Vol. 1, Table 3.15-8).

229.Appendix 0, Page 12, #6 -The main text states 319 vessels for the 2 projects and 379 for all three (Vol. 1, Table 6-3).

230.Appendix 0, Page 22 -In the first paragraph it is 5 new tanks, not 4. In the 2nd paragraph it is 19.2 million barrels, not 9,600,000. In the 3rd it is 119 vessel calls, not 60. In the 6 paragraph it is 120 tank cars, not 105 (per Vol. 1, Table 3.15-8). These last 5 comments beg the question -if this 2014 Economics Impacts Analysis can't get the basic volume numbers of the two projects correct, why should the reader assume the conclusions are correct since they are based in part on incorrect numbers?

Response GP781-216

Draft EIS Section 3.17, *Vessel Traffic*, notes the number of vessel trips to and from the project site would vary but on average would result in 119 trips per year (one-way) or approximately 60 vessel calls per year (round trips), as was specified in Draft EIS Appendix O, *Economic Impact Analysis*. Draft EIS Section 3.15, *Rail Traffic*, notes that the exact number of trips and the length of trains traveling to and from the project site would vary, but could be expected to be as long as up to 120 rail cars. Details about rail and vessel transport do not affect the results of the economic analysis.

Comment GP781-217

As a footnote, I find it interesting that the DEIS preparer, ICF International, cannot even get their own address correct. Please note that on page 2 of the cover letter, page 5 of the fact sheet, and Summary page S-2 in both documents, and on the project website, all 4 right after the heading of “Comments may be submitted by mailto:”, they are shown at “710 Second Street”, an address that does not exist in Seattle. Only page 4 in the fact sheet and the online comment form show the correct

address of "710 Second Avenue". I find directing comments to a non-existent address troubling at best.

I reserve the right to submit additional comments by the closing date of 11/30/15

Response GP781-217

The address was corrected in the Draft EIS files and the updated files were reposted to the Ecology website. The U.S. Postal Service confirmed that comments addressed to Second Street would be delivered to Second Avenue. Comments addressed as such were received.

GP782, **Tlustos, Margaret**

Comment GP782-1

Grays Harbor is the wrong place for oil terminals with its narrow, shallow shipping channel and strong currents that would put it at high risk of an oil spill. A single major spill could devastate the area's maritime economy, productive fisheries, tribal treaty rights and spectacular coastal waters. I support the Quinault Indian Nation's opposition to crude oil shipments passing through lands it has lived on since time immemorial, and endangering the natural resources its people depend on for their livelihoods. There is no way to mitigate the risks and dangers of the proposed oil shipping terminals, dirty and dangerous oil trains, storage tanks and barges, so they must be prevented.

Response GP782-1

Refer to the Master Response for the Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP783, **Tomlinson, Marc R.**

Comment GP783-1

I am a long term resident of Grays Harbor. We are active outdoor people who enjoy hiking, bird watching, fishing, etc. I am well educated in the physical and biological sciences. I own a business in Aberdeen and in general am enthusiastic about new business and jobs coming to the Harbor! It is an amazingly bad idea to contemplate bringing millions of gallons of toxic crude oil by rail to Grays Harbor!! The existing rail line goes close to our home in Central Park. That line takes quite a torturous path and is very busy as is! I was on the scene minutes after the multiple car derailment last year. Fortunately the cargo was just stinky soy meal! More rail traffic would create havoc and loss of business at the Wishkah Mall and all over downtown. More importantly, Grays Harbor is a large vulnerable ecosystem! We are home to a number of rare and pristine saltwater marshes and rivers! The associated migratory birds and fish runs need protection! We are in an area which will inevitably suffer that next huge subduction earthquake! Alaska has not yet recovered from the Exon Valdez spill after 15 years and that was one tanker! Additionally, commodities like oil are not predictable long term investments as we have seen by the recent huge drop on oil prices. In two decades we could easily end up with infrastructure that was worthless! I am a big supporter of economic growth. However, bringing in crude oil by train is idiocy! Dr. Marc and Suzanne Tomlinson

Response GP783-1

Refer to the Master Response for the Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP784, **Treadway, Carolyn**

Comment GP784-1

I am strongly opposed to the Westway and Imperium Oil Terminals in Grays Harbor, WA, and to any transport of crude oil by rail or by sea. I care very much about the environment my children and grandchildren are inheriting, and I fear for the future of all our descendants already born and yet to come.

Climate change is accelerating across our planet, including in Washington where this summer we experienced devastating drought and forest fires. ONLY by decreasing the various greenhouse gasses in our atmosphere will we have an environment in which current species can continue to live. Fossil fuels need to remain in the ground, forever. Every single operation that supports the extraction, transport, or use of any fossil fuel contributes to the devastation of our Earth, which is our ONLY home. What right do oil companies (and subsidiary companies that service them) have to risk the precious water, air, and land that belong to us all?

All for the sake of corporate profit!! Accidents will happen, as they constantly do. Just one major spill could destroy, probably forever, a large surrounding area, and the way of life of the people (and all creatures) in the area

Increasing our use of oil is physically dangerous to our planet and therefore morally wrong. Simply wrong. Building storage terminals in an earthquake/tsunami zone--to hold millions of gallons of crude oil--is pure insanity. Increasing oil terminals and transporting oil through them is in NO way worth the environmental, health, economic, and social risks involved. Time is running out for us to re-create a sustainable planet. The era of oil is over. Energy conservation and renewable energy are the future, and are necessary if we humans are to have a future. For all these reasons and countless more, please REJECT the proposals of the Westway and Imperium oil terminals. Instead, please act to PROTECT the beautiful coastline of Grays Harbor plus all the people and communities of the surrounding area. By saying NO to these proposals, you lead the way toward a sustainable future and continued viable life on Earth.

Response GP784-1

Refer to the Master Response for the Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP785, **Treadway, Roy**

Comment GP785-1

Dept. of Ecology & City of Hoquiam Re: Westway and Imperium Oil Terminal Proposals I am opposed to the Westway and Imperium Oil Terminals in Grays Harbor. The proposed Terminals would significantly increase transport of oil by rail throughout Washington, but particularly from

Chehalis to Aberdeen, putting at crucial risk the people, wildlife, farmland, and water along the way, especially in Grays Harbor.

From experience elsewhere, oil trains are not safe, and one spill could well destroy the economy, if not livelihood, of persons, including the Quinault Indians, who depend on the coasts, fisheries, and marvelous scenery of Grays Harbor. Why risk something so precious for the gain of a few, not only in the United States but in many other countries as well?

We have recently witnessed devastating floods elsewhere in our country and droughts and forest fires in the West, all aggravated by climate change from increasing carbon dioxide in the atmosphere from using fossil fuels. Let us not transport through Washington and Grays Harbor oil, the burning of which does so much harm to our planet. Washington and the Gray's Harbor area can lead the way to sustainable, clean, renewable energy, and not depend on supporting a risky, damaging last-century source of energy – oil. I urge you to reject the proposed Westway and Imperium oil terminals. Sincerely, Roy C. Treadway Note: This may be a duplicate of a comment I tried to submit on Oct. 6, 2015, but I am not sure if it were successfully submitted.

Response GP785-1

Refer to the Master Response for the Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP786, **Treat, Lynn**

Comment GP786-1

Good afternoon. I'm Lynn Treat from Chehalis, Washington. I'm here to comment upon an unnecessary risk we are taking in this state. While I have many concerns about oil companies and transports of oil within our state, I want to focus on the topic of public health and how it seems to affect our area with regard to this petroleum project.

I see at least two areas of importance. The safety -- number one, is the safety of routine shipments, their ability at containment and adherence to regulations.

The poor state of our infrastructure is well known, and this includes the declining quality of our oil cars and incidents of unknown leakages of methane.

I am very concerned with the monthly disclosure of oil train accidents, and devastation. We risk, in Washington State, a tragedy on the proportions of those in Lac-Mégantic, Quebec. Emergency resources in such communities are very stretched by having to prepare for these emergencies and how to actually conduct themselves when such an emergency happens.

It is somewhat humorous to see these oil companies try to sell us this as a job creator, an asset to our economy. The entire enterprise is a tactic by oil companies to complete its final harvest to fossil fuels.

Those jobs that they are supposedly putting here will not be here in 40 years unlike Microsoft and other very valuable institutions and hirers. So there will be no one collecting a gold watch at their retirement from the oil industry.

Real entrepreneurs will find much opportunity with alternative and renewable fuels, and they'll find much more than in helping these companies, the big oil, break and drain in our resources.

Clearly the future is in renewables, and the youth, the next generation, already know this. Thank you.

Response GP786-1

Refer to the Master Response for the Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP787, **Troyer, Stena**

Comment GP787-1

October 26, 2015 Westway and Imperium Terminal Services Expansion Projects EISs c/o ICF International 710 Second St, Suite 550 Seattle, WA 98104

Washington can be the leader for safe, renewable clean energy solutions- say NO to an oil terminal in Grays Harbor.

To whom it may concern,

For nearly three years, I have worked as an environmental educator for a nonprofit that uses education to inspire stewardship of the Puget Sound to the people of the community. This education comes in a variety of forms including interpretative beach walks, classroom science workshops, citizen science opportunities, and even a Jr Naturalist training program. In 2014 we delivered over 500 programs to over 25,000 individuals.

I find that the most rewarding parts of my job is working with students. I want to share with you that the future these students have imagined is far removed from fossil fuels. Each of the workshops we deliver connects back to the environment and gives students hands on opportunities to engage in the scientific process and devise solutions to make their world a better place. The various solutions students have to take action and reduce pollution is inspiring. Let's get the ball rolling in the right direction for these future scientists and leaders by saying no to an oil terminal in Grays Harbor.

There are better ways to meet our energy needs. Let's move away from investing in infrastructure for fossil fuels and instead, invest in clean, renewable sources so we can meet our energy needs in an earth friendly way. The time is NOW to take action to respond to climate change and dirty coal and oil is not the solution for our community and world. Please do everything you can to stop projects that promote coal and oil. We can be leaders in a future powered by safe, renewable, clean energy- let's start today.

Stena Troyer troyerstena@gmail.com 406-679-0615

PS: I urge you to consider the list on the following pages in your review of the environmental impact statement.

WA Recreational Use Study: In 2014, WA residents took an estimated 4.1 million trips to the WA coast, with nearly 60% saying the primary purpose was for recreation. Average respondents spent approximately $111.14 per trip, translating to an estimated $481 million in direct trip expenditures.

35.6% of the 4.1 million trips were taken to Grays Harbor County. Beach going, sightseeing/scenic enjoyment, wildlife viewing, and photography were the most popular activities coastwide, with some of the highest rates of activity found along the shorelines of Grays Harbor County and the ocean and estuary coastlines.

Response GP787-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2, has been updated to provide additional information about economic and social costs of oil spills, including potential impacts on businesses.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP787-2

Inadequate Assessment of Alternatives: The purpose of an EIS under the Washington State Environmental Policy Act (SEPA) is to provide our government agencies with sufficient information to make planning decisions based on environmental impact. Yet these two EIS documents fall severely short of that purpose because they do not consider any alternatives other than the no project alternative, including alternatives that would proactively strengthen the local economy and job growth, attract more tourism in the area, and reduce environmental pollution in the region.

Response GP787-2

Refer to the Master Response for Project Objective and Alternatives for an explanation of the alternatives evaluated in the Draft EIS.

Comment GP787-3

Earthquakes & Tsunamis: Both proposals are in significant earthquake and tsunami areas, as recognized in the EIS documents. An inevitable earthquake or tsunami of modest or severe size slated for the region would cause an unprecedented environmental disaster should this project go through (including significant oil spills and explosions). The mitigation proposed in the EIS does not adequately address this outcome and its destructive effects.

Response GP787-3

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation would reduce earthquake and earthquake-related events including tsunamis.

Comment GP787-4

Proposals Preclude More Sustainable Uses: The proposed fossil fuel infrastructure and uses of Washington coastline would preclude more sustainable uses in the area, such as clean energy production facilities, tourism, and recreation.

Inadequate Cost Analysis. Neither EIS includes an analysis of the inevitable increased costs to our communities and our government agencies, including:

- Increased health care costs and community illness due to air, water, soil, and noise pollution.
- Decreased commercial fishing/aquaculture returns from polluted waters and disrupted habitat.
- Decreased tourism and recreation due to less access to the coastline, waterways, and the natural resources of the area.
- Increased clean-up costs of spills, explosions, and other inevitable forms of pollution due to transport, operations, disposal, human error, and natural disasters.

Response GP787-4

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP787-5

Cumulative Impacts on Climate Change: These proposals promote the extraction, transport, and burning of fossil fuels, all of which are contributing to climate change and a host of related hazards, costs, and threats to every community, coastline and economy in the world, including our own.

Response GP787-5

Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

Comment GP787-6

Shorebirds & Waterfowl: Grays Harbor estuary is located along the Pacific Flyway, a migratory flight corridor between Alaska and South America. It is one of four major staging areas for migrating shorebirds in North America, with shorebirds congregating in the mudflats to feed and rest during spring and fall migrations. Aroximately 24 species of shorebirds use the Grays Harbor National Wildlife Refuge during migrations, which begin in late April and continue through mid-May. The spring migration is concentrated, with hundreds of thousands of shorebirds arriving for a brief stay during their northern migrations. Fall migrations begin in July and continue through September

Vessel Strikes: Collisions with ships are one of the primary threats to marine mammals, particularly large whales, along the U.S. west coast, and around the world. Related to the proposed action, the greatest potential for vessel strikes to occur would be in the shipping lanes, which are located outside of state water (farther than 3 nautical miles from the coast). This is because large mammals, like whales, typically migrate and forage in deeper waters and are not likely to enter the

harbor. However, there is some potential for vessels to strike marine animals within the study area, particularly during transits outside the harbor but within 3 nautical miles of the harbor mouth. Depending on the circumstances (i.e., vessel speeds, vessel type, type of animal, animal behavior), the impacts could vary widely, but could include bone fractures, organ damage, and internal hemorrhages

Response GP787-6

Potential impacts on animals, including vessel strikes, are addressed in Draft EIS Chapter 3, Section 3.5, *Animals*. The potential for widespread damage from oil spills, fires, or explosions are addressed in Chapter 4, *Environmental Health and Safety,* including impacts on shorebirds.

GP788, **Tuepker, Anais**

Comment GP788-1

Dear Consultants, Ecology and City of Hoquiam, Across the Pacific Northwest region, one community after another is rejecting the tremendous risks associated with increased crude oil shipping. Indigenous, business, and other local communities are opposed to the Westway and Imperium proposals, because of the risks and unavoidable, unacceptable costs that these projects would impose. I urge you to reject the oil terminals proposed in Grays Harbor because they will create the following significant and adverse impacts which cannot be avoided or mitigated and are unacceptable:

1)Non-yard oil train derailment spills will happen in the extended area several times per decade. An oil spill would have significant and adverse impacts that cannot be prevented or mitigated. At best only 14% of the oil is recovered in a spill. Crude oil contains benzene which cannot be recovered from the water.

Oil vapor pressure cannot be lowered enough to prevent ignition. When tank cars are punctured during a derailment, non-yard derailment spills usually lead to fire. Oil train fires are likely to cause burns, deaths, and property damage. Burns, deaths, and property damage are significant adverse impacts that cannot be prevented or mitigated.

Response GP788-1

Draft EIS Chapter 4, Section 4.5.2.2, *Fires or Explosions*, addresses potential risks related to fires or explosions associated with rail transport under the proposed action. Section 4.7, *Impacts on Resources*, describes potential impacts of fires and explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for additional information about the analysis of emergency planning and response capabilities.

Comment GP788-2

2) Until all the tank cars have thermal jackets and high capacity pressure relief valves, tank cars sitting in a pool fire, are likely to explode. Firefighters cannot protect the public in those cases. Oil train explosions will be impossible to prevent for nearly a decade.

Response GP788-2

Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport,* discloses voluntary measures and design features, proposed applicant mitigation, and other measures that would further reduce environmental health and safety impacts from rail transport related to the proposed action, in addition to regulatory compliance and best practices. To the extent possible, within the framework outlined in the Master Response for Mitigation Framework, measures addressing the need for more coordinated and focused planning include the role of the applicant as appropriate. However, as noted, no risks can be eliminated and, depending on the circumstances, significant impacts could occur.

Comment GP788-3

3) Oil trains block traffic, interfering with commerce, emergency response and school buses. The adverse impacts will be significant. There is no practical way to mitigate for blocked traffic.

Response GP788-3

Draft EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, addresses potential impacts on vehicle delay and emergency vehicle access. Final EIS Section 3.16 clarifies proposed mitigation and potential significant and unavoidable impacts.

Comment GP788-4

4) On some days the oil terminal will stink, particularly if the vapor combustion units fail. The city of South Portland Maine has banned the trans-loading of crude oil into marine vessels for that reason. Hydrogen sulfide first deadens the sense of smell, and then it kills you when it gets trapped in low-lying pockets.

Response GP788-4

Final EIS Chapter 3, Section 3.2, *Air*, reflects the addition of a discussion of potential impacts related to odor. The only compound with sufficient emissions to have the potential to have a perceptible odor is hydrogen sulfide. The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, are expected to reduce emissions of air pollutants, including hydrogen sulfide, to below the odor threshold for the most sensitive individual.

Comment GP788-5

5) An oil terminal can only begin the slide toward altering the landscape, river, and quality of life here. There will be no other direction once it begins. [*7*] The construction unions in Texas oil towns have been starved to death. And once they've got their foot in the door, big oil is as happy as any other corporation to break unions. The prosperity we're being offered is a poison pill. This cannot be mitigated or avoided.

Response GP788-5

Comment acknowledged.

Comment GP788-6

6) Finally, the proposed oil terminals will lead to a net increase of greenhouse gas emissions. If all the terminals in Washington and Oregon are approved, the net global oil production could increase 496,000 barrels per day. This is additive. This is not simply replacing one oil source for another. The increases must be mitigated.

We can lead (and profit from) the transition to a clean energy future, which will come, or we can fall behind in our dependence on dirty projects and dirty money. Don't approve these projects - the cost to our present and our future is too high.

Response GP788-6

Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources and for information on the likely destinations of crude oil shipped through the proposed facilities. Refer to the Master Response for the Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP789, **Tuyls, Gar**

Comment GP789-1

My name is Gar Tuyls of Portland, OR. My Masters degree is from Oregon State University for Environmental Health & Safety Education. In the past 4 years I have traveled twice to Wisconsin via Amtrak. In 2011 the east bound Amtrak was stopped on a sidetrack numerous times to allow west bound oil freighters to pass. In 2014 the side tracking was more frequent than 2011. Also, on one such passage around midnight most passengers were asleep. The rocking of our train was so severe that it woke myself and other passengers. The rocking seemed that a collision between the trains was imminent. The tracks and the bed seemed about to fail. Now an accident of this nature is an occurrence that happens all too frequently. If either the track or rail bed had failed it could have resulted in the deaths of all those aboard both trains. I am sure that there are other sections of the track or roadbed in as bad or worse repair. Please do not jeopardize public transit safety for an industry that is currently unsustainable at its given rate of resource mismanagement. What will be done to mitigate the possibility of such a train wreck? Thank you. Respectfully, Gar Tuyls.

Response GP789-1

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not

completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

For more information about the analysis of potential impacts on the BNSF main line, refer to the Master Response for the Geographic Scope of the EIS.

GP790, **Tuyls, Gar**

Comment GP790-1

My name is Gar Tuyls of Portland, OR. My Masters degree from Oregon State University for Occupational and Environmental Health & Safety Education has prepared me well to respond to the Westways/Imperium Terminals proposal. In my estimate the biggest problem of utilizing the proposed site is liquefaction. We in the Northwest are totally unprepared for the eventuality of 9.0 earthquake followed by the tsunami. The Japanese earthquake of 2011 that destroyed a nuclear plant and caused a meltdown was 9.0 Richter. There likely be much destroyed, including tank farms and pipelines. To what standards will the tanks be designed to withstand such devastating energy release as from the slip of the Cascadia subduction zone? May I politely suggest current Japanese standards. Finally, Looking at Gray's Harbor from an aerial view it is evident due to topography that given past construction standards will be woefully inadequate, particularly tank farms and underground pipelines. The only safe areas will be well east of the Olympic Peninsula, this does not include Seattle as being safe. As a matter of National Security I request you deny the Westway and Imperium Terminals applications. Thank you, Gar Tuyls

Response GP790-1

Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events.

Refer to the Master Response for the Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP791, **Tuyls, Gar**

Comment GP791-1

My name is Gar Tuyls of Portland, OR. My Masters degree from Oregon State University for Occupational and Environmental Health & Safety Education has prepared me to respond to the Westways/Imperium Terminals proposal. Noise Mitigation was part of my study curriculum and used in my professional career. In particular, is noise/vibration from any pile driving to be done. Pile driving has been used to secure storage tanks in Japan subsequent to their 2011 9.0 earthquake and tsunami in Fukushima Prefecture. The Tribal Fact Sheet states in part, "construction not likely to harm fish or wildlife". After reviewing available data provided , specifically Construction-Noise-Pile driving on the Fact Sheets there appears to be a missing component. No mention is made of the

effect of pile driving noise/vibration and energy release into Grays Harbor. I refer you to this article published By Jackson Kuhl, For National Geographic News. PUBLISHED Thu Feb 09 12:03:00 EST 2012. "In 2003 and 2004, the California Department of Transportation (Caltrans) needed to drive new pilings—8 feet (2.44 meters) in diameter and 300 feet (91.44 meters) long—into the seabed for the project. Caltrans was concerned that the short, powerful pressure waves created by the enormous hammers striking the pilings would affect the behavior of nearby seals. Bud Abbott of Oakland, California, a marine biologist consulting on the project, warned the waves might kill fish as well. ....during an early test, a number of dead fish appeared on the surface. Abbott collected the fish and conducted necropsies. The swim bladders of the fish had burst and their kidneys had suffered terrific damage. Abbott's verdict: The pressure wave compressed the air in the swim bladder, which then quickly expanded again, bursting the bladder and damaging the kidneys." There is much more scientific evidence, one is attached, of the difficulty of mitigating impact to sea animals from high noise/vibration from pile driving construction. If unmitigated the entire bay and could become devoid of all seal life. Those animals that could flee would likely do so. Those with limited mobility would likely perish. My request is the Board please review and consider disapproval of the applications currently being considered in the Westways & Imperium DEIS's due to the issue of ecosystem damage to Grays Harbor. Respectfully submitted, Gar Tuyls

[Attachments: Development of an air bubble curtain to reduce underwater noise of percussive piling. Marine Environmental Research, 2000.]

Response GP791-1

The proposed action would not require any in-water pile driving; therefore, potential underwater noise and pressure impacts on aquatic species from in-water pile driving are not addressed in the Draft EIS. Pile driving outside of but near surface waters could have impacts on aquatic species if the pile driving is close enough to the water. These potential impacts are addressed in Draft EIS Chapter 3, Section 3.5.5.2 *Proposed Action*, *Construction*, *Noise*. All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP792, **Upenieks, Roland**

Comment GP792-1

Dear Consultants, Ecology and City of Hoquiam. We urge you to reject the oil terminals proposed in Grays Harbor because they will create the following significant and adverse impacts which cannot be avoided or mitigated and are unacceptable.

The tank cars cannot be made crashworthy. Non-yard oil train derailment spills are guaranteed to happen in the extended area several times per decade. An oil spill would have significant and adverse impacts that cannot be prevented or mitigated. At best only 14% of the oil is recovered in a spill. Crude oil contains benzene which cannot be recovered from the water.

Response GP792-1

Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport,* presents the analysis of risk of oil spills, fires, and explosions related to rail transport related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Section 4.5.3 that would reduce the likelihood of a spill reaching the environment and

the potential impacts of an incident along the PS&P rail line. Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including a discussion of the potential longer-term impacts. Final EIS Section 4.3, *Risk Considerations,* reflects additional information about factors influencing cleanup.

Refer to the Master Response for the Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP792-2

2. The oil vapor pressure cannot be lowered enough to prevent ignition. When tank cars are punctured during a derailment, gases rush out and find a spark. Non-yard derailment spills usually lead to fire. Oil train fires are likely to cause burns, deaths, and property damage. Burns, deaths, and property damage are significant adverse impacts that cannot be prevented or mitigated.

Response GP792-2

Draft EIS Chapter 4, Section 4.5.2.2, *Fires or Explosions*, addresses potential risks related to fires or explosions associated with rail transport under the proposed action. Section 4.7, *Impacts on Resources*, describes potential impacts of fires and explosion.

Comment GP792-3

3. Until all the tank cars have thermal jackets and high capacity pressure relief valves, tank cars sitting in a pool fire, are likely to explode. Firefighters cannot protect the public in those cases. Oil train explosions will be impossible to prevent for nearly a decade.

Response GP792-3

Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport,* discloses voluntary measures and design features, proposed applicant mitigation, and other measures that would further reduce environmental health and safety impacts from rail transport related to the proposed action, in addition to regulatory compliance and best practices. To the extent possible, within the framework outlined in the Master Response for Mitigation Framework, measures addressing the need for more coordinated and focused planning include the role of the applicant as appropriate. However, as noted, no risks can be eliminated and, depending on the circumstances, significant impacts could occur.

Comment GP792-4

4. Oil trains block traffic. They interfere with commerce, emergency response and school buses. The adverse impacts will be significant. There is no practical way to mitigate for blocked traffic.

Response GP792-4

Draft EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, addresses potential impacts on vehicle delay and emergency vehicle access. Final EIS Section 3.16 clarifies proposed mitigation and potential significant and unavoidable impacts.

Comment GP792-5

5. The proposed oil terminals will lead to a net increase of greenhouse gas emissions. If all the terminals in Washington and Oregon are approved, the net global oil production could increase 496,000 barrels per day. This is additive. This is not simply replacing one oil source for another. The increases must be mitigated. The data was provided by Oil change International which performed a similar study on the KXL pipeline for the EPA. http://www.sightline.org/research_item/tracking-emissions/

Response GP792-5

Refer to Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources and for information on the likely destinations of crude oil shipped through the proposed facilities.

Comment GP792-6

6. Lost property values More than reported in the Economic Impact Analysis Planning model used by ECONorthwest. That model doesn't distinguish between unit oil trains and other types of freight. These adverse impacts are significant and cannot be mitigated or avoided.

Response GP792-6

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values.

Comment GP792-7

7. The Cost of Emergency Preparedness in all rail communities. NTSB says emergency response planning along the rail routes is "practically nonexistent".

Response GP792-7

Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for additional information about the analysis of emergency planning and response capabilities in the study area. For more information about the analysis of potential impacts on the BNSF main line, refer to the Master Response for the Geographic Scope of the EIS.

Comment GP792-8

Spill Cleanup delays. It took decades for the spill to be cleaned up in the town of Skykomish. Buildings had to be moved. The delays were significant and are unlikely to be avoided in the future. http://skykomish.wednet.edu/news/2015/03/13/school-clean-up/

Response GP792-8

Comment acknowledged.

GP793, **Van Doorninck, Anneka**

Comment GP793-1

We were actively involved in the cleanup of the Nestucca oil spill in 1989 in Grays Harbor The list of similar incidents is growing. Some resulting in loss of life like at Lake Megantic in Quebec. Did we learn from these incidents?

We hope so and unless safety issues are much more seriously discussed, we urge you to prevent further disasters by denying the permits for an oil harbor in Hoquiam,

Response GP793-1

Refer to the Master Response for the Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP794, **Vanderpool, Nancy**

Comment GP794-1

No oil trains allowed in the Columbia Gorge nor through Oregon and Washington.

Response GP794-1

Comment acknowledged.

GP795, **Vassilakis, Noemie**

Comment GP795-1

Expansion of these oil storage terminals is taking us in exactly the wrong direction. We urgently need to move away from dirty, carbon-intensive energy sources. We also should not be routing coal and other energy transportation through our region as the coal dust, oil spill risks, additional traffic, and other impacts that will result are bad for our environment and quality of life. I oppose these expansions.

Response GP795-1

Refer to the Master Response for the Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP796, **Vicki**

Comment GP796-1

While I understand that the Grays Harbor area is economically distressed, I believe that these expansions are a bad idea. They are not expansions of activities already being conducted at these two facilities, they are changing them to oil terminals which brings many dangers to our environment. The dangers are not limited to Grays Harbor, but would impact all of Western Washington and our entire planet. Our focus should be on clean energy, not finding ways to move more oil across our state. We should not let the oil industry beguile us with the promise of short term jobs for people in one area at the expense of the whole planet.

Response GP796-1

Refer to the Master Response for the Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP797, **Vicki**

Comment GP797-1

How is this project a good idea? I've heard that the location of it is very prone to earthquake damage. Also, it doesn't seem like many people in the area are in favor of it. Not to mention the environmental damage. I am not in support of this project.

Response GP797-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP798, **Vidal-Hallett, Emilia**

Comment GP798-1

How is this project a good idea? I've heard that the location of it is very prone to earthquake damage. Also, it doesn't seem like many people in the area are in favor of it. Not to mention the environmental damage. I am not in support of this project.

Response GP798-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP799, **Vogel, Sally**

Comment GP799-1

Good afternoon

My name is Sally Vogel, I live at 4319 Chambers Lake Dr. SE, Lacey, WA 98503. I am here representing myself and my friends and family.

I appreciate that fact that you are here willing to listen to all of us. My testimony will address the impact of the project upon the climate.

Building storage facilities for oil is like enabling an alcoholic. It encourages greater extraction of a dangerous substance. Others will address the overwhelming safety issues involved here, so I thought I would speak to the issue of climate change.

In the EIS it is stated that the proposed project will increase greenhouse gasses by only 0.033 percent compared to Statewide Greenhouse Gas Emissions in 2011. It is easy to look at this and think ...oh, that's not much. But we are already at TOO MUCH. We must not build projects that add anything to the creation of greenhouse gasses.

We can't look at this one project in isolation from the others that are proposed. The tendency of us all is to look at the percentage of increase of Greenhouse Gasses this one project would cause and dismiss it as not having much effect. That is a dangerous path to take. Climate change didn't come about all of a sudden; the gasses accumulated incrementally. Permission is given to pollute because any o e project is not seen as a danger. THAT IS THE DANGER. It all adds up.

It has added up so much that South Carolina just experienced unprecedented flooding, southeast China has had unprecedented tornados, glaciers are melting all over the planet and here in Washington, we are experiencing a rare thing for us...drought...because it is too warm to snow.

Climate change brings negative impacts to our health, our safety, the economy and our quality of life. It affects every aspect of life.

There is a path to slow and possibly reverse climate change. One component of it is to Say NO to every project that involves taking sequestered carbon from its place and every project like this one, that enables it. Leave it in the ground. Leave it in the trees. Don't truck it, pipe it, take it by rail or by tanker ...leave it where it is.

Yes, I drive a car, yes I enjoy a better way of life because of petroleum products...but the consequences of continuing my lifestyle... and yours are too awful to contemplate. That better way of life can become horrible if we don't do something. NOW. I'm willing to change my habits. Are you willing to say NO to this project? Please deny the permit.
Thank you.

Response GP799-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP800, **Voget, Connie**

Comment GP800-1

As a member of the Green Team at my church, Keystone United Church of Christ, I oppose oil-by-rail projects. I am particularly concerned about impacts on Native Americans.

Response GP800-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP801, **Voget, Connie**

Comment GP801-1

Name Connie Voget
City/State/Zip Seattle, WA 98103

I request that the risk of cancer, asthma, and other respiratory illnesses from diesel particulate pollution emitted by oil trains be evaluated. Being a cancer survivor, I am more aware than many about the toll a cancer diagnosis and treatment takes not only on the patient but also family and friends. Knowing people with asthma and other respiratory illnesses, I am aware of the debilitating effects and suffering induced by these illnesses and feel compelled to speak out against elevating risks of these illnesses.

Response GP801-1

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present analyses of cancer risk from emissions of diesel particulate matter related to the proposed action and cumulative projects, respectively. Final EIS Section 3.2 and Section 6.5.1.2 have been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analyses predict lower emissions; the level of increased risk is not considered significant.

GP802, **Voget, Richard**

Comment GP802-1

This is the wrong place for oil terminals. The Washington State Department of Fish and wildlife stated "Grays Harbor is an area particularly sensitive to the adverse effects of oil spills." Much of what makes Grays harbor special would be at risk. The narrow, shallow shipping channel and strong currents put Grays Harbor at High risk of an oil spill. A single major spill could devastate the area's maritime economy, productive fisheries, tribal treaty rights and spectacular coastal waters.

There is no safe way to move oil by train: The tank cars that split open and burst into flames in Illinois in March 2015 were retrofitted to meet a higher safety standard than federal law requires according to railroad officials. The oil cars that derailed in West Virginia in February 2015, leaking

oil into the Kanahwa River and burning down a house, were the newer 1232 cars that were supposed to be safer than the older DOT-111 models blamed for previous accidents.

Response GP802-1

Draft EIS Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* acknowledges the voluntary applicant measure for all new rail cars to meet or exceed the U.S. Department of Transportation Specification 117 design or performance criteria and that all existing tank cars be retrofitted in accordance with the U.S. Department of Transportation-prescribed retrofit design or performance standard (80 Federal Register 26643). However, as noted in Section 4.5.4, *Would the proposed action result in unavoidable and significant adverse environmental impacts related to rail transport?* the risks cannot be eliminated.

Comment GP802-2

Increased rail traffic would almost double the emissions of pollutants from rail transport in the county. Most of the diesel pollution from oil trains would be emitted near homes and businesses on a small section of tracks between Poyner Yard and the Westway and Imperium sites.

Response GP802-2

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present analyses of cancer risk from emissions of diesel particulate matter related to the proposed action and cumulative projects, respectively. Final EIS Section 3.2 and Section 6.5.1.2 have been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analyses predict lower emissions; the level of increased risk is not considered significant.

Comment GP802-3

There is a better way to meet our energy needs. Washington State is rapidly moving away from fossil fuels and towards clean, renewable sources to meet our energy needs and respond to global warming. Building more, big infrastructure for yesterday's energy is the wrong path to meet today's energy needs. Climate scientists have calculated that at least 70% of the known fossil fuel reserves need to stay in the ground and not be burned if our children and grandchildren and their children are to live in a climate that is safe and healthy. This proposed project will worsen global warming because even more oil will be burned. To knowingly contribute to a problem is morally wrong. Help preserve a safe and healthy future climate by denying the oil terminals.

Response GP802-3

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP803, **Voget, Richard**

Comment GP803-1

For the sake of our children's ability to live in a safe and healthy climate, 80% of the known fossil fuel reserves need to stay in the ground. Approving oil shipping terminals will only increase the burning of oil... a step in the wrong direction.

Response GP803-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP804, **Vogt, Max**

Comment GP804-1

My concern is about the trains carrying the oil to these storage facilities and terrorism. Have the oil train cars been secured for terrorist attacks? Will they take a bullet from a high powered rifle for instance and be able to protect the oil from exploding? There are thousands of miles of unprotected tracks throughout the US and these highly flammable liquids carried in these cars need to be protected. What about teenagers taking pot shots at these cars which is common to do in rural areas? IF it is possible to ignite one of these cars by shooting at them, then no special plans or technology needs to be used by terrorists to explode one. Just a gun.

Response GP804-1

Draft EIS Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* acknowledges the voluntary applicant measure for all new rail cars to meet or exceed the U.S. Department of Transportation Specification 117 design or performance criteria and that all existing tank cars be retrofitted in accordance with the U.S. Department of Transportation-prescribed retrofit design or performance standard (80 *Federal Register* 26643). However, as noted in Section 4.5.4, *Would the proposed action result in unavoidable and significant adverse environmental impacts related to rail transport?* the risks cannot be eliminated.

GP805, **Walberg, Patrick**

Comment GP805-1

Hello, my name is Patrick Walberg from Montesano, Washington. I'm here tonight to ask you to deny these permits. The risks are all that I have to say. The risks. There are so many risks bringing this oil to Grays Harbor that it is not worth it.

The risk of bringing it down the Columbia through the Chehalis through all the sanctuaries through the Chehalis. All it will take is one time for one of those tanks to tip over and we're done. Fishing is over.

This is not a complicated matter here. You're going through your process. You're doing your process. I appreciate that. But this is no. This is no. Did anybody see what happened in Lac-Megantic? I saw the videos of that within hours. It was horrifying. These are bombs that are coming down the tracks.

These are not oil trains, these are bombs. There is nothing good about this. This is insane. I'm sorry to use the word but it is insane to bring these oil trains to this harbor on a soil that if there was an earthquake, it's gone. It's done.

Yeah, I'm a little excited about this because I have lived here all of my life. I'm going to stay in this place all my life. But I may change that. That may change. If these oil trains come to Grays Harbor, I might have to move. I live within a half mile of the tracks in Montesano. If one of those go off, we're done. Montesano is gone. It's not worth it. It is not worth it.

Response GP805-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP806, **Waldorf, Elizabeth**

Comment GP806-1

Evolution has created an incredible, intricate, beautiful Earth on which we lead lives enriched by nature. To protect future generations if we are wise we must protect this wealth of beauty. To put our extraordinary home at risk for private, out of state companies to exploit and profit, is crazy.

Response GP806-1

Comment acknowledged.

GP807, **Waley, Valerie**

Comment GP807-1

I live in Spokane WA. It has the only rail system that handles the transport of crude oil and dirty coal entering Washington after which the trains then split into different directions. The trains that handle these dirty fossil fuels also goes thru Sandpoint ID before reaching Spokane. One rail system handling not only the 72 million gallons of oilthat would be stored at the two proposed terminals, but think of the millions of oil that comes across the rail system going to other terminals, ports, refineries. Plus the undue stress of the rails themselves to not only handle the increased volume of just the dirty fossil fuels but passenger and other commodities that depend on our rail system.

Oil trains spills hit record levels in 2014. In 2013 more oil spilled from trains into rivers, lakes, and marine waters than in the previous forty years combined.

China has announced their plan to move toward more green energy. Weren't they one of the major countries that wanted our dirty fossil fuels to begin with, starting with Powder River Basin dirty coal? Plus all those megaloads that went thru not only Spokane city streets but other smaller communities to be implemented in the Bakken Crude Oil fracking. Which both the fracking in Pine Ridge SD and Wyoming's coal mining produces fossil fuels that just to refine them are not allowed

under U.S. regulations. I live in the blast zone of a train derailment, which is an accident just waiting to happen. More than that, the fact the the train tracks run right thru downtown Spokane are a stone's throw from schools, and very, Very close to two hospitals and many medical facilities. Plus with all the buildings where people reside, and so much more. I haven't even commented on the pristine areas that these rails run thru. Nor the damage not only to people but land, wildlife, rivers, aquifers, and More. Please DO NOT allow these terminals in. We, as a society, really need to look to alternative energy and not keep destroying our beautiful land for a resource that's close to depletion and does So much harm in So many ways. Thank you for your time Valerie Waley

Response GP807-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP808, **Walker, R.P.**

Comment GP808-1

October 8, 2015

To the Washington Dept. of Ecology,

I present this letter to you in an effort to caution you as you grapple with issues surrounding the "crude-by-rail" program being proposed for the Grays Harbor port facility. As is the case with every proposed hydrocarbon energy project, there are a wide variety of issues that require close scrutiny but few municipality managers can be expected to possess all the necessary expertise to comprehend the myriad of issues that are so tightly intertwined.

My goal with this letter is to provide a set of observations and recommendations for actions you might consider taking to evaluate preparedness issues that must influence the decisions being made by port authorities and participating state agencies.

I first should describe my own credentials. I am a retired U.S. Air Force officer, who served half of that career as a physicist and nuclear engineer. In that capacity, I was involved in a variety of high science and engineering projects. I am currently a relatively new resident of Westport, having "emigrated" here from my native state of Wyoming. During the period between 2003 and 2011 in Wyoming, I became involved in applying independent science research-based challenges toward state and federal regulators, federal land stewards, environmental organizations, and companies streaming into my home area of Sublette County to develop, at break net speed, the enormous natural gas reserves there. I did so by drawing upon my science background to challenge the way industry, utilizing state and federal regulatory complacence, was systematically ruining air quality in a county that had enjoyed pristine air but subsequently has seen ozone levels exceeding those of Los Angeles. My field research has resulted in my having published technical papers, I have been extensively interviewed by a book author on the subject of censorship of public input on energy

development through administrative delaying tactics, and I am now writing my own book about my experience in Wyoming.

Over an eight-year period, I grappled with industry and government, and I learned hard lessons about what should be asked, up front, of regulators and proponents and how to ask it. As I listened to the presentation given by Imperium on the evening of Nov. 12, 2013, I saw in play the very same dynamic that was and still is in play in Wyoming and other regions where gas, oil, and coal are waiting for development or being transported. The operators (natural gas developers call themselves that) made many wonderful sounding economic promises and offered many reassuring regulatory references. Over time I learned that a listener must pay attention to what is not said and to probe for what is likely missing from the picture.

In town hall meetings, Imperium emphasizes that its industry is among the heaviest regulated in the nation. Unfortunately, all the permits that have been issued for this project may only signify that the permitting agencies have accomplished their book keeping requirements dictated by law. Permits, by themselves, do not assure accident free operation of the proposed oil trans-shipment program ..... only strict oversight, inspection and enforcement can do that. This in turn begs the question "what staff commitment and level of funding are the responsible agencies willing and able to bring into the effort?" This is where the operators should be required to provide funding since it is introducing this elevated hazard to the harbor area. Also, what level of in-house expertise is present in those agencies? It is common for such agencies to rely upon the very industry being watched for technical data and compliance reporting.

Previously, a Mitigated Determination of Non-significance (MONS) had been challenged because of perceived weaknesses in impact assessments. It is justifiable to view the "non-significance" inference as being suspect because the proposed project will likely result in major significance when the first inevitable oil spill happens ... and it will happen because human industrial activity is imperfect. It perhaps should be asked: Who made the determination? What criteria were applied? What political pressure was present and in what form to advocate issuance? Did consideration include resources and preparedness criteria to address mishaps? What level of expertise does the Dept. of Ecology possess to assure credible participation? Were any other effected municipalities allowed to participate in the permit issuance discussions? In short, was this process fast tracked because of illusionary economic benefits?

Response GP808-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of the development of the EIS and how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP808-2

Regarding those benefits, consider the trade-off between the operators' asserted creation of a comparatively handful of new jobs in the area versus the likely ruin of a shellfish industry worth thousands of jobs when a large spill accident occurs. I am informed by the Washington Crab Fishermen's Association that its industry produces on the order of $160 million in direct and indirect benefit to the harbor area. What direct and indirect benefit will trans-shipment of bulk oil produce?

Is it logical to risk the addition of oil industry jobs versus the impact of having a major spill indefinitely idle all of the jobs connected to the fishing fleet and thereby cripple the financial underpinnings of the Grays Harbor community? Also, don't forget the sport fishing industry, and the tourism industry. Learn from the Gulf Coast BP spill experience.

Response GP808-2

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP808-3

In the end, you may conclude that the crude-by-rail project will in fact be good for Grays Harbor, that the environmental possibilities are manageable, that regulatory agencies are in fact exhibiting due diligence, that all of those agencies are cooperating toward a safe and worthwhile goal, that the advertised new jobs are better than none, that risk analyses have been conducted and are credible, and that all possible due diligence by all participants has been exercised to its practical limit. Whatever your decision and actions, hopefully they will be founded upon sound information. To that end I have crafted a checklist of questions designed to measure spill event preparedness that might prove useful in guiding your search for facts. It is attached hereto.

Sincerely,
R.P. Walker
Physicist/Nuc. Engr.
Major, USAF (Ret)

Westport, WA
Ph. 268-7341
rpwalker@wyoming.com

cc: Pres., Wash. Crab Fishermen's Assoc.

Attach. 1: Spill Event Preparedness Checklist

[Attachment: Spill Event Preparedness Check List]

Damage to this area from an oil spill which has a high probability of occurring woudl be detrimental not only to wildlife but to the human community. Remember not too long ago what happened in the Santa Barbara area after that oil spill? We enjoy visiting the Grays Harbor Wildife Refuge and spend money in the area doing so. Where else can you see 4 bald eagles within a short distance of each other as we did on our last visit? Please protect this area and do not allow the oil terminals. Thank you for listening.

Response GP808-3

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action. All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP809, **Wallace, Nadine**

Comment GP809-1

Please do not allow these oil terminals. An almost certain oil spill to the delicate environment in the Grays Harbor area would be disastrous, and that is an understatement. The damage to the habitat of the marshes, oyster beds, mud and sand flats and other areas would greatly harm already struggling species who either are on the endangered species list, or have been designated as of great concern such as the Western Grebe, Marbled Murrelet and the Common Loon. Migratory birds rely on this crucial area which is listed as a site of hemispheric importance by the Western Hemisphere Shorebird Reserve Network. This area has one of the largest seal-pupping areas in Washington State. This area is home for large concentrations of forage fish, crabs, oysters, clam, sturgeon and lampreys. Damage to this area from an oil spill which has a high probability of occurring woudl be detrimental not only to wildlife but to the human community. Remember not too long ago what happened in the Santa Barbara area after that oil spill? We enjoy visiting the Grays Harbor Wildife Refuge and spend money in the area doing so. Where else can you see 4 bald eagles within a short distance of each other as we did on our last visit? Please protect this area and do not allow the oil terminals. Thank you for listening.

Response GP809-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP810, **Walsh, Rebecca**

Comment GP810-1

My concerns are regarding the permits for crude oil terminals in Hoquiam, WA, the subsequent trains carrying Bakken crude oil through populated areas of Aberdeen and Hoquiam, and the shipment of this oil on vessels in Grays Harbor waters. My focus is the public health and environmental issues related to these activities. I am questioning in particular what will be done to mitigate the hazards to human health. #Increased oil train traffic will block emergency medical service(EMS) access to the Olympic Gateway Plaza in Aberdeen typically for 35 min. Critical response time for cardiac arrest is <10 min. to avoid death or permanent brain damage. Other critical EMS response needs include, stroke, heart attack , or major trauma. Mitigation for these problems is imperative.

Response GP810-1

Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas

blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

Comment GP810-2

#These projects will worsen air pollution through increased diesel particulate matter (DPM) and other toxic pollutants like benzene, formaldehyde, and toluene at the work site. Train engines also emit DPM. DPM and other pollutants increase the the risk of cancer, respiratory disorders including asthma, COPD, impaired pulmonary development in infants and children, heart attacks, stroke, systemic inflammation, and overall risk of disease and mortality. Infants and children will be particularly vulnerable to increased risk of a respiratory death. NOx is estimated to be the most concerning air pollutant and is primarily released by train and vessel traffic. It is a key component of smog and is associated with significant airway inflammation, respiratory disease and asthma attacks, increasing hospitalizations and potential for death.

Response GP810-2

The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, would reduce emissions of criteria and toxic air pollutants from onsite stationary sources. Draft EIS Chapter 3, Section 3.2, *Air*, presents emissions estimates of criteria and toxic air pollutants from onsite operations. Considering background concentrations, onsite emissions of criteria pollutants would not cause an exceedance of national ambient air quality standards. Emissions of toxic air pollutants related from onsite stationary sources would be below the state thresholds identified in WAC 173-460-150. As described in Draft EIS Section 3.2, these emissions are subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping for onsite stationary sources.

Section 3.2, *Air*, presents an analysis of cancer risk from emissions of diesel particulate matter related to the proposed action, including emissions from offsite rail transport. Final EIS Section 3.2 has been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analyses predict lower emissions; the level of increased risk is not considered significant.

Comment GP810-3

#Train derailments have occurred in this area and will likely occur again. An accident secondary to major derailment with fire and explosion of the Bakken crude close to the populations of Aberdeen and Hoquiam could result in many deaths, the U.S. DOT estimates perhaps 200 deaths with a significant social and economic impact. First responders to such an incident would be put at health risks including burns, smoke inhalation, and toxic exposure to crude oil. In addition crude oil fires would release particulates in the smoke which are a serious public health risk and can't be completely eliminated to much of the Grays Harbor population, depending on the location and prevailing winds.

Response GP810-3

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action, which includes those that could occur during rail transport. As noted in Draft EIS Chapter 4,

Environmental Health and Safety, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms and has been revised to more fully describe the potential human health impacts. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

Comment GP810-4

#Oil spills health impacts on both land and water include increased risk of neurotoxicity, cancer, lung disease, loss of cognitive function and endocrine disruption in humans. A crude oil spill in Grays Harbor and the Washington coast would contaminate primary sources of seafood consumed by residents. Oil spills from trains also risk contamination of drinking water for populations along the rail route.

Response GP810-4

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. Final EIS Section 4.7, *Impacts on Resources*, has been revised to more fully describe the potential human health impacts that could occur as the result of an oil spill, fire, or explosion. Final EIS Sections 4.4.3, 4.5.3, and 4.6.3 present additional mitigation measures to address these risks. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

Comment GP810-5

Aberdeen and Hoquiam are within a tsunami inundation zone if an earthquake happens in the Cascadia subduction zone. The oil tanks will not have pilings in bedrock, thus increasing their potential for catastrophic failure with an oil spill into Grays Harbor.

Response GP810-5

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP810-6

#Another concern is the negative health effects from noise caused by trains horns. These sounds are of significant decibel strength to disrupt sleep, and to trigger heal issues such as increased cardiovascular events including myocardial infarction and arrhythmias associated with nighttime noise and noise greater than 90 decibels. Mitigation for this would be difficult because quiet zones could lead to risk of collisions and serious accidents.

Response GP810-6

The focus of the noise analysis in Section 3.7, *Noise and Vibration*, is on day-night average sound level (L_{dn}) for locations where people sleep. Daytime loudest-hour noise levels (in terms of L_{eq}) were not analyzed because the loudest hour at grade crossings and wayside locations would generally be characterized by a single train passby, which would be unchanged from existing conditions. The analysis uses the Federal Railroad Administration adopted noise assessment methods developed by the Federal Transit Administration. Implementation of a quiet zone is subject to Federal Railroad Administration approval and would include measures to maintain the level of safety while reducing noise.

Comment GP810-7

#Last but not least, climate change is a major emerging threat to human health. Climate change in our region is anticipated to result in increased heat-related illness, increased allergies, health care costs, and extreme weather events. Warming will allow mosquitos and other disease vectors to move into our area potentially increasing infectious diseases. According to the DEIS, these 2 terminals will release annually approximately 74,000 metric tons of CO2. What mitigation is possible and will be done to prevent these problems. Likely nothing can be done.

Response GP810-7

Draft EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, *Climate Change*, describes the projected impacts of climate change in the Pacific Northwest. Final EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport from most likely crude oil source to furthest likely final destination, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively. Refer to Chapter 3, Section 3.2.7.1, *Applicant Mitigation*, for proposed mitigation measures for air quality and greenhouse gas impacts.

GP811, **Wang, Art**

Comment GP811-1

I am President of Tahoma Audubon Society and a Board Member of the National Audubon Society. Both Tahoma Audubon and Audubon Washington have already provided comments on the EIS's,

with which I agree. However, I want to add my concerns individually. On a global basis, climate change threatens the world and is the single greatest hazard to species of birds in North America. We should not be contributing to the problem by exporting oil. On a local basis, this is simply a terrible location for exporting oil. Grays Harbor is a rich and precious site for migrating shorebirds, especially populations such as enormous numbers of Dunlin and concentrations of many of the Red Knots that migrate along the Pacific Flyway. One of the sites is literally next door to the Bowerman Basin and Grays Harbor National Wildlife Refuge. We should not be risking these populations with oil shipping facilities. No matter how the oil industry has assured us that safeguards are in place, history is replete with unexpected things that have gone wrong. The problem is that the consequences of an error are extremely high in the confined sensitive area of Grays Harbor. Yet another hazard is transportation of oil, both by rail on a spur with no current experience of heavy industrial use (and next to drainages leading to Grays Harbor) and by tanker across the bar at the entrance to Grays Harbor. In short, we should not permit the proposed facilities because of the hazards they pose.

Response GP811-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP812, **Ward, Marian**

Comment GP812-1

Westway/lmperium Hearing: October 8, 2015 Aberdeen, WA

There is currently no such thing as a safe oil train. These proposals to bring crude oil on trains that are over a mile long on miles and miles on tracks that are extremely problematic and unsafe in many places, threatens the safety of millions of people along the route.

I see no evidence that there are any evacuation plans in place for populations all along the route from the Bakken oil fields to Grays Harbor. When an oil train derails (and it will), fires and explosions are a likely result and people are generally evacuated 1/2 mile on either side of the track (which translates to one mile in diameter). Last year there were 3 derailments on the same track that will be carrying this oil ... fortunately the trains were carrying ·grain and did not impact the safety of people near the tracks.

The trains will traverse the Columbia River Gorge National Scenic Area and threaten livelihoods of tribal members, recreational opportunities in two states, tourism, entire ecosystems, and the flora and fauna all along the route.

Because it does not seem possible to mitigate derailment possibilities and because there are no evacuation plans in place all along the route, I urge you to deny these permits.

Marion Ward
735 SW St. Clair Ave., Apt. 1610 Portland, OR 97205

Response GP812-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the

reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP813, **Warren, Richard**

Comment GP813-1

My name is Richard Warren. I have a master's degree in geology from Princeton University. After extensive reading about climate change, I too concluded that global warming is a huge threat to civilization. Like many residents of "the funnel" in North Idaho, I am also concerned about the terrible effects an oil spill could have on the communities along the way from North Dakota to Washington. Doubtless, the burning of fossil fuels is a major contributor to global warming; but other pollutants besides CO2 are pumped into the skies at the same time, crossing the North Pacific Ocean from China to the US, as shown by UW atmospheric chemist Dan Jaffe in the 1990's. David Streets at Argonne National Laboratory in Illinois estimated that China produced 590 tons of mercury in 1999. Nearly half came from the smelting of metals, especially zinc. 38% more came from coal fired power plants. Streets said these emissions from China grew 5-6% a year, to 767 tons in 2003. Hans Friedli, chemist for the National center for Atmospheric Research, showed in 2001 that mercury plumes sampled off the coasts of China and the Pacific Northwest had the same source. In 2004 Jaffe found that 1400 tons of mercury was coming to the Northwest annually from Asia. When this mercury gets into the air, it gets into the food chain, and into American's blood, 90% as methyl mercury, which can effect fetal development in humans and can lead to lower IQ in children. Dan Laks, neuroscience researcher at UCLA analyzed data on thousands of American women collected by the CDC from 2000-2006. Inorganic mercury jumped from 2% of women tested to 30% of women tested in just 6 years. Besides mercury's neurotoxicity, there is evidence for its association with Parkinson's disease, Alzheimer's and ALS. The EPA estimated that only one quarter of US mercury emissions from coal- burning power plants lands on the continental USA. Satellite data for the Northwest shows that most of the mercury we experience here comes from China. We have the technology to put into place alternative energy sources on a massive scale. We lack the political will. Other nations, for example Denmark, are ahead of us, producing 39% of their electricity from wind turbines in 2014. The USA should not bow to Big Oil & Coal, whose interest is profit. This year it was revealed that EXXON did extensive research on the effects of CO2 on climate, beginning in the 1970's. Their team told high level executives that climate would be in trouble if CO2 production weren't curtailed. Instead of getting on board when NASA climate scientist James Hansen warned Congress of our peril in 1988, EXXON chose to delay action, saying that more research was needed. We could have had a 30 year head start on combating global warming had it not been for this reversal. Now we must work to save Earth and human civilization itself. People need jobs to house their families, but not at the expense of their health and environment. As famous American Henry David Thoreau said long ago: "Of what use is a house, if you haven't got a habitable planet to put it on?" Please, deny permits for the Westway and Imperium expansion projects.

Response GP813-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in

the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP814, **Warren, Richard**

Comment GP814-1

Good evening. My name is Richard Warren, and I live in Sandpoint, Idaho, just a little bit west of the town. And from my neighborhood I can look over and see the river trestle that crosses the Ponderay. Four trains crossing that bridge increase the risk of disaster in that fold.

As a former fireman in the Westside Fire District in this heavily forested area, I know how dangerous an explosive oil train derailment can be. Especially when you think about the record-breaking hot dry summers we've been having.

An even more important concern for me is that climate change. I'm not a climate scientist but I do have a Master's Degree from Princeton University, and I'm a trained scientist.

I've read numerous book by climate scientists and writers, and also many magazine articles, newspaper reports, and scientific newsletters about climate change. In my opinion it's the greatest threat that mankind has ever faced. And the very future of civilization is at stake here.

The proposed oil facilities will only ensure that we burn still more oil and continue to raise the Co2 content and the temperature of the atmosphere. These effects could become unstoppable due to powerful feedback loops.

The small number of permanent jobs we're talking about here are not worth the risks to civilization. We should not burn this oil, we should leave it in the ground. The research and development money of big oil can be used to develop alternative energy sources such as wind, solar, and fusion instead.

I strongly urge you to deny the permits for any more storage facilities. As Pope Francis has recently stated, we all have a rural obligation to leave our children with a habitual world and we must tackle climate change aggressively.

Response GP814-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP815, **Water, Mary**

Comment GP815-1

I would like to voice my opposition to the proposed expansion.

While the impacts addressed in the draft EISs focused on the area around Grays Harbor, the impact will actually be felt throughout the state and country due to the increased number of trains carrying Bakken oil. In the Spokane area, trains already restrict traffic on the many roads that lack over- or

underpasses. Increased rail traffic also brings an increase in noise, and in the hazard that a possible derailment could bring. In a world facing dire consequences from global warming, we do not need to promote the use of more fossil fuels.

Response GP815-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP816, **Watkins, Eric**

Comment GP816-1

Hi, my name is Eric Watkins, 58 years Grays Harbor, Hoquiam specifically. I've watched so many grow, shrink, grow, shrink. A lot of years I've watched appropriations try to leverage a cheap spot. New Port, for instance, they were ready to take apart the basin. How ridiculous is that. Okay?

They used to perceive economic vitality to these things exactly what this oil outfit is trying to do. What will happen here is if this goes through, it will actually cork up any economic diversification. It would be bad, that right there. We have enough bottlenecking in Grays Harbor already. The mitigation, we all know mitigation is the word itself is fallacy.

You cannot mitigate completely. There's no such thing as complete mitigation. Once it's spoiled you cannot bring it back to the thousands of years of diversity ever. I make my living off of natural resources. There are jobs in natural resources. Okay?

There's really no need for this oil train to be here at all. With the amount of jobs, it doesn't pencil out. The trade off is not worth it. Whether it's bottleneck, a spill, a catastrophe, it doesn't pencil out. Even if nothing happens, it does not pencil out. That's all I have.

Response GP816-1

Refer to the Master Response for Mitigation Framework for more information about the development, implementation, and enforcement of mitigation measures.

GP817, **Watson, Mik**

Comment GP817-1

I'm just an old retired guy living in Ocean Shores, but I can see problems with this proposal... 1) Storage of 42 million gallons of crude oil on the shores of Grays Harbor. In Hawaii, I saw the fuel tanks for Pearl Harbor were up on the hill, away from the water itself. And they don't have subduction quakes and tsunami threats. In our harbor, any tsunami wave will get focused to that

exact area they are planning on putting that storage. Is there designs for the structures, along the lines of the vertical shelter being built at Oscala to deflect the wave force? And I'm not sure THAT would be enuf to keep our harbor from the devastation a split tank would cause. I'm leaning more to getting the 'Storage' of 42 million gallons of life-killing crude oil inland where the damamge can be mitigated before it destroys the whole area.

Response GP817-1

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP817-2

Transport of crude oil by rail has its own problems. The focus of your study is on the property that Imperium, Inc resides on, but there's much more involved. The single rail line that serves Gray's Harbor, and that the crude oil is transported on, follows the Chehalis River for better'n 50 miles. The tank cars used (single-hulled, but that's another issue) will be next to this vital link to our harbor, and a serious threat to wildlife and OUR life. When an accident (let's face it, the longer crude is on the tracks, the more chances that there WILL be a spill) occurs, the oil will get to Gray's Harbor. There is no doubt that ANY spill be a death knell for EVERYONE along the Harbor, even those who livelihood isn't based on the water (shops, service, tourism. Have they considered the terrorist (foreign or domestic) problem with a rail line next to a natural resource? I, for one, don't consider crude as an acceptable salad dresssing, and remember the lessons of the Exxon Valdez and Bellingham. The issues of storing and transporting 42 million gallons of crude oil are too big for the infrastructure around Gray's Harbor. We don't have, nor will we ever have, enuf safety measures to protect ourselves against the release of even a small part of the proposal being applied for. When the price of crude gets too small to be financially viable, who will be responsible for the maintenance of the facilty? No matter what words you try to wrap Imperium up in, they will not be there when crude is made passe (and it will be, it's already being replaces in several areas). Please remember that toxic release on the Colorado River last year, the remains of gold mining left to rot, exacerbated by the very people who were supposed to protect us against that. Let's not get that started here.

See original attachment for photograph.

[Photo reviewed but not reproduced.]

Response GP817-2

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or within Grays Harbor, respectively. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Refer to the Master Response for Environmental Health and Safety Analysis for information on the approach to the analysis.

GP818, **Webb, Marty**

Comment GP818-1

Hi. I'm Marty Webb, I'm from Tacoma, Washington, Pierce County. And I grew up by the ocean. And I grew up on a very narrow peninsula, so I have the Pacific Ocean on one side and San Diego Bay on the other side.

The San Diego Bay was heavily polluted. My swimming lessons had to be canceled. My father would come in with fish that had to be thrown out, until finally somebody got the bright idea that the city could make money off of that bay, and so they cleaned it up. And now we have this glittering resource.

Governor Gregoire, same thing about Puget Sound. She said, oh my goodness, we can't afford to have a polluted Sound, we've got to clean that thing up because it's a huge economic resource for the state.

I am against this proposal because I think you're risking a natural resource that is a huge economic resource for the state, for the people.

I was really glad a fisherman was here to talk about his livelihood because I think we tend to forget. And I'm so grateful for the Pope who kept repeating -- almost every topic he brought up he kept repeating, listen to the people's stories. And I hope that there is somebody -- I don't know if any you of there -- I hope somebody on your board of decision making makes their living off the ocean or the waterways around here. I hope. Because otherwise I'm not convinced that their stories will be heard, because I think it's really important.

There's been a recreational use survey done. If you look at the map of that you will see that the red dots are the most important areas.

Gosh, Westport, Grays Harbor is just packed. It's solid red and then it sort of trickles down the coast. This is the hot spot for recreational use, really an important area.

And then I just wanted to end with, we don't have to judge progress by just improving oil, we can judge it on other things as well. So thank you.

Response GP818-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP819, **Webb, Mike**

Comment GP819-1

Good afternoon, Panel. My name is Mike Webb, Pierce County. And I come here with 40 years-plus, post-graduate degree in environmental science. Been cleaning up hazardous locations that whole time. Studying them, try to prevent them, and here I am.

But really I'm speaking very personally at this point. My career aside, my comments are cultured from public statements aired at meetings in Aberdeen prior to this public comment period, and people have already made some points clear. They came from fishermen and shellfish growers. Again, I see some of them coming here. I'm glad to see that.

The problems I see are in addressing the balance of risks of the oil spill and potential damage and the lack of mitigation to address such situation in this draft proposal.

Response GP819-1

Refer to the Master Response for Mitigation Framework for more information about the development, implementation, and enforcement of mitigation measures.

Comment GP819-2

So, first, there's a history of derailments on the current line. I think I just heard somebody just speak of that. I don't think that risk is elevated high enough for even a small train.

The clean-up techniques that are available for such -- and even projected, are inadequate to afford the five non-currants that have created risks that raise our (inaudible) from fishermen. They ought to know. They've been here since 1988 when it happened out at sea and still got in the way.

Response GP819-2

Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for additional information about the analysis of emergency planning and response capabilities.

Comment GP819-3

So then the health risk assessments are balanced toward the average fish consumer. And by design they cannot address the consumption by people who get most of their food from the ocean, such as the tribes. Mitigation. It's not there.

Response GP819-3

Refer to the Master Response for Risk Assessment Methods for a discussion of the assumptions, data sources, and methods used in the analysis of risks.

GP820, **West, Ashley**

Comment GP820-1

My name is Ashley West. I am a recent graduate of Western Washington University. I am a lifelong resident of Washington State and a frequent visitor to our inland and coastal waterways. The last few years I have traveled several times a year to Grays Harbor and north coast beaches.

The DEIS fails to adequately address the ecosystem services, especially recreation and tourist related services, that a healthy and clean marine environment provide for thousands of visitors to our shorelines. A healthy marine environment not only provides for a rewarding recreational experience it also provides the basis for a significant marine based tourist economy. All is at risk from a major fire, explosion or spill from these projects. Repeated references in the DEIS point out

that these risks cannot be mitigated. The benefit from these projects pale when measured against the potential harm they bear. If the risks from these projects are significantly adverse and cannot be mitigated the permits for these projects can and should be denied.

Response GP820-1

Draft EIS Chapter 3, Section 3.10, *Recreation*, describes the affected environment for recreation and tourism. Draft EIS Chapter 4, Section 4.7, *Impacts on Resources*, identifies impacts on recreation and the broader aquatic environment that could result from from oil spills, fires, and explosions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant.

GP821, **Wetter, Margaret**

Comment GP821-1

My church holds our annual EarthCare retreat in Grays Harbor County. We do not want this vibrant ecosystem turned into a fossil fuel sacrifice zone. We respect the beauty of Creation and ask you to protect it from the unmitigatable damage of these oil proposals.

Response GP821-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP822, **Wetzel, Paul**

Comment GP822-1

My name is Paul Wetzel I am a life long resident of Grays Harbor county, retired teacher, avid cyclist, kayaker, and sport fisher. 1. The deis uses the term “best management practices” through out the executive summary as a way to minimize the risk of an oil spill. What are these best practices and who is responsible for making sure they are followed? What historical evidence is there that they are effective?

Response GP822-1

Best management practices (BMPs) are used to achieve a desired outcome while reducing potential impacts on human or natural resources. BMPs are generally industry-accepted practices that have been tried and proven successful over the years. Draft EIS Section 3.17, *Vessel Traffic,* provides an example of a BMP in the use of tugs for vessel transport to reduce the potential for collisions or allisions*.* Any specific measures needed to reduce impacts consistent with regulatory standards would be added as conditions of the permit for the proposed action. Applicable permits and regulatory requirements are considered in the analysis of impacts. Where needed, additional mitigation measures are proposed. Refer to the Master Response for Mitigation Framework.

Comment GP822-2

2. In the executive summary section "what are the cumulative impacts" a number for greenhouse emissions is written 103,750 million metric tons. Is this suppose to mean 103 billion 750 million metric tons = 103,750,000,000 metric tons?

Response GP822-2

Final EIS Chapter 6, *Cumulative Impacts*, Table 6-4 has been revised to show the correct number, 103,750 metric tons.

Comment GP822-3

3. In the executive summary it states that the risk of a vessel collision is low but the chart shows its more likely than not. Which is it?

Response GP822-3

For the reasons discussed in the Master Response for Risk Assessment Methods, the figures depicting risks presented in Draft EIS Chapter 4, *Environmental Health and Safety*, have been removed from the Final EIS.

Comment GP822-4

4. Using these projects to facilitate the burning of fossil fuels world wide will hasten our approach to the three degree limit climatologists say is the point of no return for catastrophic overheating of the planet. If we go beyond the three degrees what "mitigation" will be available to us? Paul Wetzel 10-22-2015

Response GP822-4

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP823, **Wichar, Den Mark**

Comment GP823-1

Den Mark Wichar, Clark County. I came with prepared remarks, but I don't feel like reading them. The reason I came all the way from Clark County to Grays County is because one of the things about this is the countless, countless, countless, endless proposals that are being thrown at the Pacific Northwest, both Washington and Oregon, by the fossil fuels industries, be it soil, be it gas, is that the proposals always presume that the only concerns that exist in the mitigation are found in the precincts of the facility under question.

I would suggest that that's hardly the case. In Vancouver we are aware how our community is affected by an endless parade of oil trains.

Big oil proposes that Vancouver, Washington, USA because we're at the end of a choke point in the whole rail system. That we should continue to tolerate these trains forever.

Well I have news for the oil industry and I have news for Imperium and Westway and for Grays Harbor. The County is sick of this. Vancouver is sick of this. In all of my years of environmentalism, I have never seen a coalition in opposition like I see now.

We have a mayor developer who is in Vancouver proposing a $1.5 billion project. He opposes this. Our city opposes this. Tribes oppose this. Our small business people oppose this. I'm here to tell you that Grays Harbor, you are not an island.

Response GP823-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP824, **Wichar, Den Mark**

Comment GP824-1

Name: Den Mark Wichar
City/State/Zip: Vancouver, WA 98660

I oppose both projects. Not one of the impacts would be sufficiently mitigated. My city, for example, cannot tolerate more oil trains.

Response GP824-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP825, **Wilbert, Ed C.**

Comment GP825-1

Comments to Draft EISs Imperium and Westway Expansion Projects 10/19/15

These two EISs should have been combined, along with the third one. WAC 197-11-060(3)(b) states "Proposals or parts of proposals that are related to each other closely enough to be, in effect "a single course of action shall be evaluated in the same environmental document" Both of these documents, despite supposedly different proponents, were prepared by the same consultants. Both involve crude oil storage and shipping facilities in a common area, and shipping by rail on the same tracks. Please explain in detail why they were not combined, along with the third project, into a single, concise, readable document The fact that a third project follows these two is classic segmentation - spreading out similar impacts· over separate documents to make them appear smaller. Please explain how this is not segmentation. Please explain how producing 3800 pages of repetitive text, much of it meaningless boilerplate, was not an effort to prevent meaningful review. Also- because of the structure of the documents it is very hard to review the information and prepare comments at the same time.

Response GP825-1

Refer to the Master Response for Connected or Similar Actions.

Comment GP825-2

My family have worked, fished, hunted, and harvested clams on Grays Harbor for many years. One big concern we have is the oil spill mitigation (no mitigation offered) proposed for the expansion projects. We were previously concerned about the Geographic Response Plan (GRP) for Grays Harbor and our concerns are the same. In the event of an oil spill the GRP does not address how the mess will be cleaned up without any environmental damage and brings forth the assumption: "stuff happens".

That was before these two projects were revealed to the public. Now we learn that Canadian crude oil (dilbit) may be handled at the Port. If this is true a Canadian crude oil spill would be much worse than a regular crude spill. This is a serious concern as the Canadian crude sinks in water after the carriers wash out or evaporate. Our local news papers have carried stories about how devastating and expensive this type of crude is to the environment. The GH estuary is a closed water body with large exposed mud and sand flats. Any type of spill if not quickly cleaned up will bond with the sediment and become tar balls that will move to deep water and widely dispersed. Even a small spill will be hard to manage.

Response GP825-2

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Modeling*, refer to the Master Response for Oil Spill Modeling Methods. To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill.

Comment GP825-3

The old poorly maintained rail line from Centralia to Hoquiam is also a concern. Massive increases of crude oil traffic on this old line begs a spill to happen. The rail line snakes through a country side with many water bodies, rusty bridges and a difficult terrain not easy to access. Any spill here would be hard to cleanup and would eventually find its way into Grays Harbor. Reportedly only about 10 to 14% is ever pick up after a spill leaving the balance to keep polluting the environment

It was reported today by Sightline that Genesee and Wyoming, the parent company of Puget Sound and Pacific~ is woefully underinsured to cover a spill in Grays Harbor county. These dilbit spills are very expensive to manage as some cost over a billion dollars which G&W is ill prepared to cover.

Please update the DEIS section on oil spills for dilbit and update the insurance coverage potential oil spill coverage by PS and Pacific.

If these two concerns can't be mitigated or updated to satisfy community concerns then these two projects should not go forward and a No Action declaration made.

Rod C. Wilbert P.O. Box 2138 Westport, WA 98595

Response GP825-3

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Modeling*, refer to the Master Response for Oil Spill Modeling Methods. To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill.

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP826, **Wild, Noah**

Comment GP826-1

I am deeply concerned by the proposals to expand storage at these two facilities. The last thing we need is more dangerous oil trains traveling through the Columbia Gorge Scenic Area. These trains are dangerous, ugly, and are not taking us in the right direction in terms of future energy sources. We cannot risk a toxic spill like the one in Canada that killed 47ppl last year. Please reject these expansions and help keep our community safe.

Response GP826-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP827, **Williams, Donald**

Comment GP827-1

I am writing in total opposition to the proposed retrofits of the Westway Terminal Company and Imperium Terminal Services facilities at the Port of Grays Harbor, and the third terminal not included in the DEIS.

My concerns are for environmental impacts caused by the bulk oil storage facilities at the Port but also environmental and economic impacts relating to the transport of crude oil by rail from its source in the Midwest and by ship through the narrow and shallow passages of Grays Harbor.

Mitigations In The DEIS Did Not Consider Coastal Communities

There is currently no crude oil moving through Grays Harbor. These terminals will increase oil tanker and barge traffic by 450% adding 750 crude oil vessel-trips each year. Loaded vessels carry 15 million gallons of oil - more than the Exxon Valdez spilled in the Alaska accident.

Yes, I am concerned. I do not believe the mitigations included in the DEIS are adequate to protect against environmental and economic impacts, and the damages that will result, from the proposed projects - especially as they impact the coastal communities.

I am a long-term resident of the City of Ocean Shores, WA. We are a retirement community located at the mouth of Grays Harbor on an 8-mile-long by 2-mile-wide peninsula. Our city depends on property taxes paid by our residences, and on taxes provided by an extensive and growing tourism and recreation based industry. These all rely on our pristine sandy beaches, our clamming industry, our wildlife, the marine habitat and the beauty of our coastline. These must be preserved regardless of what it costs the project operators and the Port of Grays Harbor.

The operators and the Port must assume all financial risk and provide financial guarantees against all possible environmental and economic damage that can be caused by this proposal.

My city and many coastal communities will be devastated by a single oil spill. We experienced this in 1988 when the barge Nestucca collided with its tug boat. Oil migration from central Oregon north to Vancouver Island contaminated beaches, damaged marine habitat and caused extensive economic damage. The 1988 oil spill was small compared to what will result from oil tankers and barges carrying 15 million gallons of crude oil. My city, Ocean Shores, did not return to normal for many years and suffered extensive economic damage.

Coastal Communities Were Neglected In The DEIS

Of special importance to me and to the citizens of coastal communities like Ocean Shores is that there is no consideration, or any mitigation proposed, for the impacts that oil spills at the Port facility, oil spills related to processing, storage and loading, and oil spills in transit within and outside Grays Harbor, will have on coastal communities.

Response GP827-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms, including the potential to impact coastal resources.

As discussed in the Master Response for Oil Spill Modeling Methods, Draft EIS Appendix N, *Oil Spill Modeling*, acknowledges the limitations of the selected modeling tool to depict the movement of oil outside of Grays Harbor. Attachment A of Appendix N discusses two previous large spills, including the Nestucca that occurred off the Washington State coastline to illustrate the directions that oil can migrate offshore depending on seasonal conditions. Final EIS Chapter 4, Section 4.4, *Environmental Health Risks—Terminal (Onsite),* has been revised to clarify the potential for spilled oil to move

outside of Grays Harbor up or down the coast, depending on the specific conditions present at the time of the incident.

Final EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms and has been updated to provide additional information about economic and social costs of oil spills.

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from vessel transport—less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

For more information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

Comment GP827-2 **Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.**

Accordingly, I request that the DEIS be rejected and that additional studies be required to address how Ocean Shores and other coastal communities, including the Quinault Nation, will be made whole from the devastation that even a small oil spill will cause. Please address the following:

1. What design requirements will be placed on vessels to ensure that their structure will sustain all levels of collision or other accidents in transit?

2. How will the oil vessels be escorted from the Port facility to well into the Pacific Ocean so as to guarantee that there is no possibility of any type of oil spill affecting Ocean Shores, other coastal communities and their beaches? Over what distance will escorts be required?

3. What rescue and backup systems will be in place and operational on a 24/7 basis to ensure that all types of emergencies can be accommodated with complete safety?

4. How many tug boats will be available to respond to situations and where will they be based to guarantee a rapid response and total safety of the oil shipments? Please require an analysis for every type of emergency situation that will be encountered.

5. Are the Port's navigational systems adequate? What new navigation aids such as the latest-design vessel traffic control systems and radars will be provided to guarantee safe navigation in all types of weather? 6. What level of financial responsibility will be placed on the operators and the Port in order to mitigate the financial devastation that even a small oil spill will have on the economy of Ocean Shores, other coastal communities and the Quinault Nation?

7. How will the operators and the Port guarantee that there are adequate financial resources in place and guaranteed by the operators and the Port through, for example, liability insurance and/or security bonds to pay for cleanup and economic damage caused by the worst-case oil spill.

These guarantees must include how the financial liability will be shared between the operators including, but not limited to Westway, Imperium, the Port of Grays Harbor and future operators, for any and all financial liability from the worst-case oil spill. The plan must ensure that 100% of the cleanup costs and all economic losses will be assumed by the operators and the Port for the worst-case oil spill which may affect many coastal cities, local communities and the Quinault Nation. These are important issues that must be examined and resolved before any permits are issued.

My concerns expressed herein are focused on the impacts to coastal communities. These were not considered in the DEIS - the substantial risks to the environment, to our economy and to the existence of viable coastal communities of which I am a part.

This is a very risky proposal if allowed to go forward. In addition to the risks of vessel traffic and oil spills, it involves dirty and dangerous oil trains that have an alarming safety record. I did not address the air pollution, spill risks on land and the traffic delays but these will come with the project, adding to my concerns.

I am also concerned about the location of these facilities storing 72 million gallons of crude oil at sea level, in a population center, and in known earthquake and tsunami zones. Taken together, it is irresponsible to even consider such a proposal.

My concern expressed here is for what was omitted from consideration in the DEIS - how the proposal affects coastal communities. For this reason, I request that until these risks and issues are resolved that all permits relating to this proposal be denied.

Thank you for your consideration and for providing an opportunity for concerned citizens like myself to express our views.

Sincerely,

Donald S. Williams A resident and property owner of Ocean Shores, WA

Response GP827-2

Specific design requirements for vessels, reporting protocols, and the framework for preventing, preparing for, and responding to an incident are described in Draft EIS, Chapter 4, Section 4.2, *Applicable Regulations*. Navigational requirements, including the use of tugs, are addressed in Draft EIS Chapter 3, Section 3.17, *Vessel Traffic*. Mitigation measures to improve navigational safety are proposed in Section 3.17 and Section 4.6.3.

Draft EIS Chapter 4, *Environmental Health and Safety*, Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP828, **Williams, Imogene**

Comment GP828-1

I'm Imogene Williams, and I live in Seattle. But I'm married into the Williams families of Cosmopolis. They work for Rainier and the AWPPW, Association of Western Pulp and Paper Workers.

Grays Harbor is God's country. Our kids ran through the woods and the grassy hills. It's wonderful. But if it gets all spattered with oil and the kids get asthma, Imperium and Westway are not going to care.

So we ask that you turn down this terminal. It's the wrong direction for Grays Harbor and it's the wrong direction for Washington state. So we ask that you turn it down.

Response GP828-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP829, **Williams, Imogene**

Comment GP829-1

I'm Imogene Williams. I live in Seattle. Grays Harbor is God's country. It's green and moist and beautiful. The trees give us oxygen, but we must not take it for granted. The oil companies will destroy it, and they won't care. They will destroy it. We can't take it for granted.

I read that the shipping channel into Grays Harbor is long. It's not very deep, and it's not very wide. So you're going to have two or 300 vessels a year, tankers and barges that are going to come in, and they're going to come out and maybe somebody's coming in, and they want to go out. It's almost like Seattle traffic is what it sounds like. I think it will be very chaotic, and I hope that it doesn't happen.

I want to talk a minute about the hazards. There are different sorts of crude oil. You probably know this better than I know it. But the kind that goes from South Dakota is particularly dangerous because it's not like crude. It's not sticky black crude oil. It's much more like gasoline. It has a different composition, so it's much more dangerous.

And as you know, gasoline doesn't have to have a derailment in order to explode. It can explode very easily without very much disturbance. So I very much hope that this expansion does not happen. Thank you.

Response GP829-1

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Modeling*, refer to the Master Response for Oil Spill Modeling Methods.

To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP830, **Williams, Imogene**

Comment GP830-1

Grays Harbor is such a beautiful home for fish, families, birds, clams, kids, seniors. Oil trains are not healthy for these (or any) living things. Please do not approve the expansion.

Response GP830-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP831, **Williams, Steve**

Comment GP831-1

Good afternoon. Thank you for the opportunity to speak today on our proposed project. I'm Steve Williams, Terminal Manager of Westway Grays Harbor. I'm also a Hoquiam native, and I'm proud to be a part of this community. Part of Grays Harbor since 2009, Westway has provided bulk liquid storage, third-party distribution and related services. Our company has been in business for 60 years, and we have dealt with the best reputations for energy and for consumer safety.

The expansion of our terminal represents a long-term commitment to the community. And according to the third-party economic analysis, our project and a similar project at REG will create 280 full-time jobs, which pay an average of 84,000 per year. This project will create more than 870 jobs during the year-long construction process.

Westway is committed to hiring locally and using locally sourced projects whenever possible. As a native, I know how eager folks are to get back to work. We receive calls frequently from people who want to work on our projects. We're confident we will build this project in a way that will protect our neighbors and the environment we all value.

Westway looks forward to working closely with Ecology and the City of Hoquiam to meet the high standard of the EIS, and build these projects with the highest commitment to safety. We look forward to getting to work so we can put people back to work, stimulating the economy and generating revenue for our local governments that provide valued services like education and public safety.

Again, thank you very much.

Response GP831-1

Comment acknowledged.

GP832, **Willis, Jeffrey**

Comment GP832-1

I am apposed to oil trains coming into Grays Harbor. The potential volume of trains based off of the projected capacity of the terminals on a single sourced rail line would cripple the County, even if there were no breakdowns or other incidents. Please consider every County resident that uses a rail crossing each day and the business' that require thier customers to cross a rail line to access them. We will only suffer the consequences and will not reap any of the benifits. This one reason alone is my major concern and is the catalyst to voice my opposition, but I am also unified with those who hold concerns for safety and the potential enviromental impacts. Please do not allow oil trains into Grays Harbor. Thank you

Response GP832-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP833, **Wilmering, Kathy**

Comment GP833-1

My comments relate to both the Westway and Imperium Draft EISs.

If this project goes thru, we are begging for an oil spill. Our own Dept. of Fish & Wildlife states that this area is especially susceptible to the effects of an oil spill. Each time oil companies propose a project, they state that this time their safety procedures will negate the possibility of spills, but serious & catastrophic spills continue. Plus, given that the harbor is sited in a major tsunami/earthquake zone, the likelihood of any adverse effect is multiplied. This is in addition to the increased number of oil trains exploding. In order to export our oil to other places, including overseas, Grays Harbor is being asked to shoulder all the risk, including that to about 1/3 of its work for [illegibile], in addition to tribal fishermen.

Also, the DEIS limited its review & didn't consider other impacts along the railway lines. It also didn't review the unique hazards of the different types of crude to be shipped.

Lastly these projects will increase greenhouse emissions, by about 2.6%, from what I?m reading. Our planet is on the edge of environmental catastrophe. We do not need to & should not be adding to the danger.

Response GP833-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and

vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. Final EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms and has been updated to provide additional information about economic and social costs of oil spills.

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapters 5 and 6, *Cumulative Impacts*, reflect additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7 would also apply to the extended study area.

For more information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

GP834, **Wilson, David**

Comment GP834-1

I've done these things right here on the street and God can use those things to turn us hopefully around. Please say no to these things with oil and help us not to bring -- God's wrath is going to be inevitable if we don't turn our hearts back to Him.

Hello, I'm David Wilson, Sr. I live in Hoquiam, Washington. I was born and raised here, and I stand here because God has brought me here. And I see all these, I took notes here from other people, earthquakes, tsunamis, and numerous types of catastrophes. And this has gone on and on. You name it, it's possible.

We've talked about safety emissions, following the goodness of our hearts, the example of heroin was being used, you know, deeper wisdom and intelligence was mentioned, open for accidents, the fracking, which is basically we're making our own earthquake, derailments.

These are all things to mention, but I think it's a deeper understanding than that. This is a spiritual battle. And we need to wake up. People need to stand up and turn our hearts, and stiff necks, and our minds to Him because He has the power to change. He's done it with me.

And I don't belong to any religious affiliation. I'm running for the city council. I belong to no religious parties. I belong to God.

Response GP834-1

Comment acknowledged.

GP835, **Wilson, Don**

Comment GP835-1

My name is Don Wilson. I am a lifelong resident of Washington State and reside in Seattle. I am a recently retired Maintenance Supervisor for the Renton School District. I am a lifelong outdoorsman and sportsman. I know the importance of maintaining good water quality for all of the activities we enjoy in our State. The expansion of oil train traffic and proposed oil terminals bring grave risk to our quality of life. The DEIS on the oil terminal projects in Grays Harbor has many deficiencies and inaccurate statements. The idea offered in the mitigations prescribed that an oil spill could be contained let alone recovered in Grays Harbor is disingenuous. Oil spilled in Grays Harbor will not be contained and little of it will be recovered. If Heavy Crude oil such as Tar Sands oil is spilled in Grays Harbor much of that will likely sink and will destroy the estuary. The DEIS itself states that the risk from a major spill event cannot be mitigated. If it cannot be mitigated it should not be permitted.

Response GP835-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 to reduce the likelihood of a spill reaching the environment and the potential impacts if an incident occurs at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for additional information about the analysis of emergency planning and response capabilities. For more information about the development, implementation, and enforcement of mitigation measures, refer to the Master Response for Mitigation Framework.

GP836, **Wilson, Richard L. (Bay Center Farms)**

Comment GP836-1

Bay Center Mariculture Co.

October 12, 2015

TO: City of Hoquiam and the Washington State Department of Ecology.

Ref: Comments on Draft EIS for Westway and Imperium Expansion Project.

From: Richard L. Wilson, Ph.D., President

[See original attachment for photographs and maps.]

Introduction: It seems that realistic local citizens upon learning of the proposal to build additional storage tanks to hold 72 million gallons of the, new to this area, explosive Bakken crude oil is not only an unwelcome venture but an inimical business plan in light of petroleum economics and environmental concerns. Furthermore, to place these additional storage tanks nearly at sea level a few meters from the margin of the Grays Harbor estuary starts to border on foolish. The draft EIS cites further plans to incorporate and use an older rail line from Centralia to Grays Harbor to transport daily millions of gallons of the two very distinct types of crude oil with individual characteristic and potential to invoke environmental damage. The Bakken crude with a volatile component and the asphalt like bitumen extracted from the Canadian oil sands which requires a volatile solvent to be viscus enough to flow. To reach the proposed storage area between Aberdeen and Hoquiam the crude will have to travel from the central canadian oil sands region and the Dakotas along the Columbia river and through cities such as Spokane, Tri-Cities, Vancouver, Longview and of course Aberdeen (Figure 5-5). Foolish is morphing into insanity but the proposed actions and environmental threat does not end with storage at the proposed tank farm.

The next sections of the proposal deals with loading those millions of gallons of crude into large tankers or tank barges and send them out over some of the most vulnerable productive marine habitat on the Pacific west coast. After clearing the bar at the mouth of Grays Harbor these vessels would travel north or south to other US ports or across the Pacific ocean to foreign markets. (Oil movement map Fig. 5-1). The marine phase would seem to present the highest probability of a cataclysmic oil release with tanker vessels carrying up to 320,000 barrels (13.4 million gallons). Although there are many aspects that need review in this multi faceted project these remarks primarily address the rail and marine transport phases.

Train transport in study area: Probably important to note up front and as stated in section 3.15-1; "No local laws or regulations apply to rail traffic." As I interpret this, essentially local citizens have little say about how rail traffic is handled within their urban or county areas. Chance of input is on this EIS draft.

Response GP836-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Final EIS Chapter 4 includes updated information about the development of new and draft state rules and operational procedures aimed at improving rail safety in Washington State. These rules would also reduce the potential risks of crude oil transport related to the proposed action. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location,

amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant.

Comment GP836-2

"The PS&P rail line and river crossings between Centralia and Hoquiam was originally constructed between 1889 & 1896" (EIS 3.15.4.1). The entire rail line between Centralia and Hoquiam is single track. On a single- track line, segments of second track (sidings) must be located periodically along the line to allow trains to pass each other (passing or meeting). Upgrades have occurred but will this old railroad be upgraded enough to handle increased volume and weight? Have the proper safety features been installed to transport these highly dangerous materials to avoid collisions or derailments and making sure protection for waterway crossing is in place. There are 52 rail bridges on the PS&P rail line between Centralia and Aberdeen crossing various wetlands, soughs, rivers, creeks... etc. Major rivers to be crossed are the; Skookumchuck (MP1.68), Black (MP12.64), Satsop (MP52.43), Wynoochee (MP59.00), Chehalis (MP66.25), and Witch (MP68.24).

Response GP836-2

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP836-3

A difficult aspect to decipher in the draft EISs are the impact of an additional 3.25 daily crude oil trains each with 120 tanker rail cars using (blocking) the crossings with half loaded with explosive Bakken and Canadian crude. What effect per day will be imposed on travel times, deliveries, businesses and emergency vehicles? The exposure and delay times at various crossings both between Centralia and Aberdeen and especially within the Aberdeen area are difficult to fully understand. It seems the data presented in both draft EISs on the crossing wait times have to be determined from the combined delays of trains going to both proposed facilities. Using Table 3.15-9 (in both EISs) on that part of the train route from Centralia to Aberdeen for the five listed crossings the no-action option at present has combined delay of 84 minutes per day. Adding the 120 car crude oil cars as proposed would increase these crossing delays by 126 minutes per day or by 2 hours and 6 minutes for a total of 210 minutes instead of the current 84 minutes per day. However, the large increase in delays on the various five crossing in Aberdeen could really be important which would be due to those three plus 1.25 mile long full and empty crude oil trains. In Figures 3.15-11 the no-action option currently shows the combined delays at five crossings of 193 minutes (3 hours 13 minutes). Then by adding the combined effect by Westway and Imperium crude oil train delays the expected daily total delay appears to increase by 556 minutes daily (9 hours 16 minutes) which as estimated would total 12.5 hours per day. This should be detailed for those who will be impacted

especially in the downtown area. Fig. 3.15-6 One westbound (loaded) crude oil train and time at various crossings. McDonald's Driveway?

Response GP836-3

Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, describes impacts of the proposed action on rail traffic in the study area, including rail line capacity and train occupancy times at grade crossings. Section 3.16, *Vehicle Traffic and Safety*, describes the potential impacts of increased rail traffic on vehicle traffic, including grade crossing delay and queuing at nearby intersections. Figure 3.15-6 shows select grade crossings east of Poynor Yard. For detailed vehicle delay information, refer to Section 3.16.5.2, *Proposed Action*, and Appendix L, *Vehicle Traffic Analysis*.

Chapter 6, *Cumulative Impacts*, presents the analysis of the incremental addition of impacts from the proposed action to impacts from past, present, and reasonably foreseeable future actions—including the REG (formerly Imperium Terminal Services) Expansion Project and the Grays Harbor Rail Terminal Project.

Comment GP836-4

The EISs also are not clear on future plans concerning expansion as judged by certain statements. If a maximum number of trains on the PS&P track is currently determined to be 12 per day with plans to expand to more does this mean additional crude oil shipments? Instead of the current 6.25 (3 current or no-action and 3.25 to be added by the proposed action) what is the number for the future? Also, a consideration for the number of cars in a train is not assessed in terms of impact. The current non crude oil trains now average 63 cars per train. Contrast that with the crude oil trains with 120 or nearly double the existing train size. Then would there be an additional 5-6 crude oil trains with 120 tank cars each to meet the track capacity? Does the EIS place a cap to the 3.25 trains daily as proposed with the number of cars which is nearly twice as many as currently are being used. It seems the number of tank cars is very critical for crossing times and time required to head the train back to the oil fields. Are plans proposed to make sure spill response equipment and supplies will be available in accordance to the magnitude of and volume of the oil shale bitumen that is planned to be transported? Where is spill containment equipment going to be stored? Detail of these questions seem to be few in the EIS.

Response GP836-4

The proposed action includes rail transport of oil to the proposed facility. Rail traffic would consist of unit trains of 120 cars (1.25 miles long). Operation of the proposed action at a maximum throughput would result in a maximum of 458 train trips (each trip is one-way travel) or an average of 1.25 trips per day, along the PS&P rail line.

Current freight rail traffic on the PS&P rail line is shown in Draft EIS, Chapter 3, Section 3.15.4.6, Table 3.15-4. A total of three trips per day, including full and empty trains (1,235 trips per year, with each trip being one-way travel) currently occur on the PS&P rail line. Typical numbers of cars per train vary depending upon the commodity being shipped; typical trains range from 50 to 100 cars per train.

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that

would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP836-5

The EIS implies that the PS&P rail line adds little to the overall rail dangers. The EIS appears to base this on the small percent increase by rail for the entire heavier use on the better maintained BNSF rail complex that crosses the state from Idaho. The current light use of the older PS&P line from Centralia to the coast has little traffic especially of the long heavy oil carrying trains which would be added. The risk factor on the older lightly used PS&P rails in terms of crude spilling, fire or explosion between Centralia and Aberdeen is essentially, if not a new one, certainly a greatly increased old one with a new frequency not comparable to the heavy traveled BNSF rail complex.

Grays Harbor Bay study area: Vessel traffic as defined (3.17.1) includes all of Grays Harbor, the navigation channel and out three nautical miles into the ocean (see image at end of comments). A little difficult to find but the EIS does state; in section 5.7, " As discussed in Chapter 4, Environmental Health and Safety, large oil spills, fires or explosions would likely include unavoidable and significant adverse environmental impacts. Although the likelihood of a large spill, fire, or explosion is low, the potential for significant adverse impacts on the environment and human health in the case of such an incident is high. The specific impacts would vary based on the location, amount spilled, type of liquid, and weather conditions. Examples of these impacts are described in Section 4.7, Impacts on Resources."

Response GP836-5

Comment acknowledged.

Comment GP836-6

Not much attention in the EIS is devoted to the geomorphological setting of Grays Harbor. Grays Harbor is a relatively shallow embayment estuary with multi creek and river input. It has a dynamic sedimentary component driven by both tidal and tributary currents, wave action, stream and river deposition and longshore ocean beach transport. The channel requires about one million cubic yards of dredging yearly to permit passage of the current vessels. How much addition dredging will be needed. How deep and how often and what is planned for the spoils? Will contamination be monitored and dredge spoils be deposited away from Dungeness crab and shellfish growing areas, as well as, other critical benthic areas? Is an upland site available for disposal of contaminated sedimentary materials? Channel maintenance would seem a vital activity to allow the increased tanker traffic and the EIS should detail these plans.

Response GP836-6

Draft EIS Chapter 3, Section 3.3.4.2, *Surface Waters, Grays Harbor*, describes Grays Harbor as a water resource. It includes information on drainage basin area, size and dimensions of the harbor,

formation of the estuary, sedimentation sources, sedimentation deposits and movement, water depths, navigation channels, mudflats and sandbars, tides and tidal currents, sources of freshwater inputs (rivers and streams), and salinity ranges.

The proposed action would not require dredging or deepening of the navigation channel to accommodate vessel traffic. Section 3.17, *Vessel Traffic*, evaluates the capacity of the Grays Harbor Navigation Channel to accommodate proposed action-related vessels.

Comment GP836-7

Grays Harbor bay and estuary with the productive intertidal areas present the biggest possibility of irreparable destruction by a large oil release from a tanker or tank barge. For example, a tank barge loaded with over 6 million gallons or, a tanker with 13 million gallons of crude oil breaking up at the mouth of the bay and the oil stays on the mudflats. A tanker volume of the thinner Bakken crude could cover nearly 8 sq. miles of intertidal to one tenth of an inch deep. The heavier asphalt like crude as thinners evaporate could cover 1.5 sq. miles one half inch thick. Could these companies meet the cost of a massive environmental clean up as required by law? Could a cleanup be effective at revitalizing or reclaiming the mudflats?

Response GP836-7

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP836-8

The important weather and water conditions are described (4.3.2.3) in a cursory way for the Grays Harbor bay with such statements as “fog and swells caused by high winds with erratic current directions” normally around two knots but known to reach five knots. One statement (4.3.2.2), if not in error, is very confusing: “Winds recorded at Bowerman Airport (in Grays Harbor) are generally from the east or northeast during the winter and the west or southwest or directly from the south (less frequently) during the summer”. These are totally in error unless in an unconventional way are meant to be the direction the wind is blowing to, not from. These directions are very important as they are the creators of waves and the drivers of longshore currents which determine the direction beach sand travels or an oil spill would travel along the beaches. Weather, tides, high surf, extreme currents and wind as reported by mariners who use the bay, can make the entrance and exit to Grays Harbor anything but routine at times.

The constant daily changes in the flood and ebb tides change channel current characteristics making the entrance to the bay unpredictable. In general this area is shallow with sand movement that can cause changes in the actual channel location and depth. Two tidal exchanges per day are present and during extreme tides can result in exchanges around 12 feet between the high and low tides which in turn greatly influence water velocities. Weather conditions such as barometric pressure, wind and rainfall along with watershed runoff can be extreme and add considerable height to the tide. In addition, up river toward the docking area the discharge rate (flow) in the Chehalis River along with the tidal influence is characterized by seasonal variation, with sharp rises of relatively short duration from October to March. This corresponds to the period of heaviest rainfall (U.S. Army Corps

of Engineers 2003). That said the final sentence in the EIS casts these velocities and hydrological characteristics as "typical for a river and bay with similar topography and hydrologic characteristics". Those skippers who use the entrance channel on a frequent basis would probably not characterize it as typical and predicable.

Response GP836-8

The information presented in Draft EIS Chapter 4, Section 4.3.2.3, Water Flow, is intended to generally describe the range of water flow conditions that can occur within the study area. Draft EIS Appendix N, *Oil Spill Modeling*, presents in greater detail the assumptions used relative to wind conditions within the study area. Wind directions in the Draft EIS are identified as coming "from" the direction indicated. Wind conditions used in the oil spill modeling are further described in the notes section of Table 1 (see p. N-5 of Draft EIS Appendix N) and in the Master Response for Oil Spill Modeling Methods.

Comment GP836-9

The EIS does not detail an assessment of how much of a bay or near ocean crude oil spill could be cleaned up and how much would be inaccessible and left as probably a permanently inundated area. "Crude oil is a persistent oil. Bakken crude oil is a Group II oil and diluted bitumen is a Group IV or V oil (Section 4.3.1.2, Crude Oil)". This means they do not evaporate totally and can sink and remain like asphalt or rolled up like tar ballss. In addition, the unpredictable crude oil dispersion in response to tides, wind directions, fluvial velocities, temperatures and seasons also work against capture and clean up in an open coastal bay. Much of a spill might be impossible to recover. I seem to recall a US Coast Guard representative who estimated on the average only about 5-10% of a spill of similar types of crude oil could be recovered in a coastal estuary and the near shore waters. This in part is due to the asphalt like bitumen after a few hours or days sinks and becomes very difficult to find and recover. If a large cleanup was undertaken where would the oiled sediments and biotic elements be deposited? The EIS should detail these questions so people will know what they might have to live with when accidents, be they small or large, occur. The possible destruction of the benthic intertidal production should be assessed when the crude asphalt hardens on or in the sediments. There is also the real or perceived loss of product quality from a bay when the public learns an oil spill occurred. The EIS seems to lack detail on the possible destructive mess which could occur in the 'study areas'. If a train derails and explodes near Centralia or a tanker with several million gallons runs aground and breaks up at the mouth of Grays Harbor the EIS seems to take the view; 'it is to rare to consider', but state it could happen, or as stated indirectly, spills, etc. are, "anticipated to be low also [compared to study area] in the extended study areas" (5.2). What seems to be missing is the fact that the magnitude of one destructive incident could effect numerous people, infrastructure and property and environmental aspects and if even correctable take years to return to normal. A large spill or explosion might only happen rarely, but if and when it does and it could, people might be in for a very large, expensive and long lasting impact.

Response GP836-9

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different

types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Modeling*, refer to the Master Response for Oil Spill Modeling Methods. To improve oil recovery in the case of a spill of crude oil that weathers, sinks or submerges, a new mitigation measure has also been added to Final EIS Sections 4.4.3, 4.5,3, and 4.6.3, for the applicant to ensure appropriate response equipment is available within 12 hours of a spill.

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

Comment GP836-10

If the proposed action should happen to be favored can we be sure of compliance to Washington State law requiring the operators of tankers and tank barges transporting hazardous substances to provide evidence of financial responsibility? Under RCW 88.40.020, Evidence of Financial Responsibility, tank vessels that transport oil in bulk as cargo must demonstrate financial responsibility to pay at least one billion dollars. With a few limited exceptions, federal law requires vessel operators (all types of vessels) to have a Certificate of Financial Responsibility for vessels over 300 gross tons using the navigable waters of the United States (33 CFR 138.15). The certificate is evidence to the U.S. Coast Guard that the vessel owner or operator can meet their oil spill removal obligations under the Oil Pollution Act should they spill oil into the navigable waters of the United States. Is there a price set for loss of estuary habitat?

Response GP836-10

Refer to the Master Response for Liability and Responsibility for information about response and cleanup of an oil spill.

Comment GP836-11

For those oil tankers traveling from a foreign port (such as Asia) to Grays Harbor are provisions being addressed to keep unwanted and potentially harmful species out of the bay. Non endemic species could be transported in bilge water or attached to the ship hulls? How are state and federal laws to be enforced? Have federal and state natural resource agencies such as WDFW set forth rules on this potential problem? Has cleanup or control costs been assessed and identified as available to address the escape of a harmful pest species?

Response GP836-11

Potential ballast water impacts on the aquatic environment are covered in Draft EIS Chapter 3, Section 3.4, *Plants*, and Section 3.5, *Animals*. The Washington State ballast discharge regulations (RCW 77.120.040) include reporting, monitoring, and sampling requirements of ballast water; all vessels must submit nonindigenous species ballast water monitoring data. Washington Department of Fish and Wildlife may also board and inspect vessels under WAC 220-150-033 without advance notice to provide technical assistance, assess compliance, and enforce the requirements of Washington State ballast water management program laws and regulations. Penalties and enforcement of not complying with the regulations are covered in WAC 220-150-080. To further minimize the risk of ballast water on vegetation communities and animals, the applicant would develop and implement a monitoring plan in consultation with Washington Department of Fish and Wildlife prior to the start of proposed operations (Section 3.4.7.1, Applicant Mitigation, and Section 3.5.7.2 Applicant Mitigation).

Comment GP836-12

Are the huge tanker vessels projected to create additional navigational problems in this relatively restricted shallow waterway and narrow twisted channel? How will the other vessels associated with commercial shipping and fishing or boaters in general be impacted by those behemoth oil vessels (Figure 3.17-3), which due to size, have the channel right of way over smaller boats?

Response GP836-12

Draft EIS Chapter 3, Section 3.17.4.4, *Vessel Traffic Management*, describes the systems that are in place to manage vessel traffic in Grays Harbor safely. Final EIS Section 3.17.4.4 provides additional information.

Comment GP836-13

Closing Comments: In my estimation the EIS draft downplays many of the potential difficulties and risks in transporting and transferring to storage tens of millions of gallons of toxic and explosive Bakken and Oil sands crude to load in to tankers which then travel the bay to open ocean. Based on this assessment little discussion and is available on how to mitigate (in fact the EIS seem to indicate not necessary) and deal with the cleanup and destruction that could result. The point is, a huge catastrophic spill, explosion and fire could happen and the EIS does not put any emphasize on what to do with this possibility. As stated above the new or greatly expanded use of the PS&P rail line and Grays Harbor estuary to transport large volumes of toxic explosive crude oil is a new use with little significant data to back up probabilities of spills or explosions. The draft EIS should clarify this and let citizens know these loaded trains are dangerous.

Response GP836-13

Draft EIS Chapter 4, Environmental Health and Safety, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an

incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, Impacts on Resources, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP836-14

Numerical simulation of tsunami generation and inundation was conducted to assess potential impacts and overtopping at the Westway Terminals LLC and Imperium Terminal Services Facilities. It was found that the berm surrounding the Westway Terminals LLC and Imperium Terminal Services could be overtopped. So much here depends upon the tsunami force, direction, tidal phase and height. They performed many force tests and the data is present. Just have to assume that this is a destructive possibility. The Fukushima tsunami should give all pause for concern and the image (right) reminds us of the height and power in the initial wave topping the sea wall:

Response GP836-14

Draft EIS Chapter 3, Section 3.1.4.3, Geological Hazards, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, Proposed Action, Operations, Earthquakes and Related Hazards, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events. The containment around the tanks is required for spill containment, it is not intended to be a berm for tsunami waves.

Comment GP836-15

As a former professor of geology, I cannot understand why this proposal is even considered. After the long trip from the Dakota and Canadian fields the volatile crude will travel by train nearly 60 miles from Centralia to be off loaded into the proposed storage facility at the moorage site in Aberdeen. Then reloaded into large tankers or tanker barges to traverse approximately 20 miles across the estuary and out the entrance of Grays Harbor. What could go wrong? The EIS, I feel, leads the reader to infer that the Grays Harbor crude oil add on is a relatively small aspect to the total scheme of moving incredible volumes of Bakken crude. Well, in fact it is but that should not be the measure to judge the possible damage which could be done. Instead, the EIS should point out how this proposal is a new series of actions over areas which puts a stretch of rail line and associated small populated areas and a very critical marine area in certain jeopardy of long term or permanent damage. The value of the nearshore marine habitat seems to be discounted as to the importance and possibility of long term destruction from the crude oil. Example would be the estuary food webs dependent upon the intertidal which are critical for higher tropic levels such as the Dungeness crabs, fish such as salmon, birds and shellfish. The north and south ocean beaches are productive razor clam digging areas. The popular Bowerman Basin national wildlife refuge (see map below), famous for the migrating shorebirds, is only a couple of miles from the proposed enlarged crude oil tank farms and very near the tanker route.

It seems ironic and just wrong that oil destined to end up in US refineries would be placed on tankers to traverse critical ecological habitat then to turn north or south to parallel our coast and then land back into another US port. This implies a certain disregard for the marine habitat. The EIS

should explain why domestic crude would not just stay on the BNSF train line for one of the northern refineries in Washington or even British Columbia. It appears this is a plan for a few to profit a little more quickly while potentially the citizens and environment of the Grays Harbor area could end up the big losers. The no-action alternative seems the most environmentally sound option and would not interfere much at all with the overall crude oil plan which is also foolish in terms of eventual carbon dioxide release. Furthermore, the chance of spills or explosions would be greatly decreased in the study areas as defined in the EISs and would not happen if the Imperium or Westway facilities are not expanded to establish the travel to, storage of and loading out the crude oil from the Bakken and oil sands fields.

Thank you for the chance to comment but I have to note; it seems the duel EISs make for a long confusing read for most people and that includes me.

Response GP836-15

Refer to the Master Response for Project Objective and Alternatives.

GP837, **Winn, Diane**

Comment GP837-1

My name is Diane Winn. Have you ever sat in your car frustrated waiting for a train to pass? Well, think about being on the other side of the tracks and waiting for emergency responders to reach you when you have a heart attack, your child has fallen down the stairs and lying on your floor unconscious, or your house is on fire.

In these life and death situations, seconds and minutes matter. This proposed project will present major consequences for emergency services with an increase of rail traffic that will cause long delays at rail crossing.

For example, according to the DEIS, Olympic Gateway Plaza is likely the crossing most impacted. Complete blockage to and from the complex will occur. The expected delays will typically be 35 minutes per train several times a day. This will dramatically affect the emergency responders.

These delays are a matter of life and death. In reviewing the safety fact sheet in the DEIS, the companies involved did not do anything to mitigate delay. The mitigation places responsibility for taking action on cities and drivers, and will do little more than send notification to emergency responders to change their routes.

However, this may not be a feasible approach since unlike oil trains, the timing locations of emergencies are not scheduled. The DEIS attempts to give impact near the site of the proposed projects. The trains delivering oil to Grays Harbor passes through dozens of cities along the route. I fear there will be impacts in these communities. It's important that there be a comprehensive EIS.

Response GP837-1

The Final EIS reflects revised proposed mitigation measures based on comments received on the Draft EIS. Refer to the Master Response for Mitigation Framework for an explanation of how mitigation measures were identified.

GP838, **Wireman, Ginger**

Comment GP838-1

I am extremely opposed to the expansiong of these terminals and the ability to move more oil through the state.

I am on the edge of the blast zone for one of the tracks according to explosive-crude-by-rail.org. Cottonwood elementary at 16734 Cottonwood Creek Blvd. in Kennewick (99338) is within the blast zone - the middle of the playground is 70 feet from the center of the tracks. My son's apartment is in the blast zone in Cheney as are half the dorms at Eastern WA University. It is disruptive and dangerous enough with the current number of trains. Providing additional capacity and allowing more trains is sheer insanity! The Ecology spills team could mobilize to Cheney - but the Tri-Cities would be screwed as minimum response time would be at least two hours (Yakima and Spokane are not close!)

I also vacation in Westport. An accident in that area would cause damage to the communities, the watersheds, the fishery and toursim. Any additional jobs would notbe worth the risk.

Response GP838-1

Comment acknowledged.

Comment GP838-2

After seeing the damage from the Japanese and Indonesian tsunamis I don't believe there is anything Imperium could do that could possibly mitigate the danger posed by a tsunami. For example, the Japanese puzzled over how the wave was 20 feet over their 14 foot sea wall, but post earthquake, the elevation of the land the wall was built on had dropped by 3 feet! I imagine any place that would be convenient to ship oil from would be in a liquifaction zone and unstable whether there was a tsunami following an earthquake or not. We must stop these trains.

Response GP838-2

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

GP839, **Wolfe, Diane**

Comment GP839-1

The Draft EIS for both Westway and Imperium contain multiple findings of significant and unavoidable adverse impacts which render approval of their permits to operate bulk oil facilities at the Port of Grays Harbor out of the question. Specifically, I call your attention to Sections 3.1.8, Earth; 3.7.9.1 Noise at grade 8 crossings; 3.12.8, Tribal resources; 3.17.8, vessel traffic unavoidable adverse impacts; 4.4.2.2 Explosions, "A large oil spill or explosion would likely cause unavoidable and significant adverse environmental impacts"; 4.4.4, Environmental Health Risks—Terminal (Onsite), specifically the finding that ," no mitigation measures would completely eliminate the possibility of a large spill or explosion, nor would they completely eliminate the adverse

consequences of a large spill or explosion"; 4.5.4, Rail transport impacts, "A large oil spill or explosion would likely cause unavoidable and significant adverse environmental impacts. As described above, the likelihood of a large spill or related explosion is low; however, the potential for significant consequences to the environment and human health in the case of a large spill or explosion is high…no mitigation measures would completely eliminate the possibility of a large spill or explosion, nor would they completely eliminate the adverse consequences of a large spill or explosion."; 4.6 Environmental Health Risks—Vessel Transport 4.7 Impacts on Resources "no mitigation measures can be implemented that will completely eliminate the possibility of a large spill, fire, or explosion, nor are there any mitigation measures that will completely eliminate the adverse consequences of a large spill, fire, or explosion"; 5.7 Extended Rail and Vessel Transport, "large oil spills, fires, or explosions would likely include unavoidable and significant adverse environmental impacts…no mitigation measures would completely eliminate the possibility of a large spill, fire, or explosion from rail cars carrying crude oil or hazardous materials nor would they completely eliminate the adverse consequences of a large spill, fire, or explosion."; And Chapter six discussing Cumulative impacts that would result from the incremental addition of the proposed action to impacts from past, present, and reasonably foreseeable future actions from individually minor, but collectively significant, actions that occur over time. Unavoidable and Significant Adverse Environmental Impacts include the potential for exposure to significant adverse noise, tribal resources, vehicle delays in Aberdeen, and increased vessel traffic causing disruption when commercial fishers are in the navigation channel. In conclusion the analysis notes that impacts from an incident from any of the cumulative projects would likely result in unavoidable and significant adverse environmental impacts. I urge you to support the no action alternative and deny the permits.

Response GP839-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP840, **Wolfe, Diane**

Comment GP840-1

I am commenting specifically on the economic impact sections of the draft EIS for Westway and Imperium found in Chapter 7 of both draft EIS. While there are many problems with the analysis, my primary focus will be on the lack of rigor in verifying underlying data and the superficial criteria underlying the analysis. One example of the lack of rigor is failure to request from the proponents a list of the jobs they see being created, those salaries and whether or not the jobs can be filled from the current job pool in Grays Harbor County.

Response GP840-1

Draft EIS Chapter 7, Section 7.1.4, *What are the potential impacts on economic conditions?* report projected employment generated under the proposed action. Employment projections were developed through the IMPLAN analysis (Appendix O, *Economic Impact Analysis*).

Comment GP840-2

One example of the incomplete criteria used to evaluate the economic impact is the use solely of a cost benefit analysis that does not take into account the costs to the citizens of Grays Harbor County compared to the benefits that might accrue to the citizens as a result of these proposals. Common business practice for any multi-million dollar project would necessitate both a Net Present Value (NPV) and Internal Rate of Return (IRR) analysis to aid in deciding whether to invest in these projects. Make no mistake, these companies are asking the citizens of Grays Harbor County to invest our capital in their enterprises. At first glance, investment decisions like these can seem to be "no brainers" – make the investment, and then collect the profit. But when the value of money received in the future is less than the value of that money now (because of market fluctuations and macroeconomic conditions) it's possible that the return from an investment might actually be worth less than the investment itself, once you have compared the value today and in the future. There are also other investment opportunities to consider. Would investing the money elsewhere provide a better return? Take the single issue of real estate values. These are important to citizens because your home is the largest single investment the average household makes and the operation of local government relies heavily on real estate taxes which are based on their monetary value. Study after study of real estate values in areas where oil terminals and rail transportation of petroleum have shown a decrease in real estate values from 5% in Cuyahoga County Ohio to 10% in Oslo, Norway to 51% in Houston, Texas and 72.3% in Albany, New York. The already fragile real estate market in Grays Harbor cannot tolerate those kinds of loses nor can the governments of Grays Harbor county tolerate those kinds of budget cuts. I urge you to support the "no action" alternative and deny the permits based on significant and unavoidable adverse economic impacts to the people of Grays Harbor County. Thank you

Response GP840-2

Draft EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, addresses economic considerations, social policy implications, and the costs and benefits associated with the proposed action , per City of Hoquiam SEPA policies and procedures (HMC 11.10.160).

GP841, **Wolfe, Diane**

Comment GP841-1

Good afternoon. My name is Diane Wolfe. I'm a resident of Hoquiam and Grays Harbor. I'm commenting specifically on economic impact sections of the Draft EIS for Westway and Imperium found in Chapter 7 in both Draft EISs.

While there are many problems with the analysis, my primary focus will be the lack of rigor and verifying the underlying data and the superficial criteria underlying the analysis.

One example of the incomplete criteria used to evaluate the economic impact is the use solely in the cost benefit analysis. This does not take into account the cost to the citizens of Grays Harbor County compared to the benefits that might accrue to the citizens as a result of these proposals.

Common business practice for any multi-million dollar project will necessitate both a net present value and a term rate of return analysis to aid in deciding whether to invest in these projects. And make no mistake, these companies are asking the citizens of Grays Harbor County to invest our capital in their enterprises.

At first glance, investment decisions like these can seem to be no brainers. We can make the investment, collect the profit. But when the value of the money received in the future is less than the value of the money now because of market fluctuations and economic conditions, it's possible that the return from an investment might actually be worth less than the investment itself once you have compared the value today and in the future.

There are also other investment opportunities to consider. Would investing the money elsewhere provide a better return?

Take the single issue of real estate values. These are important to citizens because our homes are the largest single investment the average household makes, and the operation of local government relies heavily on the estate taxes which are based on that monetary value.

Study after study of real estate guidance in areas where oil terminals and rail transportation of petroleum have shown a decrease in real estate value from five percent in the County of Ohio to ten percent in Norway to 51 percent in Houston, Texas.

I urge you to support the no action alternative and deny the permits based on significant and affordable adverse economic impacts. Thank you.

Response GP841-1

Draft EIS Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*, addresses economic considerations, social policy implications, and the costs and benefits associated with the proposed action , per City of Hoquiam SEPA policies and procedures (HMC 11.10.160).

GP842, **Wolfe, Diane**

Comment GP842-1

My name is Diane Wolfe. I'm a resident of Hoquiam. The Draft EIS for both Westway and Imperium contain multiple findings of significant and unavoidable adverse impacts in which I concur.

Specifically I call your attention to sections 3.1.8.3., 3.7.9.1, noise and vibration; 3.12.8, tribal resources; 3.17.8, vessel traffic; 4.4.2.2, explosions; 4.4.4, environmental health risks, terminals on-site; 4.5.4, rail transport impacts; 4.6, environmental health risks, vessel transport; 4.7, impact on resources; 5.7 extended rail and vessel transport. And the entire Chapter 6 discussing incremental addition of the proposed action to impacts from past, present, and foreseeable future actions from the actions which appear to be individually minor, but collectively significant.

And these actions will occur over time. Unavoidable and significant adverse environmental impact include potential exposure to significant adverse noise, tribal resources, and increased vessel traffic causes destruction when the commercial fishers are in the navigation channel.

In conclusion, I urge you to support the no action alternative and deny the permits.

Thank you.

Response Comment GP

Response GP842-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP843, **Wolfe, John**

Comment GP843-1

October 22, 2015
TO: Washington State Department of Ecology.
RE: Increased rail traffic.
Increased fossil fuel transshipment through Washington State.
Shell Anacortes Refinery proposed crude by rail unloading facility
Westway and lmperium Terminal Services Expansion Projects EISs
c/o ICF International/ 710 Second Street, Suite 550 I Seattle, WA 98104

Dear Reviewer,

I have been unable to attend recent public meetings regarding "increased rail traffic" and am taking this opportunity to present my views on the matter.

Increased rail traffic elicits immediate concerns about rail bed stability, functional crossing guard mechanisms and wait times at intersections with other modes of transportation. The state of rail infrastructure is of great concern to all.

Greater concern should be placed on what drives the increased rail traffic, the explosion of the extraCtion industry's production and sale of the most polluting forms of fossil fuels imaginable; tar sand crude oil from Canada, tracked crude oil primarily from the Dakotas and coal from the Powder River region of Wyoming and Montana.

Response GP843-1

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.

Comment GP843-2

Summarizing the environmental pitfalls of the extraction, transportation and use of these fossil fuels is Simple; every piece of the cycle is a moral hazard to every living organism on our planet.

Technology has made the generalized use of fossil fuels obsolete. While chemical uses of carbon and organic compounds will probably always be needed, generalized use for energy is no longer the only and certainly not the best option available.

Multinational corporations are pushing additional development of fossil fuels for their enrichment only, ignoring the enormous and deadly biological issues associated with their "right" to extract the last shovel full of coal and last drop of oil to satisfy their shareholder and executive greed.

Response GP843-2

Comment acknowledged.

Comment GP843-3

BNSF railway, owned by Berkshire Hathaway and directed by the renowned investor Warren Buffet is hardly the apple pie American corporation based in Middle America Omaha that its marketer's would have us believe. They are a huge multinational company controlling a major portion of the world's re-insurance market.

Their investment in coal and tank car rolling stock has surged to serve the increased production of fossil fuels. While BNSF operates on a right of way which is virtually its private property, we and they should not forget that the property was provided by our government; from we the people, to develop our nation not destroy it.

Rail traffic, like airline traffic, has an admirable safety record per mile traveled. However much of its bridge infrastructure is one hundred years old. The existing rail bed cannot support passenger rail across the country, it cannot support increased commodity traffic. Evidence exists that corporate bottom line does not include safety modernizations. Here on Puget Sound many miles of track lie alongside one hundred .foot high glacial till bluffs that have a tendency to slide during our wet winter months. Increased traffic with longer trains carrying fossil fuels vibrating unstable bluffs is a recipe for environmental disaster.

Response GP843-3

Refer to Response to Comment GP843-1.

Comment GP843-4

Many corporations have plans for exporting these newly exploited reserves of obsolete fossil fuel energy sources.

The petroleum industry wants increased rail traffic to its proposed refinery expansion in Anacortes. New and expanded tank farms for export are being proposed in Grays Harbor and on the Columbia River. Export of domestic crude has been illegal for forty years but industry is confident that their political contributions will change that.

The coal industry wants new intermodal export facilities on the Columbia River and Strait of Georgia and in the meantime is content to export via the Canadian facility at Tsawwsen.

While the actions of multinational corporations imperil the world, the actions of the citizens of the world seek to maintain its habitability.

Increasing rail traffic to enhance the growth of obsolete and highly polluting energy sources is a moral hazard that the leaders of our nation cannot and must not ignore. Please send a message to the corporate world that the days of generalized use of fossil fuels, especially the Canadian bitumen, fracked American crude and western coal are over and those reserves best left in the ground.

Do not allow increased rail traffic of fossil fuels across Washington State. Do not allow export of an obsolete and deadly energy source to satisfy the greed of vestigial energy and transportation corporations.

Sincerely,

John Wolfe
20207 23rd Ave NW
Shoreline, WA 98177

Response GP843-4

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP844, **Wolff, Virginia**

Comment GP844-1

The findings in the DEISs for Westway and Imperium oil terminal proposals show that the risks of oil spills, train accidents, increased train and oil tanker traffic, air pollution, noise, harmful impacts on tribal culture and resources, and vehicle delay at railroad crossings cannot be fully mitigated and the environmental damage could be significant. The Draft EIS does not adequately address the impacts to the rail communities and waterbodies in the extended area. The DEIS inexplicably only studied the last 59 miles -- less than 5% -- of the route. The last few years have seen an enormous expansion in the amount of highly volatile crude oil shipped by rail, and there has been a corresponding spike in the number of derailments, fires and explosions. Turning Washington State into an oil export hub through these proposals and others will make it much more likely that the next oil disaster will happen here. This isn't just an issue for Grays Harbor, it's an issue for the entire state. I urge you to reject the oil terminals proposed in Grays Harbor because they will create the following significant and adverse impacts which cannot be avoided or mitigated and are unacceptable: A major train derailment is not a questions of "if" but "when."

Response GP844-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing

conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

Comment GP844-2

The oil vapor pressure of Bakken crude cannot be lowered enough to prevent ignition. When tank cars are punctured during a derailment, gases rush out and find a spark. Non-yard derailment spills usually lead to fire. Oil train fires are likely to cause burns, deaths, and property damage - significant adverse impacts that cannot be prevented or mitigated. A U.S. DOT analysis predicts that oil and ethanol trains will derail on average 10 times per year during the next 20 years. If a single accident happens in a heavily populated area, DOT estimates that over 200 people could be killed, costing an estimated $6 billion. Both Bakken crude oil, and tar sands have ignited and exploded in previous train derailments.

Response GP844-2

Draft EIS Chapter 4, Section 4.5.2.2, *Fires or Explosions*, addresses potential risks related to fires or explosions associated with rail transport under the proposed action. Section 4.7, *Impacts on Resources*, describes potential impacts of fires and explosion.

Comment GP844-3

The DEIS must include the cost of emergency preparedness in all rail communities. NTSB says emergency response planning along the rail routes is “practically nonexistent”.

Response GP844-3

Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for additional information about the analysis of emergency planning and response capabilities in the study area. For more information about the analysis of potential impacts on the BNSF main line, refer to the Master Response for the Geographic Scope of the EIS.

Comment GP844-4

Oil Spill Risk: An oil spill would have significant and adverse impacts that cannot be prevented or mitigated. The DEIS suggests that medium to large oil spills during rail transport are moderately to highly likely. This admission alone should make this proposal unacceptable. Health impacts of oil spills over land or water increase risks of neurotoxicity, cancer, lung disease, loss of cognitive function and endocrine disruption in humans. At best only 14% of the oil is recovered in a marine spill. Oil spilled off the coast would contaminate primary sources of seafood for residents, especially for tribal subsistence fisheries. Contamination includes toxins such as polycyclic aromatic hydrocarbons (PAHs), which accumulate in seafood, and increase risks to humans who eat it. Rail spills increase risk of contamination to wells, such as those in the Chehalis River Valley, municipal drinking water for Olympia and cities with a single source aquifer such as Spokane and Vancouver.

Response GP844-4

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that

would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or within Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP844-5

Traffic delays: Long traffic delays at rail crossings present major and unmitigatable consequences for emergency services. According to the DEIS, Olympic Gateway Plaza in Aberdeen is likely to be the at-grade crossing most impacted by delays from trains. Complete blockage to and from the complex will occur. Considering that expected delays will typically be 35 minutes per train several times a day, this will dramatically affect an EMS system where outcomes are dependent on response times of less than 10 minutes. These delays could be a matter of life and death in the event of cardiac arrest, heart attack, stroke or major trauma. This concern impacts not only Grays Harbor, but communities all along the rail corridor. There is no practical mitigation for these traffic delays. I urge you to reject the proposed Westway and Imperium oil terminals.

Response GP844-5

Final EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, reflects the addition of PS&P and Aberdeen Fire Department communication and response procedures for emergency access to areas blocked by a train under existing conditions. These procedures would apply under the proposed action as well and would reduce impacts on emergency access to the Olympic Gateway Plaza and Port of Grays Harbor areas.

GP845, **Wolff, Virginia**

Comment GP845-1

These comments supplement those previously submitted: tracking number 000000761. They concern air pollution and climate change impacts which cannot be adequately mitigated, along with other impacts the DEIS fails to consider.

Air Pollution: Onsite operations at oil terminals would release toxic pollutants, including diesel particulate matter, benzene, formaldehyde and toluene. During normal operations, according to DEIS documents, the risk of DPM inhalation increases at least 10 fold at project sites, putting workers at increased risk of adverse health effects. DPM and other pollutants associated with these projects increase risk of cancers, including breast and lung cancer; are associated with lower infant birth weight and increase risk of respiratory death; contribute to impaired pulmonary development for infants and children; increase the risk of asthma diagnosis exacerbations and related hospitalizations; contribute to neurodevelopmental disorders in children, and increase risks of acute and chronic obstructive lung disease, heart attack, stroke, systemic inflammation, and overall risk of disease and mortality.

Response GP845-1

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present analyses of cancer risk from emissions of diesel particulate matter related to the proposed action and cumulative projects, respectively. Final EIS Section 3.2 and Section 6.5.1.2 have been updated to reflect revised assumptions regarding rail operations (types and number of locomotives), based on information received from PS&P. The updated analyses predict lower emissions; the level of increased risk is not considered significant.

Comment GP845-2

Air toxins emitted by spills and derailments: Many people live and work within 1,000 yards of rail lines and terminals, the radius even the DEIS considers significant. Considering that oil trains and terminals would be located within population centers, these residents are at risk from inhalation of smoke and particulate matter in the event of a firey derailment. Smoke inhalation of the dense, heavy, suffocating type experienced in crude oil fires is a serious public health risk and cannot be completely eliminated as a risk to much of the Grays Harbor population or any other population at risk along the rail route.

Response GP845-2

Draft EIS Chapter 4, Section 4.7, *Impacts on Resources*, describes the potential impacts on human health in the event of an oil spill, fire, or explosion. Final EIS Section 4.7 has been revised to more fully describe these potential impacts.

Comment GP845-3

Climate Change: Climate change is the largest emerging health threat for this century. These projects release greenhouse gas (GHG) emissions that directly contribute to climate change. They also facilitate further emissions from the end-use of the crude oil, as it releases GHGs upon combustion. According to DEIS calculations, these two terminals would collectively result in annual release of approximately 74,000 metric tons of CO2. Climate change in our region is anticipated to result in increased heat-related illness, potency of allergies, health care costs, and extreme weather events. Expanded ranges of disease vectors are expected to result in increased spread of infectious diseases. There are better way to meet our energy needs. Washington State is rapidly moving away from fossil fuels and towards clean, renewable sources to meet our energy needs and respond to global warming. Building more, big infrastructure for yesterday's energy is the wrong path to meet today's energy needs and a big economic gamble for Grays Harbor.

Response GP845-3

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP845-4

The Draft EIS also failed to adequately consider a number of other important issues, including, but not limited to: the uniquely high combustibility of Bakken crude oil; the potential of even low-speed train car derailments, punctures, spills, fires and explosions; risks to endangered or listed species; statewide traffic impacts; full statewide economic impacts of an oil train disaster; quality of oil spill

cleanup; adequacy of insurance; rail inspection failures; risks of fire spreading beyond one train car or oil storage tank in the event of a leak, fire, or explosion; risks posed by outdated and insufficient oil barge contribution to carbon pollution and climate change. There is simply too much risk and too little reward from these proposals: Grays Harbor communities would take on the risk and oil companies would reap the profits, while Grays Harbor would become a throughway for oil going elsewhere. Much of what makes Grays Harbor special would be put at risk. A single major oil spill could devastate the area's maritime economy, productive fisheries, tribal cultures and economies, and spectacular coastal waters.

Response GP845-4

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. Final EIS Chapter 4 reflects additional mitigation measures proposed to address gaps in emergency preparedness planning and response capabilities. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

For additional information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

GP846, **Wonhoff, Taylor (Surfrider Foundation)**

Comment GP846-1

I write to express my concerns about the draft EIS that is currently out for public comment. I am from the Willapa Harbor area, and have spent significant parts of my life working and recreating on Grays Harbor. I have significant concerns about the adequacy of the draft EIS to protect the people and ecosystems in Grays Harbor and at sites along the rail transport line. My concerns boil down to three primary focal points. First, the proposed site at Grays Harbor is not suited to handle the expansion of the Westway and Imperium facilities. Second, the oil trains that will be tasked with transporting the crude oil to Grays Harbor are dirty and dangerous. Finally, the mitigation measures outlined in the draft EIS are insufficient to protect the environment and local economy. First, Grays Harbor is the wrong place to site the expanded oil terminals. Grays Harbor features a narrow shipping channel and strong, unpredictable currents that create dangerous conditions that make oil transport extremely risky. One spill in Grays Harbor could jeopardize the local economy, which relies heavily on the natural environment. Shellfishing, fishing, and many other industries are reliant on healthy, clean waters, and a single spill could irreparably harm those industries.

Response GP846-1

Draft EIS Chapter 4, Environmental Health and Safety, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, Impacts on Resources, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP846-2

Furthermore, the transport of the oil by train to the facility site will require 638 loaded train shipments each year, and an equal number of empty trains being moved out. Each trip will require road closures, which will disrupt so many other industries in the area. The timber industry, moving wood off the Olympic Peninsula, will be interrupted. This is just one example of the disruption that so many other industries feel—industries that hinge on a reliable, clear transportation network.

Response GP846-2

Operation of the proposed action at maximum throughput would add 458 unit train trips per year (half of which would be loaded and half of which would be empty), or 1.25 trips per day on average, along the PS&P rail line, compared to the approximately 1,100 train trips per year, or 3 trips per day on average, under the no-action alternative. Road closures are not required for existing rail traffic and would not be anticipated for rail traffic related to the proposed action.

Comment GP846-3

Finally, as a member of the Surfrider Foundation, I need to point out that a single spill will damage the reputation of Grays Harbor as a place to recreate. Dirty beaches will impact the surfing, kayaking, and other paddle sports industries; birders, beachcombers, and others will similarly choose to spend their time at other locations, and any dip in recreational dollars spent in places like Westport or Ocean Shores will be disastrous to those communities.

Response GP846-3

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP846-4

Second, oil trains are extremely dirty and dangerous. At least 10 oil trains have recently exploded in North America, and the explosion in Quebec demonstrated that explosions may occur in populated areas and directly harm local citizens. Tank car technology has not yet evolved to the point that oil transport by rail is safe; the so-called safer cars, the 1232 cars, have derailed and leaked oil and

burned a house. No oil train transports should take place to this facility until oil tank car technology is improved to better minimize the potential for derailments and oil spills.

Response GP846-4

Draft EIS Chapter 4, Section 4.5.3, What mitigation measures would reduce impacts related to rail transport? acknowledges the voluntary applicant measure for all new rail cars to meet or exceed the U.S. Department of Transportation Specification 117 design or performance criteria and the retrofitting of all existing tank cars in accordance with the U.S. Department of Transportation-prescribed retrofit design or performance standard (80 Federal Register 26643). However, as noted in Section 4.5.4, Would the proposed action result in unavoidable and significant adverse environmental impacts related to rail transport? the risks cannot be eliminated.

Comment GP846-5

Furthermore, the rail line on which these oil shipments will be sent to these facilities is an ancient rail spur that was not designed to ship mile-long oil trains. Before any oil shipments take place, that rail spur must be rebuilt to 21st century engineering standards and be routed away from neighborhoods/cities, focal points of industry, and inland waterways.

Response GP846-5

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP846-6

Third, the identified mitigation measures are insufficient to adequately protect the people of Grays Harbor County and local ecosystems. In addition to the mitigation measures stated in earlier sections of this comment, the oil facilities should not be sited on the flats near to the water. They should be sited at a distance away from the water, so that if there is a spill, there will be a reduced chance that the oil will leak into the water. In every community/neighborhood along the rail line, there should be adequate emergency response personnel, equipment, and systems in place to assure immediate responses that will limit the damage that can be caused by a spill. Thank you. Taylor Wonhoff Tacoma, WA

Response GP846-6

Refer to the Master Response for Mitigation Framework.

GP847, **Wood, John and Polly**

Comment GP847-1

For national security, public safety, and environmental reasons wour family wholeheartedly objects to the shipment of bulk fossil fuels out of this country. There is no reason to to allow these projects to be built, only desire. The few beneficiaries gain only dollars. Those who lose, lose much more, even if only measured in dollar terms. Please do not allow these projects to proceed.

Response GP847-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP848, **Wood, Sandy**

Comment GP848-1

I live along the RR, hearing and feeling the heavy and speeding oil and coal trains pass our house frequently. We know that it is not if, but when, a train will derail, and explode, in our neighborhood. I do not understand why, knowing the danger, proved over and over again, the trains continue to threaten our lives, our future, our environment. Clean energy is our future, not dirty fossil fuels. Exporting those dirty fossil fuels only destroys our environment for the benefit of the big coal and big oil companies. We have fish and agriculture and tourism, and work diligently to clean our air and water. We do not want the Pacific Northwest destroyed!!

Response GP848-1

Comment acknowledged.

GP849, **Wood, Sandy**

Comment GP849-1

Thank you for listening to the comments of the public and hearing the concerns we have. We are not willing to accept the risks for the proposed Westway and Imerium oil terminals in Greys Harbor. The following significant and adverse impacts, as well as others not listed, cannot be avoided or mitigated, and are unacceptable.

1. The tank cars cannot be made crashworthy, and derailment spills are guaranteed to happen in the extended area many times a decade. Oil spills cannot be completely recovered. Crude oil contains benzene which CANNOT be recovered from the water.

2. Oil vapor pressure cannot be lowered enough to prevent ignition. When the tank cars are punctured during a derailment, the gases rush out and find a spark. Non-yard derailment spills usually lead to explosive fire. You cannot prevent or mitigate the loss of lives, property, and the damage to the environment. The damage done to the RR tracks themselves, prevents other train traffic. At-grade crossing damage prevents people from crossing, leaving homes, getting emergency assistance, etc.

3. Firefighters cannot protect themselves or the public from the explosions and fires. The blast zone is extensive. Again, this cannot be prevented or mitigated.
4. Oil trains block traffic, prevent passage on at-grade crossings by the public, school buses, emergency response vehicles. Other freight has to wait for their passage, meaning that agriculture products can be and are damaged, as they wait their turn for hours.
5. The oil trains stink as they pass, as well as shaking the ground. Our property was purchased BEFORE (1880's) the trains arrived in the 1920's, with home built before and during building of tracks. Our house has cracks throughout caused by the weight and speed of the coal and oil trains. It was built in the 1930's and was undamaged before the coal and oil trains started passing. BNSF has asked us to let them know when the windows rattle so they can check the tracks. The RR tracks were built for shorter, slower, less heavy trains!
6. An oil terminal will destroy the quality of life for the community, the waterways, and the environment. No community with oil terminals is a desirable place to live. This loss of value cannot be mitigated.
7. Hydrogen sulfide, escaping during the loading of crude oil into marine vessels, deadens your sense of smell, then kills you, as it is trapped in low-lying pockets. No guarantee can be made for the vapor combustion units. No prevention or mitigation can be guaranteed.
8. Construction jobs for an oil terminal are a short-term job increase. The loss of jobs, lives, homes, prosperity, thereafter cannot be mitigated.
9. The cost of emergency preparedness is beyond calculation, not covered by insurance, and impossible to create along the miles in danger.
10. Spill cleanup delays are for generations, with the damage done to water, air, environment not ever back to pre-spill.

The Pacific Northwest does not wish to be a location for fossil fuels. Our fisheries and forests and water and agriculture and cannot be sacrificed for the benefit of BIG OIL, making profits as they export the oil, destroying our lives. The cost to us cannot be mitigated or avoided. I do not choose to live in fear of the oil trains destroying our lives. I do not choose to live with oil terminals. The Pacific Northwest is a treasure, and should be treated with respect, not contempt. Greenhouse gases need to be decreased, not increased. Please deny these and any other oil terminals proposed in the Pacific Northwest!

Response GP849-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action, including derailment of trains carrying crude oil. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion from train derailments. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions,

such as the time of year, water flows, and weather conditions, environmental impacts could be significant.

Final EIS Chapter 4 has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports.

Draft EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, addresses potential impacts on vehicle delay and emergency vehicle access. Final EIS Section 3.16 clarifies proposed mitigation and potential significant and unavoidable impacts.

The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, would reduce emissions of criteria and toxic air pollutants from onsite stationary sources. As described in Draft EIS Chapter 3, Section 3.2, *Air*, based on air quality modeling for conducted by the applicant, onsite emissions of toxic air pollutants related to routine operations of onsite stationary sources, including hydrogen sulfide, would be below the state thresholds identified in WAC 173-460-150. The Final EIS section reflects updated estimates based on a review of recently published Bakken crude oil data. These emissions are subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which would include enforceable requirements specifying emission limits, reporting, and record keeping for onsite stationary sources. Refer to the Draft EIS for a list of permit conditions and applicant mitigation that would reduce potential impacts on air quality. Rail and vessel operators are required to adhere to all applicable regulatory requirements intended to ensure the safe passage of freight.

GP850, **Woods, Keith**

Comment GP850-1

I strongly oppose shipping crude oil from the Port of Grays Harbor. The environmental risks on the rail line and facilities so close to places like the Gateway Mall, an active fishery, and the National Bird Sanctuary does not make sense and should not move forward. The threat to our estuary, beaches, fishery, shore birds, and the local economy is simply not worth the risks involved and certainly not to encourage the extraction and shipment of bakken crude or other fossil fuels. Bio diesel already shipped from our port presents too great of a risk already given the seismic nature of this area. Please deny permits to move forward with these projects.

Response GP850-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP851, **Woodward-Rice, Claudia**

Comment GP851-1

I would like to associate my comments with those of JB McCrummen, attached below. The DEISes as written are inadequate, should be rejected and/or re-written. Meanwhile permits should be voided and the projects cancelled.

Comments on Draft EIS for Proposed Oil Terminals in Grays Harbor County, Washington

FAILURE OF DRAFT EIS; CALL FOR REJECTION DRAFT EIS AS WELL AS PROPOSED EXPANSION

The Draft EIS on the expansion of bulk liquid storage terminals (petroleum, other flammable and/or toxic liquids by Westway Terminal Company LLC and Imperium Terminal Services and located at the Port of Grays Harbor Terminal 1 is filled with misleading as well as erroneous information, missing analyses, a lack of known analytical methodology for both draft EIS and final EIS documents, artificial "boundaries" that purposely limit comments or facts about the impacts of oil trains to just Grays Harbor county, and does not address macro environmental as well as economic impacts of the proposed expansions due to the fossil fuels.

Based on the above summary, it is clear from the Draft EIS that the preparing firm and its employees and consultants have a bias toward Westway and Imperium. The Draft EIS not only violates rules and regulations governing the preparation of both a draft and final EIS, but was completed by an unqualified firm, if not a firm influenced by Westway, Imperium, and other fossil fuel companies or trade associations.

Therefore, the entire Draft EIS must be rejected as faulty and therefore, the proposed expansion rejected.

If, instead Hoquiam and DOE decide not to reject the project, then a new Draft EIS must be completed and by a different professional, non-biased firm, at the expense of the proposing companies. Neither Westway nor Imperium can be involved in the selection of a different firm or in the preparation of the new Draft EIS.

Response GP851-1

The commenter does not provide sufficient details to allow for response. Refer to responses to more specific comments below.

Comment GP851-2

I am submitting additional comments to illustrate the appalling nature of the Draft EIS.

<u>Comment Section: Draft EIS- Westway & Imperium Proposed Bulk Liquid Storage Terminals</u>

As noted in my introductory comments, I am calling on the Department of Ecology and City of Hoquiam to reject both the Draft EIS and the proposed expansion of oil and other petroleum

products by Westway & Imperium. The Draft EIS does not meet the minimum legal standards of the required EIS nor does it meet the objectives outlined on the DOE Comment Web Page that states the Draft EIS must "identify existing environmental conditions, potential impacts on the environment and community, and mitigation measures to reduce or avoid the potential impacts."

The Draft EIS is prejudicial, non-responsive, and does not address analysis of critical impacts of the proposed expansion. As a result, the Draft EIS does not fully complete a Draft EIS, especially on critical strategies to avoid or mitigate environmental accidents or disasters, including:

OIL TRAINS AND TANK CARS

* The terminals would be fed by about sixteen loaded oil train deliveries every week (on average more than two per day) with more than 5 million gallons of oil daily (one barrel = 42 gallons) per day.

* The tank cars cannot be made crashworthy. Non-yard oil train derailment spills will occur, as outlined in recent studies focused on the Columbia River rail line. An oil spill would have significant and adverse impacts that cannot be prevented or mitigated. At best only 14% of the oil is recovered in a spill. Crude oil contains benzene which cannot be recovered from the water. The Draft EIS does not address this topic.

Response GP851-2

Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport,* presents the analysis of risk of oil spills, fires, and explosions related to rail transport related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Section 4.5.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident along the PS&P rail line. Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including a discussion of the potential longer-term impacts. Final EIS Section 4.3, *Risk Considerations,* reflects additional information about factors influencing cleanup.

Comment GP851-3

* The oil vapor pressure cannot be lowered enough to prevent ignition. When tank cars are punctured during a derailment, gases rush out and find a spark. Non-yard derailment spills usually lead to fire. Oil train fires are likely to cause burns, deaths, and property damage. Burns, deaths, and property damage are significant adverse impacts that cannot be prevented or mitigated. The Draft EIS does not address this topic.

Response GP851-3

Draft EIS Chapter 4, Section 4.5.2.2, *Fires or Explosions*, addresses potential risks related to fires or explosions associated with rail transport under the proposed action. Section 4.7, *Impacts on Resources*, describes potential impacts of fires and explosion.

Comment GP851-4

* Until all the tank cars have thermal jackets and high capacity pressure relief valves, tank cars sitting in a pool fire, are likely to explode. Firefighters cannot protect the public in those cases. Oil train explosions will be impossible to prevent for nearly a decade. The Draft EIS does not address this topic.

Response GP851-4

Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport,* discloses voluntary measures and design features, proposed applicant mitigation, and other measures that would further reduce environmental health and safety impacts from rail transport related to the proposed action, in addition to regulatory compliance and best practices. To the extent possible, within the framework outlined in the Master Response for Mitigation Framework, measures addressing the need for more coordinated and focused planning include the role of the applicant as appropriate. However, as noted, no risks can be eliminated and, depending on the circumstances, significant impacts could occur.

Comment GP851-5

* Oil trains block traffic. They interfere with commerce, emergency response and school buses. The adverse impacts will be significant. These impacts cannot be mitigated. The Draft EIS does not address this topic.

Response GP851-5

Draft EIS Chapter 3, Section 3.16, *Vehicle Traffic and Safety*, addresses potential impacts on vehicle delay and emergency vehicle access. Final EIS Section 3.16 clarifies proposed mitigation and potential significant and unavoidable impacts.

Comment GP851-6

IMPACT ON CLIMATE CHANGE & AIR POLLUTION

* When-not if-terminal containers of rail cars, due to vapor combustion, fail, there will be dramatic air pollution. The city of South Portland, Maine has banned the trans-loading of crude oil into marine vessels for that reason. Hydrogen sulfide first deadens the sense of smell, and then people and animals die. The Draft EIS does not address this topic.

Response GP851-6

The marine vapor combustion unit and the storage tanks' internal floating roofs, described in Chapter 2, *Proposed Action and Alternatives*, would reduce emissions of criteria and toxic air pollutants from onsite stationary sources.

As described in Draft EIS Chapter 3, Section 3.2, *Air*, emissions of toxic air pollutants related to routine operations of onsite stationary sources, including hydrogen sulfide, were modeled to be below the state thresholds identified in WAC 173-460-150. The Final EIS section reflects updated estimates based on a review of recently published Bakken crude oil data. These emissions are subject to compliance with an air permit issued by the Olympic Region Clean Air Agency, which

would include enforceable requirements specifying emission limits, reporting, and record keeping for onsite stationary sources. Refer to the Draft EIS for a list of permit conditions and applicant mitigation that would reduce potential impacts on air quality.

Comment GP851-7

* The proposed oil terminals will lead to a net increase of greenhouse gas emissions. The net global oil production could increase. This is additive. This is not simply replacing one oil source for another. The increases cannot be mitigated. The Draft EIS does not address this topic.

Response GP851-7

Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources and for information on the likely destinations of crude oil shipped through the proposed facilities.

Comment GP851-8

DRAMATIC IMPACT ON RIVERS, FORESTS, COMMUNITIES, AND GRAYS HARBOR

* Increased train traffic of at least 16 more oil trains per week. With increased oil trains there will be an increase in the risks of oil train derailments and oil spills into the Chehalis River, Grays Harbor, (and of course the Columbia, Snake, and other rivers "outside" of the artificial boundary of the Draft EIS) and local communities near the rail trains. The increases cannot be mitigated. The Draft EIS does not address this topic.

Response GP851-8

Refer to Response to Comment GP851-2.

Comment GP851-9

Lower property values- residential, commercial, forest, with increased human diseases. The Draft EIS does not provide a fair and balanced economic analysis (that is, an accepted methodology for economic impacts) of the proposed impacts on property values along the rail line, from oil spills, conversion of the Grays Harbor diversified economy to an "oil economy", increased pollution and the increased illness due to the oil pollution, nor the impact on human health and animal life along the rail line. The topics cannot be mitigated. The Draft EIS does not address this topic. The Draft EIS does not address this topic.

Response GP851-9

Final EIS Section 4.7, *Impacts on Resources*, has been revised to more fully describe potential human health impacts. Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values. Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP851-10

* The Cost of Emergency Preparedness in all rail communities. NTSB says emergency response planning along the rail routes is "practically nonexistent". The Draft EIS does not address this topic.

Response GP851-10

Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for additional information about the analysis of emergency planning and response capabilities in the study area. For more information about the analysis of potential impacts on the BNSF main line, refer to the Master Response for the Geographic Scope of the EIS.

Comment GP851-11

* Spill Cleanup delays. For example, it took decades for the spill to be cleaned up in the town of Skykomish, WA. The Draft EIS does not address this topic.

Response GP851-11

Final EIS Chapter 4, Section 4.7, *Impacts on Resources*, describes the general types of impacts on resources that would be expected as a result of an oil spill; the section has been revised to acknowledge the potential for more lasting impacts as the result of a spill.

Comment GP851-12

* Grays Harbor. A single major spill could devastate the area's maritime economy, productive fisheries, tribal treaty rights and spectacular coastal waters.

Response GP851-12

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including impacts on Grays Harbor. Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Comment GP851-13

The twelve mile long Grays Harbor shipping channel is narrow, shallow, subject to strong currents and has limited staging area for ships and tugs.

Response GP851-13

State-licensed pilots work with the U.S. Coast Guard to avoid any risks associated with vessel transits during periods of poor weather and/or sea state conditions. Refer to Final EIS Chapter 3, Section 3.17.4.4, *Vessel Traffic Management*.

Comment GP851-14

If both terminals were expanded, 638 tankers and barges of oil would need to twice traverse Grays Harbor every year for a minimum of 1276 trips per year. Of course, there could be more trips.

Response GP851-14

As described in Draft EIS Chapter 3, Section 3.17, *Vessel Traffic*, the proposed action would result in a maximum of 238 vessel transits under maximum throughput operations; half of these trips would be laden vessels. As described in Chapter 6, *Cumulative Impacts*, the cumulative projects—the proposed action, the REG (formerly Imperium Terminal Services) Expansion Project, and Grays Harbor Rail Terminal Project—would add 758 trips.

Comment GP851-15

There is no analysis of the possibility of future dredging the channel and the impact on wildlife, fisheries, and the disposal of the dredged materials.

Response GP851-15

The proposed action would not require dredging or deepening of the navigation channel to accommodate proposed vessel traffic.

Comment GP851-16

The Draft EIS analysis of the impact on the Chehalis River, particularly as it moves into the Grays Harbor, is completely faulty-since it does not use data from the Chehalis River and Grays Harbor.

Response GP851-16

Refer to the Master Response for Oil Spill Modeling Methods.

Comment GP851-17

The Draft EIS does not address these topics.

* Transition to Green Energy Economy – not included due to bias by Draft EIS Preparer(s)

Governor Inslee has signed an executive order to reduce carbon emissions in Washington. The proposed expansion would violate that Executive Order.

The Draft EIS purports to provide an economic analysis of the proposed expansion and the value to the local economy. This analysis is clearly bias toward fossil fuels and this expansion, without providing an objective economic analysis, including negative impacts of the proposed expansion and alternatives in the Green Economy-like manufacturing products for the conversion to green energy

resources. Of course, the State of Washington provides significant incentives for green economy employers-like for solar component manufacturing.

The Draft EIS does not address these topics.

SUMMARY

In summary, the above points are just a few of the inadequacies of the Draft EIS. They illustrate the unprofessional bias and misconduct of the preparers of the document including a bias toward fossil fuels and prejudice against local communities.

The Draft EIS must be rejected as must the proposed expansion. If DOE and Hoquiam don't reject the project on its face and based on the inadequacy of the Draft EIS, then a new Draft EIS by a different, professional and objective organization must be completed.

As Submitted by JB MCCRUMMEN, ROCHESTER, WA 98579 11/30/2015

Response GP851-17

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP852, **Woodward-Rice, Claudia (Coalition for Infrastructure)**

Comment GP852-1

The massive size of these DEISes combined with the frequent errors, omissions, and contradictions included, appear to be intended to intimidate and overwhelm the public. We will not be cowed into submission by this cynical tactic.

Response GP852-1

The commenter does not provide sufficient details to allow for a response.

Comment GP852-2

The proposed oil terminals in Grays Harbor would create drastic devaluation of real property along the rail route. In one recent study, done at the University of California at San Diego, it was concluded that for every 10 million gross tons per mile, you can expect a 1 percent drop in your property value. Using this standard formula and applying to Grays Harbor and the expected oil traffic, can we assume up to a 20 to 30 percent drop in value? Provided all three companies interested ramp up production, it may turn out to be much worse for homes or businesses within a half mile of the tracks. This is a "taking" of private property by private industry under the color of authority (Ecology)—so who will pay us for lost value? Proposed oil shipping terminals and the dirty, dangerous oil trains, storage tanks, tankers and barges that would come with them puts the health and safety of people, the local economy, and our ocean and coastlines at risk.

Response GP852-2

Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values.

Comment GP852-3

There is no way to mitigate the risks and dangers of these crude oil terminals. Grays Harbor communities would take on the risk, oil companies would reap the profits, and Grays Harbor would become a throughway for oil going elsewhere to places like California and even overseas. Westway and Imperium, two of three proposed oil terminals for Grays Harbor between Aberdeen and Hoquiam would have the combined capacity to handle nearly 127,000 barrels, or more than 5 million gallons of oil daily (one barrel = 42 gallons) per day. The terminals would be fed by about sixteen loaded oil train deliveries every week (on average more than two per day). Wrong place for oil terminals: Much of what makes Grays Harbor special would be at risk. The narrow, shallow shipping channel and strong currents put Grays Harbor at high risk of an oil spill. A single major spill could devastate the area's maritime economy, productive fisheries, tribal treaty rights and spectacular coastal waters.

- The Washington State Department of Fish and Wildlife stated "Grays Harbor is an area particularly sensitive to the adverse effects of oil spills."
- A major oil spill could devastate marine resource jobs which support more than 30% of Grays Harbor's workforce according to a 2013 study by the University of Washington.
- An economic study commissioned by the Quinault Indian Nation found that a major oil spill could put more than 150 tribal commercial fishermen out of a job, resulting in a direct loss of as much as $20 million in wages and up to $70 million in revenue for affected businesses.
- If built the two terminals together could store an astounding 72 million gallons of crude, or the equivalent of 2526 oil tank cars.

Response GP852-3

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP852-4

Grays Harbor sits in a major earthquake and tsunami zone. Geologists say the odds of a "big" Cascadia earthquake happening in the next 50 years are approximately one in three. The odds of the

"very big" one are roughly one in 10. • According to the U.S. Geological survey the overdue earthquake could produce waves from 20 feet to more than 100 feet high. We can expect that wall of water would topple storage tanks washing away all the oil which could possibly ignite.

Response GP852-4

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP852-5

Dirty and dangerous oil trains: The alarming safety record of oil trains means an explosive oil train derailment may be a question of when, not if. Less dramatic but equally concerning is the air pollution, spill risks, and traffic delays oil trains would bring to communities along the rail line from Hoquiam to Centralia and all the way to the oil source in North Dakota and Alberta, Canada.

Response GP852-5

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

Comment GP852-6

We are concerned that the DEIS as presented apparently recommends and believes that the staffing of 30.2 FTE employees with a tax-supported budget of $11,527,000 can solve and mitigate an endless litany of risks.

Response GP852-6

Refer to the Master Response for Purpose and Focus of the EIS.

GP853, **Young, Robert**

Comment GP853-1

Also consider the impacts on the climate of burning this oil somewhere on this planet.

Response GP853-1

Draft EIS Chapter 3, Section 3.2.5.2, *Proposed Action*, presents greenhouse gas emission estimates of onsite operations, offsite transport, and combustion of crude oil at maximum throughput capacity.

Comment GP853-2

Please consider the increased dangers of transporting highly flammable and toxic oils by rail and ship across Washington and the seas.

Response GP853-2

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action in the study area. Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

GP854, **Young, Saphronia**

Comment GP854-1

Both of these projects pose unacceptable environmental risks. Noise, vibration and traffic are serious enough to table each project, but the risks associated with spills are completely unacceptable. The risk of a spill reaching water has been rated "very low." I actually question that, given the proximity to the water. However, the environmental impacts when it does reach water are rated as extreme, which is undoubtable. For an old technology that pollutes the planet once in use, why are we willing to take such risks? Our marine environment in and around Washington state are already so fragile and at risk. I am completely against these projects, although aware that they would probably create some jobs. We need to create jobs in the green energy sector, not 19th century coal and oil dirty energy. We have a responsibility to our children and to the planet. Do not move forward with this project.

Response GP854-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP855, **Yun, Christine**

Comment GP855-1

I am opposed to the development of infrastructure that will require the transport of crude oil through a National Scenic Area. The transport of crude oil in railroad cars is not safe and the odds of having crude oil spills in this national treasure and in populated areas is too high a risk for the return on a source of energy that is not a viable long-term energy source. I oppose the development of both terminals.

Response GP855-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP856, **Zeigler, Bob**

Comment GP856-1

1102 A Creekwood Ct. SE Olympia, WA 98501 (360) 570-0848 ZeiglerBob@msn.com October 1, 2015 RE: Elma Public Hearing: Westway and Imperium crude oil-by-rail terminal EIS Dear Responsible Officials: I know you cannot make any permit decisions until all information is in and Impact Statements are final but I do hope you will explore all potential impacts especially secondary impacts of these proposed actions. SEPA Rules state: (d) A proposal's effects include direct and indirect impacts caused by a proposal. Impacts include those effects resulting from growth caused by a proposal, as well as the likelihood that the present proposal will serve as a precedent for future actions. For example, adoption of a zoning ordinance will encourage or tend to cause particular types of projects or extension of sewer lines would tend to encourage development in previously unsewered areas. (WAC 197-11-060, Content of environmental review (4) Impacts). The indirect or secondary potential impacts including increased risk of spill, accident and potential loss of life and public resources (water quality to fish and wildlife) to tribal resources occur from the point where trains are loaded with oil to the point of your permitted facilities. The fact that the previously developed site is enhanced for oil storage and transport sets in motion the movement of oil by rail from point of loading to the sites being proposed.

Response GP856-1

Draft EIS Chapter 5, Extended Rail and Vessel Transport, addresses potential impacts from rail and vessel transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Final EIS Chapter 5 further describes the potential risks associated with rail transport in this area.

Comment GP856-2

In addition to increased spill or accident the impact of facilitating increased emission of CO2 from consumption of these resources has cumulative impacts on the climate of our planet. Scientists tell us that to reduce risk of most severe climate consequences we need to leave 80% of the planet's fossil fuels in the ground. Pope Francis in his recent encyclical, Laudato Si, calls on all on the planet to drastically reduce carbon emissions and convert from the use of fossil fuels. This has become a major moral issue as well as one of science.

Response GP856-2

Comment acknowledged.

Comment GP856-3

I also urge you to check with your legal staffs to assess, in light of railroads incurring no legal risks, what potential legal risks do the City and the state of Washington incur if one or both of these facilities are permitted and a train has a serious accident for example in Hoquium or even in City of Spokane or Tri Cities? While the railroad does not, both the City and the State have the responsibility for public health, safety and welfare and SEPA responsibility for a safe and healthy environment. Should an accident occur as happened in Quebec where 47 lives were lost, who pays especially when so many concerns have been raised in the environmental review and permitting process? I will

provide additional comments on your draft EIS after my final review. Thank you very much, Bob Zeigler

Response GP856-3

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP857, **Zeigler, Bob**

Comment GP857-1

Department of Ecology and City of Hoquiam, RE: Westway and Imperium Oil Expansion Projects DEISs Your form provides insufficient space for comment. See attached documents for comment

Department of Ecology and City of Hoquiam,

RE: Westway and Imperium Oil Expansion Projects DEISs

Thank you for preparing a detailed Environmental Impact Statements for these two oil storage and shipment facilities and the opportunity for Public Comment.

State of Washington through Washington State Department of Ecology and City of Hoquiam as SEPA Leads are responsible for accurate presentation of direct, indirect and cumulative impacts of these proposals as well as mitigation measures to lessen impacts. The State and City are responsible for Public Health Safety and Welfare and protection of air quality, water quality, and public resources and human health through any permits that might be issued for these projects at completion of environmental review. Since the potential impacts from both projects are similar, I will offer one comment letter and submit it for both projects.

Since projects are on previously developed lands, greater potential for impacts are off-site and secondary in nature. They include potential risks of accident, spills, derailment that exists because of distance of volatile Bakken oil and/or jet fuel on rail line infrastructure that is aged, crosses waters and hydric soils and in areas that experience earthquakes. This is complicated by a limited rail oversight and federal enforcement and penalty action needed for significant risk reduction because of Congressional limitation on railroads.

Response GP857-1

Refer to the Master Response for Purpose and Focus of the EIS.

Comment GP857-2

Associated with these projects are the secondary impacts of discharge of greenhouse gases when oil and other projects are consumed. While the EISs explain carbon emissions associated with construction and even operation, they do not cover impacts of product consumption facilitated by these projects. These projects alone will facilitate oil consumption and make it more difficult to limit

gashouse gas emissions so temperatures are not raised above the 2 degree Centigrade levels. See Christophe McGlade and Paul Ekins, Nature, 517. Pp 187-190, January 8, 2015:

"Policy makers have generally agreed that the average global temperature rise caused by greenhouse gas emissions should not exceed 2 °C above the average global temperature of pre-industrial times1. It has been estimated that to have at least a 50 per cent chance of keeping warming below 2 °C throughout the twenty-first century, the cumulative carbon emissions between 2011 and 2050 need to be limited to around 1,100 gigatonnes of carbon dioxide (Gt CO2)2, 3. However, the greenhouse gas emissions contained in present estimates of global fossil fuel reserves are around three times higher than this2, 4, and so the unabated use of all current fossil fuel reserves is incompatible with a warming limit of 2 °C. Here we use a single integrated assessment model that contains estimates of the quantities, locations and nature of the world's oil, gas and coal reserves and resources, and which is shown to be consistent with a wide variety of modelling approaches with different assumptions5, to explore the implications of this emissions limit for fossil fuel production in different regions. Our results suggest that, globally, a third of oil reserves, half of gas reserves and over 80 per cent of current coal reserves should remain unused from 2010 to 2050 in order to meet the target of 2 °C. We show that development of resources in the Arctic and any increase in unconventional oil production are incommensurate with efforts to limit average global warming to 2 °C. Our results show that policy makers' instincts to exploit rapidly and completely their territorial fossil fuels are, in aggregate, inconsistent with their commitments to this temperature limit. Implementation of this policy commitment would also render unnecessary continued substantial expenditure on fossil fuel exploration, because any new discoveries could not lead to increased aggregate production".

Response GP857-2

Draft EIS Chapter 3, Section 3.2, *Air*, and Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, present estimates of greenhouse gas emissions from onsite operations, offsite transport within Washington State, and combustion of maximum annual throughput of crude oil related to the proposed action and cumulative projects, respectively, in the context of emission inventories and reduction goals. Final EIS Section 3.2 and Section 6.5.1.2 have been revised to include emissions from offsite transport from the likely source of crude oil to the furthest likely refinery destination. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

Comment GP857-3

There will be oil trains on the tracks that would not be there without these projects. There is very little railroad liability. For example in the West Virginia oil train explosion as recent Federal Railroad study has shown was the result of gross neglect of repair of cracked rails by the railroad company and the largest fine they could be assessed is $25,000. Does legal liability fall to the State of Washington or the City of Hoquiam if these projects are permitted and accident and explosion results as happened in Quebec and these trains are enroute because of these oil storage facilities in Hoquiam? Does any legal liability fall to the City and/or State that are charged with protection of public health safety and welfare?

Response GP857-3

Draft EIS Chapter 4, *Environmental Health and Safety*, Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents

for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP857-4

The following comments are on the two drafts:

DEIS WESTWAY EXPANSION PROJECT

Summary

The EIS accurately discusses potential direct impacts on critical public resources in the area. Bowerman Basin Grays Harbor National Wildlife Refuge which is of international significance to shorebirds on migration and Chehalis River Surge Plain Natural Area Preserve and eelgrass are critical areas.

It also accurately states: "The project site is located in an area that has the potential for moderate to severe earthquakes." Occurance of severe earthquakes are every 300 years and major event could happen at any time. At Elk River in some of the erosion on can find trees below salt marsh when soils collapsed in a major past event.

Response GP857-4

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP857-5

Your documents downplay the risk of spill or explosion but do point out: "A large oil spill, fire, or explosion would likely cause unavoidable and significant adverse environmental impacts. The likelihood of a large spill or related fire or explosion is relatively low; however, the potential for significant consequences to the environment and human health if such an incident were to occur is high. The specific impacts would vary based on the location, amount spilled, type of liquid, and weather conditions. No mitigation measures would completely eliminate the possibility of an incident, nor would they completely eliminate the adverse consequences of an incident. There have been a number of oil train explosions and derailments in the last two years and even the US Military has expressed concern. See Rachel Maddow Show 5/13/15 US Military Concerned About Oil Train Proximity to Missile Sites: http://www.msnbc.com/rachel-maddow-show/watch/oil-trains-alarmingly-near-nuclear-missiles-444408387996 Also (S-23, S-30 and P 4.5-3 and 4.4-4 and 4.5-16) Same comment.

The document accurately discusses the potential risk from increased frequency but again somewhat downplays this. Note not all the train derailments and explosions are the result of speed (Same comment for P 4.5-3 and 4.4-4.

"The increased number of rail trips and vessel trips related to the cumulative projects pose a greater potential for more frequent spills of bulk liquids relative to the proposed action alone. In general, fires or explosions occur as the result of some but not all oil spills. An incident is most likely to occur during transport when higher speeds provide enough energy to generate a spark. Because allowable train speeds along the PS&P rail line and vessel speeds in the harbor are low, the likelihood of a fire

or explosion during transport is reduced, although the potential for environmental harm if a fire occurred with or without an explosion could be quite severe."

Response GP857-5

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 to reduce the likelihood of a spill reaching the environment and the potential impacts if an incident occurs at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion. Refer to the Master Response for Risk Assessment Methods for more information about the data, assumptions, and methods used in the risk analysis. For more information about the development and implementation of mitigation measures, refer to the Master Response for Mitigation Framework.

Comment GP857-6

The document states: **"Cumulative Impacts** Because the cumulative projects, including the proposed action, would have unavoidable and significant adverse environmental impacts on noise, tribal resource, vehicle traffic, and environmental health and safety, the proposed action would contribute to unavoidable and significant adverse environmental cumulative impacts on these resources." Note also significant impacts to: water quality and public fish, wildlife and recreation **(S-35).**

Response GP857-6

The statement cited by the commenter refers to potential impacts from construction and routing operation of the proposed action. Potential unavoidable and significant impacts related to risk of an incident are described the *Environmental Health and Safety* subheading.

Comment GP857-7

Note your document states: "To reduce the risk of spills affecting high numbers of migratory birds during peak spring migration (typically 2 weeks), the applicant will coordinate with the City of Hoquiam to receive advance notice of the date for the annual Grays Harbor Shorebird Festival. The applicant will halt crude oil vessel loading operations for a period of 2 weeks each year overlapping with the event." (S-39) (Note a large spill a month or a year ahead of the arrival of shorebirds would have serious consequences for them if oil hits Bowerman Basin and surrounding areas and there are other resources impacted such a amphipods and food and structure for numerous estuarine and marine species.)

You state: However, a spill on an individual animal would be unlikely as the animal would have already cleared from the area due to human and equipment presence, and the spill would likely be small and would be contained and cleaned up quickly per operating and maintenance protocols for rail operations and maintenance spills." Is this really an accurate statement? Is that the experience is

past spills in extremely high value resource areas? What about impacts to amphipod Corophium salmonis, the tube dwellers so important as a food source there?

Response GP857-7

The cited text from Draft EIS Chapter 3, Section 3.5.5.2, *Proposed Action*, refers to potential impacts of routine operation of the proposed action. The potential for widespread environmental damage related to the risk of oil spills, fires, and explosions is addressed in Chapter 4, *Environmental Health and Safety.* Section 4.7*, Impacts on Resources*, describes the potential impacts, including impacts on invertebrates, such as amphipods. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant.

Comment GP857-8

IMPERIUM EIS

In general comments are the same as above. In addition to the proposed transport and storage of Bakken oil, other products such as jet fuel are no less volatile.

This document states: "A large oil spill, fire, or explosion would likely cause unavoidable and significant adverse environmental impacts. The likelihood of a large spill or related fire or explosion is relatively low; however, the potential for significant consequences to the environment and human health if such an incident were to occur is high. The specific impacts would vary based on the location, amount spilled, type of liquid, and weather conditions. No mitigation measures would completely eliminate the possibility of an incident, nor would they completely eliminate the adverse consequences of an incident." And "Spill prevention, preparedness, and response requirements are intended to reduce the likelihood of a spill at the project site and the resulting environmental damage. Implementation of mitigation (Table S-1) would further reduce the risks associated with spills at the project site. Although the overall risks would be low, if a spill occurred, the potential environmental damage would be significant. These risks would remain even with implementation of mitigation". **(S-20 and S-21)**

As stated above: Your documents downplay the risk of spill or explosion There have been a number of oil train explosions and derailments in the last two years and even the US Military has expressed concern.

Response GP857-8

Comment is specific to the REG (formerly Imperium Terminal Services) Expansion Project and would be addressed in responses to comments as part of the Final EIS for that proposed project.

Comment GP857-9

You accurately state: "Additionally, Grays Harbor and the Chehalis River provide habitat for numerous sensitive and unique plant and animal species. The area also provides important commercial and recreational opportunities, including fishing and shellfish growing, and cultural, historical, and tribal resources. Potential impacts from oil spills, fires, or explosions are summarized by resource in Table S-3. **(S-25)**"

Response GP857-9

Comment acknowledged.

Comment GP857-10

Your document states: "Because allowable train speeds along the PS&P rail line and vessel speeds in the harbor are low, the likelihood of a fire or explosion during transport is reduced, although the potential for environmental harm if a fire occurred with or without an explosion could be quite severe (S-30)." Not all oil train accident or explosions are related to train speed. Also for similar comment on **4.5-10.**

Response GP857-10

Draft EIS Chapter 4, Section 4.5, *Environmental Health Risks—Rail Transport*, describes different scenarios under which a train can derail, including human error, equipment failure, and track issues.

Refer to the Master Response for Risk Assessment Methods for additional information about the approach, assumptions, and sources of data used in the risk assessment.

Comment GP857-11

Your document states: Voluntary measure: To reduce the risk of spills affecting high numbers of migratory birds during peak spring migration (typically 2 weeks), the applicant will coordinate with the City of Hoquiam to receive advance notice of the date for the annual Grays Harbor Shorebird Festival. The applicant will halt crude oil vessel loading operations for a period of 2 weeks each year overlapping with the event. **(S-40)." Any large spill beyond that narrow window would have significant impact on shorebirds through their food source at this site. Long term impacts at the refuge would occur.**

Thank you for the opportunity to comment through public hearing and EIS review.

Sincerely,

Bob Zeigler
1102 A Creekwood Ct. SE
Olympia, WA 98501
ZeiglerBob@msn.com
(360) 570-0848

[Attachment: Accident Findings Report.]

Response GP857-11

Although ceasing vessel-loading operations for 2 weeks during the Grays Harbor Shorebird Festival would reduce risks related to oil spills that could affect migratory birds during this migratory season as well as other species in the area, the Final EIS clarifies that the applicant's primary intent in committing to this voluntary measure is to recognize the importance of the annual Grays Harbor Shorebird Festival to the community and those attending the festival and to eliminate the chance of a spill from vessel-loading operations during this time. The measure has been moved to Final EIS Chapter 3, Section 3.10, *Recreation*, to reflect this clarification. Potential impacts on resources in the event of a spill, fire, or explosion are addressed in Chapter 4, Section 4.7 Impacts on Resources. Final

EIS Section 4.7 has been revised to indicate that the mechanisms for potential adverse impacts also include secondary impacts on shorebirds from loss of food sources. Chapter 4, *Environmental Health and Safety*, acknowledges (in multiple sections) that oils spills are not completely preventable even with the regulatory requirements and mitigation measures that would reduce the risk of an oil spill; Chapter 4 further states that that the potential impacts from an oil spill could be significant.

All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP858, **Zeigler, Bob**

Comment GP858-1

Thank you for the opportunity to comment. My name is Bob Zeigler, I live in Olympia, Washington.

And I'm here because of the potential impacts of the proposals of public resources. There is -- you have in this area natural resources of international significance; the shorebirds, the Bakken Basin, as well as your fishery resources and other resources.

There's -- I want to talk a little bit about the secondary effects of these proposals, and those are, there's potential impacts. The climate change was of great concern from those comments made earlier. Also, impacts that can occur anywhere for where these trains are loaded with oil all the way to Hoquiam. And I hope that can be explored, because I wonder what the potential risks are for the state and for the city if they permit the facility that is the reason the train is on the tracks that has a spill or accident, would pays? The railroads don't pay. They're legally exempt. But what liability falls to the City and to the State? Thank you.

Response GP858-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP859, **Zeigler, Bob**

Comment GP859-1

1102 A Creekwood Ct. SE Olympia, WA 98501 (360) 570-0848 ZeiglerBob@msn.com

RECEIVED OCT 1 2015

October 1, 2015

RE: Elma Public Hearing: Westway and lmperium crude oil-by-rail terminal EIS

Dear Responsible Officials:

I know you cannot make any permit decisions until all information is in and Impact Statements are final but I do hope you will explore all potential impacts especially secondary impacts of these proposed actions.

SEPA Rules state:

(d) A proposal's effects include direct and indirect impacts caused by a proposal. Impacts include those effects resulting from growth caused by a proposal, as well as the likelihood that the present proposal will serve as a precedent for future actions. For example, adoption of a zoning ordinance will encourage or tend to cause particular types of projects or extension of sewer lines would tend to encourage development in previously unsewered areas. (WAC 197-11-060, Content of environmental review (4) Impacts).

The indirect or secondary potential impacts including increased risk of spill, accident and potential loss of life and public resources (water quality to fish and wildlife) to tribal resources occur from the point where trains are loaded with oil to the point of your permitted facilities. The fact that the previously developed site is enhanced for oil storage and transport sets in motion the movement of oil by rail from point of loading to the sites being proposed.

In addition to increased spill or accident the impact of facilitating increased emission of C02 from consumption of these resources has cumulative impacts on the climate of our planet. Scientists tell us that to reduce risk of most severe climate consequences we need to leave 80% of the planet's fossil fuels in the ground. Pope Francis in his recent encyclical, Laudato Si, calls on all on the planet to drastically reduce carbon emissions and convert from the use of fossil fuels. This has become a major moral issue as well as one of science.

I also urge you to check with your legal staffs to assess, in light of railroads incurring no legal risks, what potential legal risks do the City and the state of Washington incur if one or both of these facilities are permitted and a train has a serious accident for example in Hoquium or even in City of Spokane or Tri Cities? While the railroad does not, both the City and the State have the responsibility for public health, safety and welfare and SEPA responsibility for a safe and healthy environment. Should an accident occur as happened in Quebec where 47 lives were lost, who pays especially when so many concerns have been raised in the environmental review and permitting process?

I will provide additional comments on your draft EIS after my final review. Thank you very much,

Bob Zeigler

Response GP859-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP860, **Zeller, Nick**

Comment GP860-1

Transporting highly volatile oil by rail through the communities of the columbia gorge is dangerous, and risky. I was a TV news photographer 28 years for KGW-TV and been to many derailments in the gorge and have seen the damage they have caused to the river and environment. An oil train disaster could wipe out much of my town as the rails run right through the community. Oil for export

shouldn't traverse the unique Columbia Gorge, there is just too much at stake, from human lives to salmon and sturgeon. These proposals should not be approved. We all must stop adding carbon to the environment, allowing oil trains to despoil the gorge for profit must not be allowed.

Response GP860-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

Based on the Crude Oil Market Analysis, presented as Final EIS Appendix Q, despite the lifting of the Energy Policy and Conservation Act of 1975 banning the export of crude oil from the United States, West Coast refineries remain the most likely destination for crude oil transloaded under the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion.

GP861, **Ziggy**

Comment GP861-1

My name is Ziggy, I'm from Spokane and Spokane County. I had to work last night so I had to drive all through the night, haven't slept since nine o'clock yesterday morning so I could be here, because you don't seem to include the fact that these things affect my city, too. Every one of these trains comes through Spokane.

And if of them has an accident and blows up, that's my friends that are going to die. And the only way I would support this thing is if the four of you want to take criminal responsibility for those people that might die because you approve this.

I'm totally against this, I will be at every hearing you have, and I will never stop opposing this and I will do anything I can to stop it.

Response GP861-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP862, **Ziggy**

Comment GP862-1

Hello, my name is Ziggy. I live in Spokane. I'm here today to speak on behalf of my numerous friends in the Spokane area and in Idaho. I've been involved in the coal transportation, Spokane area from the very beginning.

It involves citizens and residents on the eastern side of the state only because of these issues possibly expanding the oil through Hoquiam to Grays Harbor.

All of those trains to Grays Harbor come through the Spokane area. We don't have a facility or a refinery. Even if an explosion doesn't happen, there would be no benefit to our town. Those of us fellow Washingtonians that don't live in Grays Harbor want you to know we do not benefit from these facilities, nothing. Instead we risk spills in our river, devastating fires, threat of our economic vitality, life and health of our citizens and our environment.

We are making decisions for thousands of people along the rail lines. It's not just about Grays Harbor. It's the whole Northwest. We all live together as a team in this world. Using baseball as an analogy, you get three strikes before being out. With these proposals, all the hundreds of towns on the rail line, including where I live, get one strike and we are done, end of play, end of game, perhaps the end of our towns.

It is clear from the DEIS there is no way to mitigate the risk and danger from these crude oil terminals. Department of Ecology and the City of Hoquiam must deny these permits.

Response GP862-1

Refer to Response to Comment GP862-1.

GP863, **Zimmer, Doug**

Comment GP863-1

Hi. My name is Doug Zimmer. I have lived in Aberdeen, Grays Harbor County, since 1986. I am retired from the U.S. Fish and Wildlife Service and the Washington Department of Wildlife. I have worked on over a dozen oil spills during my career, beginning with the Nestucca in 1988 and finishing with the Deepwater Horizon. I know something about spills. I also know something about DEISs, and I am not impressed with this one.

When I reviewed the wildlife section I was disappointed. The section on terrestrial wildlife lists species that do not exist here and ignores others that do. The section on marine mammals failed to cite easily available current professional sources and appears to have been sourced from Wikipedia or a 30-year-old nature guide.

Response GP863-1

The Washington Department of Fish and Wildlife (WDFW) Priority Habitat and Species database was used as one of the primary data sources for describing animals in the study area because it provides comprehensive information on important fish, wildlife, and habitat resources in Washington and is the principal means by which WDFW provides wildlife and habitat information to

public and private entities for planning purposes. The U.S. Fish and Wildlife Service and National Marine Fisheries Service lists of federally listed species were also reviewed.

Comment GP863-2

It restricts the area of investigation to a three-mile arc around the harbor mouth, but anyone who remembers the Nestucca spill, which happened in the mouth of the harbor, knows that it oiled beaches and killed animals from Oregon to Neah Bay.

Response GP863-2

Refer to the Master Response for Oil Spill Modeling for information about the approach, assumptions, and limitations of the oil spill modeling in Draft EIS Appendix N, *Oil Spill Modeling*.

Comment GP863-3

The DEIS calls the effects of contaminant release short-term and temporary. Grays Harbor is a soft-sided estuary fed by tidally-influenced rivers that back-flush for miles. Oil released in such an area is impossible to remove and persistent over decades or centuries. These may be short term in geologic time, they are not in human or wildlife terms. The effects of spilled oil are not temporary, they are chronic and persistent.

Response GP863-3

Final EIS Chapter 4, Section 4.7, *Impacts on Resources*, describes the general types of impacts on resources that would be expected as a result of an oil spill; the section has been revised to acknowledge the potential for more lasting impacts as the result of a spill.

Comment GP863-4

The DEIS says that there will likely be no unavoidable or significant adverse impacts to wildlife. The effects of a major oil spill are always unavoidable and always significant. There is currently no entity in Washington capable of effectively handling the catastrophic release from a train derailment, tank failure, or vessel accident. And I say that from experience and knowing the programs.

Response GP863-4

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 to reduce the likelihood of a spill reaching the environment and the potential impacts if an incident occurs at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including wildlife. Refer to the Master Response for Mitigation Framework for more information about the development, implementation, and enforcement of mitigation measures.

Comment GP863-5

Putting facilities like these on fill, in an earthquake and tsunami zone, subject to the effects of storm, wind, and wave, is irresponsible. It will inevitably result in a catastrophic release. It's not if, it's when. And not one of the responsible parties is prepared to handle that.

That's fine. Here's my written statement. thank you.

Response GP863-5

Draft EIS Chapter 3, Section 3.1.4.3, *Geological Hazards*, describes geologic conditions that could affect the project site, including earthquake and earthquake-related hazards such as tsunami and liquefaction. Section 3.1.5.2, *Proposed Action*, *Operations, Earthquakes and Related Hazards*, describes the potential impacts on the proposed facilities in the event of an earthquake. Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to these events.

GP864, **Zimmer, Doug**

Comment GP864-1

Comments on the proposed lmperium Expansion Project in Grays Harbor

Section 3.5 Animals

Doug ZimmerRECEIVED OCT 1 2015 2017 West 6th Street Aberdeen, WA 98520 October 1, 2015

3.5 -1 oct 1 2015

Study area: The study area does not cover the area nor the animals that would be affected by an accidental release of oil or other toxics from the Westway site. It currently covers only a small footprint, yet the materials stored on site or transported to it have the potential for a catastrophic release. The study area should include all the marine waters of Washington and Oregon and all the tidally-influenced waters of the Grays Harbor estuary. During the 1988 Nestucca spill cleanup oil from the accident, which occurred in the mouth of Grays Harbor was found more than 50 miles at sea and on beaches from Oregon to Neah Bay. That was only a partial release (231,000 gallons) from a barge. This project proposes annual passage of hundreds of vessels many times larger. The current study area is woefully inadequate to the risk. Although State jurisdiction extends only three miles from the shore, there are hundreds of miles of shoreline at risk. Consideration must also be given to the State's potential liability in the event of a release within the State's jurisdiction which then extends into Oregon or Federal waters and affects Oregon or Federally-protected species.

Response GP864-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. Final EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms and has been updated to provide additional information about economic and social costs of oil spills.

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapters 5 and 6, *Cumulative Impacts*, reflect additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action.

Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7 would also apply to the extended study area.

For more information about the analysis of risks associated with potential oil spills, fires, and explosions, refer to the Master Response for Environmental Health and Safety Analysis and the Master Response for Risk Assessment Methods.

Comment GP864-2

3.5 -4 This section lists mule deer as local residents. The local resident deer are Columbian black-tailed deer. Although they are a sub-species of mule deer, they use significantly different habitat and citing them as mule deer is both a taxonomic error and would lead to habitat misidentification. The nearest mule deer are east of the Cascades Mountains, over 100 miles away. This is an indicator of incomplete species presence identification.

Response GP864-2

Final EIS Chapter 3, Section 3.5, *Animals*, removes the mule deer reference. The reference to Columbia black-tailed deer has been retained.

Comment GP864-3

3.5 -6 Correspondingly, there is no mention of elk as present in the study area. Roosevelt elk are common around the harbor perimeter. On 9/29/15 I watched 17 head of Roosevelt elk grazing in the Bishop Recreational Center in direct line of sight from the Westway and lmperium project sites. Their habitat would be effected by any large toxic release. This is an indicator of incomplete species presence identification.

Response GP864-3

Elk are mentioned in Section, 3.5.4.3, *Grays Harbor*, *Washington State Department of Natural Resources Marine Protected Areas,* as being present in the study area, specifically around the North Bay Natural Area Preserve and the Elk River Natural Resources Conservation Area.

Comment GP864-4

3.5 -10 There is no mention of summer-run steelhead in the Wynoochee River. Summer-runs are present and would be affected by a rail-based spill. I have seen them caught by sportsmen almost directly below the current rail bridge. This is an indicator of incomplete species presence identification.

Response GP864-4

Draft EIS Chapter 3, Section 3.5.4.2, *PS&P Rail Line*, *Aquatic Habitats*, recognizes the 26 salmon-bearing streams, including the Wynoochee River, that are crossed by the PS&P rail line in the study area. In addition, Appendix F, *Special-Status Species*, lists all special-status species in the study area, including steelhead trout, that could be affected by the proposed action.

Comment GP864-5

3.5 -14 The section cites a harvest of 9,247 pounds of Dungeness crab in 2013-14 then notes that the average harvest is 91,372 pounds. This was either the worst crab harvest in living memory, a significant error in reporting, or a typo missed by the editors. In any case it speaks to the credibility of the overall document - or lack thereof.

Response GP864-5

The Dungeness crab harvest for 2013–14 and average annual harvest between 1997 and 2014 identified in Draft EIS Chapter 3, Section, 3.5.4.3, *Grays Harbor*, *Aquatic Habitat, Invertabrates,* accurately reflect the Washington Department of Fish and Wildlife data cited.

Comment GP864-6

3.5 -15 The depiction of the potential presence of sea turtles as highly unlikely is inaccurate. Sea turtles, all species listed under the Federal Endangered Species Act, regularly strand at Ocean Shores, Westport and other area beaches. I have personally participated in several stranding recoveries of both live and dead green and loggerhead sea turtles from area beaches. Although not common, sea turtles occur in the area frequently enough to warrant consideration regarding both vessel strikes and contaminants release. Particularly if the study area is expanded.

Response GP864-6

Final EIS Section 3.5, *Animals*, reflects additional information to justify the statement that sea turtles in the study area would be rare. Potential oil spill impacts on sea turtles are discussed in Final EIS Chapter 4, Section 4.7, *Impacts on Resources*. Because sea turtles are rare in the study area, potential strikes on sea turtles from vessels associated with the proposed action would be unlikely.

Comment GP864-7

3.5-21 The DEIS characterizes the effects of contaminants reaching a surface water body as short-term and temporary. The bottom and sides of the Grays Harbor estuary are soft soils - essentially mud - and the tidally-influenced rivers that feed the Harbor backflush for tens of miles in each tide cycle. The effects of toxic release in such areas are not short-term, nor are they temporary: rather they are chronic and persistent. Please review the effects of similar releases into coastal estuaries during the Deepwater Horizon event for examples. Any toxics spilled into Grays Harbor water bodies are likely to be detectable and toxic for decades.

Response GP864-7

Draft EIS Chapter 3, *Affected Environment, Impacts, and Mitigation*, addresses the impacts associated with routine operations, including the potential for minor spills and leaks. As noted in Section 3.3, *Water*, the potential for impacts associated with incidental spills would most likely be minimized by containment features and best management practices. The potential for widespread environmental damage related to the risk of oil spills, fires, and explosions is addressed in Chapter 4, *Environmental Health and Safety*. As noted in Chapter 4, spill scenarios include the release of up to a specified volume of oil, meaning that smaller spill volumes are included in the assessment of risks. Mitigation measures to address potential impacts from the increased risk of oil spills, fires, or explosions are presented in Chapter 4 and, as noted, would help to reduce potential impacts on the environmental resources in the study area. However, as noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP864-8

3.5 - 28 The section on vessel strikes greatly underestimates the potential for, and effect of, vessel strikes on marine mammals, specifically whales, both within Grays Harbor and in areas immediately surrounding and just outside the harbor mouth.

Oleson, E.M., J. Calambokidis, E. Falcone, G. Schorr, and J .A. Hildebrand. 2009 Acoustic and visual monitoring of cetaceans along the outer Washington Coast. Technical Report for grant N0002407WX12527. Report # NPS-OC-09-001 issued by Naval Postgraduate School, Monterey, California. 45 pp. cites sightings of both humpback and gray whales within Grays Harbor and immediately adjacent to the mouth of the Harbor. Sightings of harbor porpoise in the area are almost too numerous to plot. The sightings plotted on their maps are within the shipping lanes that would be used by the additional hundreds of vessels entering and exiting the harbor to utilize the lmperium and Westway facilities. This will greatly increase the probability of vessel strikes. Vessel strikes are known to cause significant levels of mortalities in both whales and porpoises yet the only mention of strike effects in the DEIS are four strikes in which the animals survived. That is akin to citing NFL sacks in which the quarterback did not get knocked down. It happens but not very often and the damage inflicted is often still significant. “Somewhat greater” is not an accurate description of the chances of vessels strikes imposed by the addition of hundreds of vessel trip per year through an area frequented by dozens, perhaps hundreds, of whales and other marine mammals.

As regards the project area, I have personally seen whales in the Chehalis River as far upstream as Cosmopolis. This means those animals swam right past both the lmperium and Westway project sites. These sightings, while infrequent, are not unknown and could happen again any time. Several have been reported in the Aberdeen Daily World. Checking with area sport and tribal commercial fishermen will confirm my report. I have heard several members of each group refer to "whales in the river."

Response GP864-8

Final EIS Chapter 3, Section 3.5.4.3, *Grays Harbor,* clarifies whale and other marine mammal use of Grays Harbor and provides additional information on gray whales, humpback whales, and killer whales. Draft EIS Section 3.5.5.2, *Proposed Action*, addresses potential vessel collisions with marine mammals. Final EIS Section 3.5.5.2 clarifies that marine mammals that are more common in Grays Harbor and nearshore coastal waters would be at a higher risk from vessel strikes. However, the potential for vessel strikes in the study area would be only slightly greater compared with the no-action alternative.

Comment GP864-9

3.5 - 31The proponents propose to mitigate the effect of possible oil spills on shorebirds utilizing Bowerman Basin by halting crude-oil vessel loading for two weeks surrounding the annual shorebird festival. This is clearly palliative rather than protective - the migration period lasts several months and the shorebird festival is based not on peak bird use but on tides that make for convenient viewing. I don't know whether this proposal is as cynical as it seems or merely ignorant of the real situation but it is not a realistic mitigation factor: any spill that happens in the other 50 weeks will ensure that birds visiting Bowerman during those two "off" weeks do not have a healthy stay.

Response GP864-9

Although ceasing vessel-loading operations for 2 weeks during the Grays Harbor Shorebird Festival would reduce risks related to oil spills that could affect migratory birds during this migratory season as well as other species in the area, the Final EIS clarifies that the applicant's primary intent in committing to this voluntary measure is to recognize the importance of the annual Grays Harbor Shorebird Festival to the community and those attending the festival and to eliminate the chance of a spill from vessel-loading operations during this time. The measure has been moved to Final EIS Chapter 3, Section 3.10, *Recreation*, to reflect this clarification.

Comment GP864-10

3.5-31 .8 The statement of "no unavoidable and significant adverse effects" is nonsensical given the likelihood of vessel strike imposed by the great increase in vessel trip through a harbor and estuary crowded with multiple species of marine mammals. Even if you discount the harm and take caused by the periodic release of toxic petroleum products the finding is simply not accurate. There is no way it could pas a serious "red face" test among knowledgeable oil spill professionals. It shouldn't be in this DEIS.

Response GP864-10

Final EIS Chapter 3, Section 3.5, *Animals*, reflects additional information to address marine mammal use of Grays Harbor. The vessel impact mechanisms described in Section 3.5 remain the same, but the Final EIS section clarifies that marine mammals that are more common in Grays Harbor and nearshore coastal waters would be at a greater risk from vessel strikes. As described in Section 3.5, the likelihood of vessel strikes and the potential for population-level impacts be low; therefore, potential impacts are not considered significant.

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. Draft EIS Chapter 6, *Cumulative Impacts*, presents the analysis of risk of oil spills, fires, and explosions under cumulative conditions. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including impacts on marine mammals.

Comment GP864-11

4.7.1.3 Animals

4.7 -5 Animals that need to be listed and considered in this section but are not include common murres, the most numerous bird species oiled by the 1988 Nestucca oil spill at the mouth of Grays Harbor, and sea otters, which have been colonizing southward from Cape Elizabeth as far as northern Oregon. There are several sighting reports within Grays Harbor, mostly in the north bay (pers Comm Deanna Lynch, USFWS, 9/29/15). I have had anecdotal reports of sea otters as far up the Chehalis as the turning basin adjacent to Bayview Redi-mix but these are undocumented. Still, given the rapid expansion and southward spread of Washington's sea otters and their extreme vulnerability to oil spills, consideration should be given to their presence.

Response GP864-11

Draft EIS Chapter 3, Section 3.5, *Animals,* focuses on rare, threatened, or endangered species (listed in Draft EIS Appendix F, *Special-Status Species*) and conservatively assumes that these species are or could be present in the study area at any given time. Section 3.5 refers to other species in general terms. The risk of impacts on special-status species would be greater than all other species because of their sensitivity, but impact types and mechanisms would be the same for other species.

The sea otter is listed as one of the special-status species in Appendix F, *Special-Status Species*, which supports Section 3.5. Based on Washington Department of Fish and Wildlife's sea otter recovery plan, sea otters are rare near Grays Harbor. While they were historically found in waters off of Grays Harbor, their current distribution is concentrated almost exclusively on rocky habitat along the Olympic Peninsula Coast and western Strait of Juan de Fuca. However, the impact mechanisms considered in the analysis of impacts from construction and routine operation (Section 3.5) and from oil spills, fires, or explosions (Chapter 4, Section 4.7, *Impacts on Resources*) are relevant to all species.

Comment GP864-12

6.1 Cumulative impacts

6-1, 6.2 The cumulative impacts section does not address the cumulative impacts of potential vessel strikes on marine mammals despite the addition of an estimated 400 vessel trips per year for the proposed lmperium expansion and 238 additional vessel trips for the proposed Westway Expansion Project. This is an increase of two and a half times as many vessel trips through an area heavily utilized by multiple species of marine mammals, several of them ESA-listed species. Impacts to these protected species could result in additional restrictions being imposed on already-present marine-related industries. This needs to be considered in the cumulative effects analysis.

Response GP864-12

In general, the scope of the cumulative impacts analysis is limited to those resources on which the proposed action could have significant impacts in combination with other past, present, and reasonably foreseeable and similar future actions, based on the analyses in Chapter 3, *Affected Environment, Impacts, and Mitigation*, and Chapter 4, *Environmental Health and Safety*. As described in Draft EIS Chapter 3, Section 3.1.5.2, *Proposed Action*, proposed action vessel trips would result in a small, incremental increase in the potential for impacts associated with wake compared with the no-action alternative. Therefore, the potential for increased vessel strikes is not included in the cumulative analysis.

GP865, **Zimmerman, Robert**

Comment GP865-1

I am strongly opposed to the development of facilities that would allow for an increase in the transportation of bulk oil through the Columbia Gorge. The risk of accident is too high. Please consider the impact of these projects on both the people and the environment of this special place -- and not just the financial gain to be obtained by the businesses involved.

Response GP865-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP866, **Zora, Craig**

Comment GP866-1

November 23, 2015

Westway and Imperium Expansion Projects EIS
c/o ICF International
710 Second Avenue, Suite 550
Seattle, WA 98104

SUBJECT: **Westway and Imperium Crude Oil-by-Rail Terminal EIS**

The draft environmental reviews found that the risks of oil spills during rail transport, at the terminal site, and during marine vessel transport through Grays Harbor cannot be **fully mitigated**, and that if a spill occurred, the environmental damage would be **significant**.

Twenty-five years after the infamous Exxon Valdez oil spill in Prince William Sound, beaches on the Alaska Peninsula hundreds of kilometers from the incident still harbor small hidden pockets of surprisingly unchanged oil, according to new research (American Geophysical Union 2014).

Incidental Leaks and Spills There will be small spills throughout the oil transportation process. Pacific herring (*Clupea pallasii*) spawn in eelgrass in Grays Harbor. Federal scientists based in Seattle and Alaska have found that oil — by impairing heart functions — can cause serious harm to herring and salmon at far lower concentrations than previously documented (Incardona et al. 2015). How will impacts from chronic exposure to small oil spills be identified and monitored? Who will fund the comprehensive baseline sampling, testing, and monitoring? Discuss in the Final Environmental Impact Statement (FEIS) how an environmental baseline will be established and changes will be detected. How will these impacts be mitigated and will an GIS-based tool be created for the public to easily view all environmental assessments?

Response GP866-1

Chronic exposure to oil (regardless of spill size) is addressed in Draft EIS Section 4.7, *Impacts on Resources,* and summarized in Draft EIS Table 4.7-1, *Chemical Properties and Mechanisms of Impact on Plants and Animals*. Any oil spilled in the aquatic environment during its transport would need to be cleaned up per federal and state regulations regardless of spill size. As stated in Section 4.7, the extent of the damage would depend on various factors (e.g. location of spill, environment affected, weather, material spill). Any testing, monitoring, or mitigation of the spill's impact on the environment would be determined at the time of the spill and cleanup in consultation with federal and state agencies. Any environmental assessments of the spill and cleanup efforts and public availability of those assessments (in whatever form they may be in) would be determined by the resource agency at the time of the spill event and cleanup. Refer to the Master Response for Environmental Health and Safety Analysis for additional information.

Comment GP866-2

Listed salmon species Poor coho (*Oncorhynchus kisutch*) survival continues to have a devastating effect on the stocks and our fisheries. Coho restrictions have already been in effect in Puget Sound, Grays Harbor, Willapa Bay, and the Columbia Basin. This action was necessary to protect wild coho that appear to be arriving at approximately half the number needed to meet 2015 escapement goals.

When the Coho salmon is eventually listed what extra precautions will Westway, Imperium, the railroad, and the shippers take to minimize impacts to a listed species. As environmental conditions in the ocean change (Fig. 1 and 2) other salmon species will be affected. How will impacts be minimized as the earth's climate changes (see indicator list below)? Has any modeling been done? All these concerns need to be examined in the FEIS.

Fig. 1 NOAA Fisheries

http://www.nwfsc.noaa.gov/research/divisions/fe/estuarine/oeip/g-forecast.cfm?utm_source=January+2014+Newsletter&utm_campaign=Jan+2014+Newsletter&utm_medium=email

[See original attachment for Fig. 1, Coho and Chinook 2015 outlook based on large-scale ocean and atmospheric indicators, local and regional physical indicators, and local biological indicators]

Western Washington's "maritime" summer climate becomes today's interior Columbian Basin. The interior Columbian Basin becomes today's Central Valley.

[See original attachment for Fig. 2, Salmon and Ecosystems: August Mean Surface Air Temperature and Maximum Stream Temperature]

Response GP866-2

Refer to Final EIS Chapter 3, Section 3.2.7.1, *Applicant Mitigation*, for proposed mitigation measures for air quality and greenhouse gas impacts. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for additional information about the analysis of greenhouse gas emissions. For more information about the development, implementation, and enforcement of mitigation measures, refer to the Master Response for Mitigation Framework.

Comment GP866-3

3.5-27 Vessel Strikes *Collisions with ships are one of the primary threats to marine mammals, particularly large whales, along the U.S. west coast, and around the world. Related to the proposed action, the greatest potential for vessel strikes to occur would be in the shipping lanes, which are located outside of state waters (farther than 3 nautical miles from the coast). This is because large mammals, like whales, typically migrate and forage in deeper waters and are not likely to enter the harbor.*

How often do Gray whales enter the harbor to forage on ghost shrimp (*Neotrypaea californiensis*)? There are early accounts (1903) of Gray whales making their way to the Wishkah River. I recommend marine mammal observers (using passive acoustic monitoring at night) be deployed on all vessels during migration windows to minimize the risk of marine mammal collisions (Weinrich et al. 2009). In the FEIS discuss in detail how collisions with all marine mammals will be avoided.

Response GP866-3

Final EIS Chapter 3, Section 3.5.4.3, *Grays Harbor,* clarifies whale use of Grays Harbor and provides additional information on gray whales, humpback whales, and killer whales. Draft EIS Section 3.5.5.2, *Proposed Action*, addresses potential vessel collisions with marine mammals. Final EIS Section 3.5.5.2 clarifies that marine mammals that are more common in Grays Harbor and nearshore coastal waters would be at a higher risk from vessel strikes. However, the potential for vessel strikes in the study area would be only slightly greater compared with the no-action alternative. Refer to the Master Response for Mitigation Framework.

Comment GP866-4

3.5-30 Voluntary Measures and Design Features *The following voluntary measures and design features would reduce impacts on animals. To reduce the risk of spills affecting migratory birds during peak spring migration (typically 2 weeks), the applicant will coordinate with the City of Hoquiam to receive advance notice of the date for the annual Grays Harbor Shorebird Festival and will halt crude oil vessel-loading operations for a period of two weeks each year overlapping with the event.*

Is two weeks sufficient? Why not coordinate with USFWS, WDFW, and Audubon? Shorebird migration in Grays Harbor County begins around April 15 and continues for about 3-4 weeks. A month at the minimum would be required not two weeks. There needs to be input from scientists not just City of Hoquiam administrative staff. Again discuss in FEIS how this process should work.

Response GP866-4

Although ceasing vessel-loading operations for 2 weeks during the Grays Harbor Shorebird Festival would reduce risks related to oil spills that could affect migratory birds during this migratory season as well as other species in the area, the Final EIS clarifies that the applicant's primary intent in committing to this voluntary measure is to recognize the importance of the annual Grays Harbor Shorebird Festival to the community and those attending the festival and to eliminate the chance of a spill from vessel-loading operations during this time. The measure has been moved to Final EIS Chapter 3, Section 3.10, Recreation, to reflect this clarification.

Draft EIS Chapter 4, *Environmental Health and Safety,* presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and proposes additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted in Chapter 4, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant.

Comment GP866-5

Appendix N GNOME modeling. The GNOME model requires selecting the specific type of oil for the modeled trajectories from a predetermined list of pollutants. Bakken crude oil and diluted bitumen, which are the two most likely types of oil under the proposed action, are not included in this list. Therefore, the GNOME model cannot fully reflect how these types of oils would behave or persist in the environment when spilled.

- Add Bakken crude oil and diluted bitumen to the list of pollutants. This tendency may result in a mixing of the oil droplets or fragments with sediment in the water column and a resultant suspension of oil beneath the water's surface. As discussed in Attachment B, at the Marshall spill into Talmadge Creek and the Kalamazoo River, under certain conditions, diluted bitumen was observed as suspended in the water column or even sank. How much oil will sink?

- The Grays Harbor Location Files used in the GNOME trajectory analysis were developed to address hydrodynamic conditions within the harbor and are not meant to model accurately the movement of oil outside of Grays Harbor (N-3). Would an oil spill reach Willapa Bay in a 48 or 96 hour period? Can this scenario be modeled? How would Willapa Bay be impacted? Why not model for 96 hours and greater? Discuss in FEIS.

- Add Rennie Island to an updated Grays Harbor GNOME model. Include this revised model in the FEIS.

- Were other oil spill models considered? What other models are available besides GNOME? Are there 3D models available that are more predictive that the GNOME model (Chao et al. 2001)? Discuss in FEIS.

- ICF is using a 1-dimensional hydraulic model (HEC-RAS) to model a spill in the Chehalis River. Is a one-dimensional model adequate? Were other spill models considered? Discuss in FEIS.

- Model the Nestucca oil spill that occurred off Grays Harbor on December 23, 1988 in the FEIS. The environmental parameters are known so the GNOME model could be evaluated. At public meetings held in Grays Harbor and Thurston County this request is brought up often.

- Can the Envsion model (http://envision.bioe.orst.edu/Default.aspx) be used in conjunction with the GNOME model to evaluate habitat impacts under different oil spill scenarios.

Response GP866-5

Draft EIS Appendix N, *Oil Spill Modeling*, presents data from ADIOS at the 48-hour mark to easily compare with the GNOME mass balance estimates at that same period. This comparison provides a better representation of the behavior of Bakken crude oil or diluted bitumen (dilbit), which can be modeled using ADIOS but not GNOME, in the environment.

Refer to the Master Response for Oil Spill Modeling Methods, which addresses the applicability and selection of the three models used as part of the oil spill modeling effort: GNOME, ADIOS, and Hydrologic Engineering Centers River Analysis System (HEC-RAS). It was determined that these models provided sufficient analytical capabilities for the purposes of evaluating spill scenarios for the Draft EIS. GNOME, specifically, was selected to complete the oil spill trajectory analyses because it is a commonly accepted industry standard for contingency planning, scenario analysis, and oil spill response used by the National Oceanic and Atmospheric Administration, the U.S. Coast Guard, and the Washington State Department of Ecology.

Comment GP866-6

3.5 What is the study area for animals? *The study area for animals consists of animals and habitats (terrestrial and aquatic) on and near the project site that could be affected by construction and routine operations at the project site. The study area also includes animals that could be affected during routine rail transport along the Puget Sound & Pacific Railroad (PS&P) 2 rail line and vessel transport through Grays Harbor out to 3 nautical miles from the mouth of the harbor*.

Why are impacts limited to three nautical miles? Are acoustic impacts to marine mammals limited to three miles (*Weilgart 2007*)? In the FEIS explain why the study area should not be beyond three miles.

Response GP866-6

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from vessel transport—less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS.

Comment GP866-7

3.5 Oyster beds *are located primarily in the south and central portions of Grays Harbor (Washington Department of Fish and Wildlife 2014a). Oysters feed on small organisms that they filter from the water column. Spawning occurs annually in July or August when water temperatures rise above 19.5°C*.

There are State, County, and private oyster grounds in North Bay also. The oyster tracts are shown on the Washington Marine Spatial Planning tool. Include North Bay oyster ground in the FEIS: https://fortress.wa.gov/dnr/mspmaps/index.html.

Is an environmental baseline survey required so when a spill does occur damages can be accurately assessed? Who pays for collection, storage, and processing of oyster tissue samples (Auffret et al. 2004)? Please discuss in the FEIS.

Response GP866-7

Final EIS Chapter 3, Section 3.5, *Animals*, has been revised to indicate that oyster beds are also found in areas of the North Bay.

Draft EIS Chapter 4, *Environmental Health and Safety*, Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP866-8

3.4.4.3 *These environmental parameters (i.e., current speed, water depth, salinity, and low turbidity) are not found in the navigation channel, along the shoreline, or in the immediate vicinity of the project site. The shoreline of the inner harbor and the shoreline adjacent to the project site do not support eelgrass (ICF Jones & Stokes 2009:4-1–4-4)*.

How will increased shipping traffic impact eelgrass in Grays Harbor? How will impacts be monitored and mitigated? Please discuss in the FEIS.

Response GP866-8

As stated in Draft EIS Chapter 3, Section 3.17, *Vessel Traffic*, vessels related to the proposed action would be limited to the navigation channel, which is maintained to a depth significantly deeper than the depth at which eelgrass can grow. As described in Section 3.4.4.3, *Grays Harbor*, *Aquatic Vegetation*, *Eelgrass*, the environmental parameters for eelgrass are not found in the navigation channel, along the shoreline, or close to the project site. Therefore, ships would not displace, uproot, or damage eelgrass during passage.

Increased intensity of wash or wakes could affect eelgrass by uprooting eelgrass in shallow areas along the outer boundary of the navigation channel (Section 3.4.5.2, *Proposed Action*, *Operations*, *Vessel*, *Vessel* Wakes). A 2003 wave modeling study conducted by Pacific International Engineering[3] (for the Port of Grays Harbor and coastal communities of southwest Washington) to address Washington Department of Natural Resources concerns about potential wave impacts on state-owned aquatic lands caused by the navigation channel in Grays Harbor concluded that, "energy from wind-generated waves generated in Grays Harbor and vessel-generated waves are shown to be insignificant in relation to the contribution from oceanic waves." The study focused on the Washington Department of Natural Resources Natural Preserve Whitcomb Flat, which is a sandflat

[3] Pacific International Engineering. 2003. Dynamics of Whitcomb Flats. Grays Harbor. July 10. Prepared for Port of Grays Harbor in Coordination with the Coastal Communities of Southwest Washington.

that is mostly submerged during high tide and exposed during low tides; it is directly adjacent to the navigation channel and is the nearest unprotected erodible feature to the navigation channel. The study concluded that waves from vessels (a variety of large commercial vessels traveling at 15 knots were modeled) made an insignificant contribution to all waves and that natural waves (storm waves and swell from ocean) were the driving force that affected the movement and erosion of the sandflat. Therefore, any impact caused by vessel wake would be insignificant in comparison to the existing baseline conditions (natural wave incidence).

Comment GP866-9

3.4.5.2 *Although small spills or leaks could occur as the result of human error or minor equipment failure, the potential for these incidents to occur would be reduced by appropriate training and the implementation of prevention and control measures as described in the spill prevention, control, and countermeasures plan and oil spill prevention plan.*

How will be the impact of these small spills or leaks be identified and assessed? How will their impact to the Grays Harbor ecosystem be monitored? Will a comprehensive study be funded to collect baseline data if the facilities are permitted? Discuss this in the FEIS.

Response GP866-9

As noted in Draft EIS Chapter 4, Section 4.2, *Applicable Regulations*, there is a framework in place to prevent, prepare for, and respond to oil spills. In Washington State, any oil spill, meaning of any size, must be reported by the responsible party. Appropriate regulatory action is taken based on the specific circumstances.

Comment GP866-10

Use the Washington Marine Spatial Planning tool
(https://fortress.wa.gov/dnr/mspmaps/index.html)

to analyze impacts from increased shipping traffic to the environment and other uses. A flow of key information links marine spatial planning (MSP) and oil spill risk analysis (OSRA), two distinct processes needed to achieve true sustainable management of coastal and marine areas. Discuss in the FEIS.

Response GP866-10

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms.

Comment GP866-11

Monitoring is the ongoing evaluation of the impacts of a development proposal on the biological, hydrologic and geologic conditions of shorelines and critical areas. Monitoring includes the gathering of baseline data and the assessment of the performance of required mitigation measures through the collection and analysis of data for the purposes of understanding and documenting changes in natural ecosystems and features. Discuss in the FEIS how monitoring will be implemented.

Response GP866-11

For information about the development, implementation, and enforcement of mitigation measures, refer to the Master Response for Mitigation Framework. Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP866-12

The paper, Treaty Rights at Risk, examines how the rights of western Washington treaty tribes to harvest treaty fish and shellfish, and the federal government's salmon and orca protection efforts, are at grave risk. Discuss further in FEIS how this project impacts these treaty rights of local tribes (3.12 Tribal Resources).

Link to paper:
http://nwifc.org/w/wp-content/uploads/downloads/2011/08/whitepaper628finalpdf.pdf

Response GP866-12

Draft EIS Chapter 3, Section 3.5, *Tribal Resources*, describes impacts on tribal resources that could occur in the study area as a result of construction and routine operation of the proposed action. Section 3.12.3.1, *Information Sources*, lists the sources of information used in the analysis. Chapter 4, Section 4.7, *Oil Spills, Fires, and Explosions*, describes potential impacts on resources, including tribal resources, in the event of an oil spill, fire, or explosion in the study area. Final Section 4.7 reflects additional information to address potential impacts on tribal resources.

Comment GP866-13

4.2.3.3 Oil Spill Response *Contractors* *The applicant must maintain an oil spill response contractor for oil spill response. These contractors provide spill response equipment and trained personnel. The Western Response Resource List outlines various types of response equipment maintained by participating private and public response organizations in the Pacific Northwest. Additional resources from across the United States are available as needed*.

Discuss in more detail the trained personnel available to respond to a spill. I have observed oil spill response training exercises on the water. Many contracted responders are employed locally or working on vessels overseas so are not available to be called up immediately. Have response times been modeled for different spill scenarios?

Response GP866-13

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Comment GP866-14

Ballast Water Concerns The International Maritime Organization's (IMO) convention is yet to be ratified. Once ratified, the convention will require an IMO-type approved ballast water treatment system (BWTS) to be installed on all new-build vessels and to be retrofitted on existing vessels. In the meantime, other bodies—most notably the U.S. Coast Guard (USCG)—have introduced their own federal regulations (Homeport, 2015) concerning ballast water. This links back to two legislative acts: the Nonindigenous Aquatic Nuisance Prevention and Control Act (1990) and the National Invasive Species Act (1996). Under U.S. federal rules, ships must have a USCG-type approved system installed by the ships' compliance date, starting as early as 2013, if they wish to travel in U.S. waters. Discuss in more detail how ballast water treatment systems will be inspected and monitored for compliance. Is the best available technology being utilized?

Response GP866-14

Potential ballast water impacts on the aquatic environment are addressed in Draft EIS Chapter 3, Section 3.4, *Plants*, and Section 3.5, *Animals*. Existing federal and state regulations address ballast water management. The Washington State ballast discharge regulations (RCW 77.120.040 and WAC 220-150) include reporting, monitoring, and sampling requirements of ballast water; all vessels must submit nonindigenous species ballast water monitoring data. Washington Department of Fish and Wildlife may also board and inspect vessels under WAC 220-150-033 without advance notice to provide technical assistance, assess compliance, and enforce the requirements of Washington State ballast water management program laws and regulations. Penalties and enforcement of not complying with the regulations are covered in WAC 220-150-080. To further minimize the risk of ballast water on vegetation communities and animals, proposed mitigation is included in Sections 3.4 and 3.5 for the applicant to develop and implement a monitoring plan in consultation with Washington Department of Fish and Wildlife prior to the start of proposed operations.

Comment GP866-15

The draft Environmental Impact Statements for both Imperium and Westway state repeatedly that **impacts cannot be mitigated**. All permits for these two projects must be denied. Instead let's focus on restoring water quality, restoring habitat, preparing for sea level rise and climate change impacts, and supporting natural resource-based industries throughout our estuary.

Sincerely,

Craig Zora
360-589-9854
czora@comcast.net

Response GP866-15

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP867, **Zora, Craig**

Comment GP867-1

Please comment on the attached report's findings as they pertain to this proposal. Report was just released on 11/30/2015.

[Attachments: The Behaviour and Environmental Impacts of Crude Oil Released into Aqueous Environments.]

Response GP867-1

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms, including impacts on animals. All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP868, **RogerZora, Craig**

Comment GP868-1

Additional DEIS comment:

This excellent study was just released. Review it and discuss findings as they pertain to the Imperium-Westway projects. Craig Zora 360 589 9854

From: czora [mailto:czora@comcast.net l Sent: Monday, November 30, 2015 3:04 PM To: Butorac, Diane (ECY) <dbut461@ECY.WA.GOV > Subject: OIW Report.pdf

Sent from my Verizon Wireless 4G LTE smartphone[Attachment: The Behaviour and Environmental Impacts of Crude Oil Released into Aqueous Environments.

Response GP868-1

Refer to Response to Comment GP867-1.

GP869, **Zora, Craig**

Comment GP869-1

Comment on this recent report's finding as they pertain to the Westway-Imperium DEIS. Report is 12 MB so only sending link. http://www.sciencedaily.com/releases/2015/11/151125233112.htm Craig Zora 360 589 9854

Sent from my Verizon Wireless 4G LTE smartphone[Attachments: Shedding Light on Oil Behaviors Before the Next Spill, Science Daily. 2015.]

Response GP869-1

Refer to Response to Comment GP867-1.

GP870, **Anonymous**

Comment GP870-1

[Attachment: Dirty and Dangerous Crude Oil Terminals Proposed in Grays Harbor Factsheet]

Response GP870-1

All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP871, **Anonymous**

Comment GP871-1

Where to begin?

I mean it starts with fracking and oil shale 7 sands then OIL BY Rail to Refineries. refinerie? under currant laws US cannot ship crude oil But a little light refining and "vowla" transportation oil.

I am not anti oil we need oil why export it we need it, So where will it be exported to under the PPTA Asian markets with little to no regulation on it use it could end up fueling Chinas ambitions and at the very least well get it back as acid Rain.

I beleive these terminals are the wagon before the horse these guys want to build these terminals ASAP before new regulation come about and to put in terms they can understand NEW Regulations for oil by Rail are in the pipline, but they want cheap and fast build NEW STRUCTURES that they will then "grandfather" and that is the Rush the urgency is all about these guys are really not much more than bullys and if we the people want them to play fair like all bully they'll take their slimeball and go home

[Attachment: Oil terminals, for your consideration]

Response GP871-1

Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources and for information on the likely destinations of crude oil shipped through the proposed facilities. All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP872, **Anonymous**

Comment GP872-1

[Attachment: Letter to Mr. Davis from Derek Kilmer, U.S. Representative, Congress]

Response GP872-1

All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*. Comment acknowledged.

GP873, **Anonymous**

Comment GP873-1

"Steps to Christ" collage

[Collage reviewed but not reproduced.]

Response GP873-1

Comment acknowledged.

GP874, **Anonymous**

Comment GP874-1

Please see the attached PDF which states my observations and concerns around ecotourism in Ocean Shores, Washington, from the Imperium and Westway proposals.

I came in the fall of 2011 to Ocean Shores as a trailing spouse. My mother-in-law's declining health was more demanding, and we moved here for support of her. I had long wanted to retire in the verdant and healthful climate of the Pacific Northwest. Then the chance came to her son, my spouse. I am committed—if the area avoids further deterioration of its natural benefits—to living a productive engaged life here in Gray's Harbor. My resources will be spent here where I remember that the term "Pacific Northwest" means to most people "cleanliness," a place where wealth is measured many ways.

The proposals by Imperium and Westway are disappointing. A brief scan of the large documents shows several "show stopper" conclusions that cannot be supported.

The obvious inadequacy in the route of rail transport amazes me. Along the ineffably sensitive Columbia, Chehalis River, and at last the Hoquiam River these plans mandate passage of hypo-

insured oil tank cars. The condition and route of the oil route makes it unusable. The redundancy in the many descriptions of bridges, weak railbeds, and slumping hillsides threatening the track precludes needs for mention again here. The bridges and bed of the rail nearly require tipping, spillage, landslide overturns, or worse--ignition and probable explosion within the waterway itself. The Dakotan volatiles make this inadequately stabilized oil product yet more polluting and incendiary when shipped in moving vehicles. Velocity itself we review,is the largest factor in force (Force = Mass * Velocity^2), is idealistically one to avoid when transporting explosive masses.

Response GP874-1

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

Comment GP874-2

The core parameters of the GNOME modeling are inappropriately chosen. Many historically considered and vital geo- and biological parameters are missing from these EISs. These this do not account realistically for drift, deposition, decay or permanence in the bay. Thus, these EISs addresses environmental impact in language but not with historical, bioassayed, relevant data. These data bend heavily to those regarding appearance rather than ecosystem deterioration.

The scope of needed mediation is missing or inadequate, perhaps based on unavailable or underutilized data. My amateur scan of government data banks and reports (many machine readable) reveals many data available appropriate to the analysis of poisons and flows in Gray's Harbor. Several great failures in this model are clear.

Response GP874-2

Most parameters in the GNOME location files are based on historical averages and therefore use of the Location Files is considered appropriate for representing conditions in Grays Harbor for the purposes of the EIS. Refer to the Master Response for Oil Spill Modeling Methods for more information about the approach, assumptions, and limitations of the GNOME model.

Comment GP874-3

Only Gray's Harbor is modeled. This is inadequate given historical events and spills here. As **Appendix N-1** states we must assume that "the NOAA Grays Harbor Location Files used in the GNOME trajectory analysis were developed to address hydrodynamic conditions within the harbor and *are not meant to model accurately the movement of oil outside of Grays Harbor.*"

Response GP874-3

The Location File for Grays Harbor only extends approximately 10 miles north or south of the Grays Harbor entrance and does not include Rennie Island. Most of the environmental conditions associated with Rennie Island are included in the model. In order to predict how oil would travel along the coastline, Attachment A of Draft EIS Appendix N, *Oil Spill Modeling*, discusses two previous large spills off the Washington State coastline to illustrate the directions that oil can migrate offshore depending on seasonal conditions. Draft EIS Chapter 4, *Environmental Health and Safety*, indicates there is a potential for oil spills to move outside of Grays Harbor and up or down the coast depending on the specific conditions present at the time of the incident. Refer to the Master Response for Oil Spill Modeling Methods for information about the approach, assumptions, and limitations of the GNOME model.

Comment GP874-4

The channel rather than shellfish and other invertebrate habitats of interest to prey organisms such as migratory waterfowl is emphasized. Again N-1 states the NOAA Grays Harbor Location Files "are limited to the geographic extent of the Location Files when, during an actual spill, oil could continue to spread over time and travel beyond the immediate vicinity of the harbor depending on the existing current and wind conditions at the time of the spill." The files were developed earlier and used, though they fail to extend to concerned areas of the harbor.

Response GP874-4

Refer to Response to Comment GP874-3.

Comment GP874-5

Flows are not based on historically available data from the seven rivers into the harbor although the ADIOS attempt at approximation and amelioration is applied. One must question why accuracy has been sacrificed for research efficiency. Flows are chaotic and weather-dependent. Rivers are short and periodic, though viable in all season. Modeling these conditions demands greater care than that applied in each EIS.

Response GP874-5

Refer to the Master Response for Oil Spill Modeling Methods.

Comment GP874-6

Some issues suggest the impossibility of mediation, though appropriate longer-term analysis could very well dispel such objections. But one would be wise to believe that destruction of the basis for healthy diversity in reproducing populations is at risk because of these contaminants. Current data suggest the likelihood of irreversible permanent damage.

Response GP874-6

Comment acknowledged.

Comment GP874-7

These seeming irregularities suggest questions.

1. Ocean Shores depends upon reputation. If oil spills even once that reputation as "Destination for Nature" is destroyed. Home owners and visitors will not come to a polluted city. They wish filth's absence. How is it that such a destructive plan as either EIS proposes be consistent with ecotourism?

2. Why have impacts on home prices on the west and the east sides of Point Brown not been included when the prices are pollution-related?

3. Why have the above mentioned issues of water, shore, and air quality not been addressed with regard to ecotourism in Ocean Shores?

For these general reasons and many more detailed ones, I request the permits be denied.

Response GP874-7

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Draft EIS Chapter 7, Section 7.3.4.3, *Potential Impacts on Property Values*, acknowledges the potential for property values to be adversely affected due to the perception of increased risks and presents representative information about how this perception can adversely affect values. Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2 has been updated to provide additional information about economic and social costs of oil spills.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

Comment GP874-8

[Attachment: Ecotourism in Ocean Shores, Washington]

Response GP874-8

The approach to the risk analysis is to consider potential spill scenarios related to the proposed action. As noted in Draft EIS Chapter 4, *Environmental Health and Safety*, this is because a spill could occur at any location and at any time. Scenarios are based on assumptions about terminal, rail, and vessel operations and locations where spills could occur more frequently, based on expert opinion, or could result in a worst-case spill.

Because the potential impacts of an incident would vary based on the material spilled, weather, water flows, location and other factors, Section 4.7, *Impacts on Resources*, describes the types of impacts that could be expected in general terms. Draft EIS Chapter 7, Section 7.3.4.2, *Potential Costs Related to Environmental Health and Safety Concerns,* describes the range of associated costs that could be expected in general terms. Final EIS Section 7.3.4.2, has been updated to provide additional

information about economic and social costs of oil spills, including impacts on on affected businesses.

Refer to the Master Response for Economics, Social Policy, and Cost-Benefit Analyses for additional information about the scope of the analysis in Chapter 7, *Economics, Social Policy, and Cost-Benefit Analysis*.

All supporting material submitted during the public comment period is listed by commenter in Chapter 8, *Attachments*.

GP875, **Anonymous**

Comment GP875-1

I am against the proposal to increase the number of loaded oil trains that pass though North Bonneville, Washington. May I remind you, the Skamania County Fire Districts and the Stevenson City Council have already expressed concern for the safety of residents. At this time we do not have the capacity to ensure our safety. Our only recourse is to evacuate our properties, if indeed we know when to do this

Response GP875-1

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation. For more information about the analysis of potential impacts in the extended study area, refer to the Master Response for the Geographic Scope of the EIS.

Comment GP875-2

Why did you not solicit comments from our area?? I only found out last week from a person in another community. Why are we ignored? Well the answer seems clear to me, you did not really want comments.

Response GP875-2

Legal notices for the release of the Draft EIS, comment period, and public hearing were published in the *Washington State Register* (201504472 and 201504475) on August 31, 2015. Email notices were sent to the individuals, tribes, agencies, and organizations listed in Draft EIS Chapter 8, *Distribution List*. A Notice of Availability was published on August 27, 2015, in *The Montesano Vidette*, and a news release was issued on August 31, 2015. Notice of the public hearings and public comment period

was published in the following papers: *Centralia Chronicle* and *Aberdeen Daily World* on September 26 and October 3; *Montesano Vidette* on September 24 and October 1.

Comment GP875-3

I am also opposed to any new oil terminals in Washington.

Response GP875-3

Comment acknowledged.

GP876, **Anonymous**

Comment GP876-1

Good evening. I speak from personal experience as a resident of Washington state for 40 years. I'm probably the only person in this room that dealt directly with the results of the spill of Grays Harbor in the early '90s.

I spent five days washing birds. Ninety percent of the birds we washed died a horrible death because we couldn't save them. That's the mortality rate. And that's at best. That's with volunteers working night and day trying to keep birds alive.

I doubt if any of you have ever gotten your hands dirty cleaning wildlife up in this oil. But it's like really heartbreaking and it really tears you up.

Things like loons and eagles and -- not just seagulls. Birds that people go and watch. I'm a fisherman. I fish in Chehalis River. I do volunteer work for tribal reserve on runs. I'm disgusted with this Environmental Impact Statement because it declares that nothing can be done but we should go ahead with this anyway.

Our politicians may have been prostituted out by oil, but people like you haven't been. And you're going to be held -- your feet are going to held to the fire whether in this world or the next world, and you really should keep that in mind. You're going to be judged. And if you don't want to be put in the same category as all of the corrupt politicians that are selling their souls for the oil companies, I dare you look in the mirror before you make your decision because people's lives are at stake, but people's children and people's children's children are at stake even more.

If you know what's happened to all our rivers lately in our country, they're being contaminated by industries, and then people's drinking water goes away. Water is the new oil. We don't need oil to contaminate water. Water is more valuable. What doesn't relate to you? Don't make mistakes.

Response GP876-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP877, **Anonymous**

Comment GP877-1

Thank you for this opportunity to speak about this very important proposal before us today. Last week I attended the Moral Action Climate Change events held in Washington, D.C. in support of the Pope's visit and his comments dealing with the moral issues facing everyone on this planet dealing with climate change and the rising temperatures. We need and we will shift our paradigm in regards to how we look at fossil fuels. More specifically, we need to look at the decision-making model that includes both environmental justice and social justice components. Yes, justice for our planet and for the people who share our resources, clean air, water, energy sources, food, sustainability of these resources and, yes, jobs.

I grew up in Longview, Washington on the banks of the Mighty Columbia River. The river is sacred to me knowing the importance in our region. It is a place where we had church and school picnics, my father fished there, smelt came up the Columbia into the Cowlitz River. I learned to waterski during high school off the sandy shores and, yes, it was a place for naughty teens to have fun, innocent parties, and, yes, it created jobs for our local economy.

I totally understand the urgency and potential opportunity for the Grays Harbor community to embrace and welcome 84 new jobs. I understand that. My father was an iron worker, and his jobs were building dams and bridges. Jobs are essential to communities.

But, when you consider this proposal in this new paradigm shift, we must include local, regional, national, and global effects resulting from our decision-making policies.

I want to address the most important concern I have which is shared with anyone living along the Columbia River. What if -- yes, I could list all the train wrecks with lethal contaminants that have cost millions in correcting the results in the aftermath or the cost of human lives and devastation to wildlife, but I will leave this to the scientific reports.

Here are my grave concerns, the outdated transportation system, infrastructure of our railroad system. I am concerned about the lack of transparency dealing with the routes, number of cars, what contaminants are carried in them. How can we adequately provide vital emergency services to potential explosions, derailments? Furthermore, who is going to pay for this?

The Seattle Times recently had an article about this very concern. Enough is enough. We need to put a moratorium on the number of contaminants, coal and oil and other deadly cargo, until we get a handle on public safety.

Response GP877-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water

flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP877-2

Second concern, really, really, the Columbia Gorge Scenic Byway. Scenic means tourism. It means something special, something we must take care of in order to fully enjoy.

What about those salmon runs? I envision a salmon trying to make its way up the fish ladder after a spill. Of course, we all know that our river and its fish and wildlife would be dead. No, we will fight to keep the Columbia Gorge free from this proposal, the largest proposal for a terminal in the U.S.

Twenty-five million gallons of Bakken crude oil? You must take into consideration the impact of sending crude oil through our states only to be a financial gain for industry seeking to make a profit off of our natural resource, the Columbia River. The daily threat is incomprehensible, unimaginable.

I want to remind you that our Native nations, the Quinault, Makah, the Warm Springs, Celilo Falls, Yakama Nation, Umatilla Nation, our sovereign peoples who have, under our U.S. Constitution, the right to their lands and resources. Under the Boldt decision, they have fishing rights which are the basis of their economy.

And private investors, who have nothing to do with the health of our natural resources here in the Pacific Northwest, want to build the largest oil export on the Columbia River and the largest coal terminal at Cherry Point on ancestral lands of the Lummi Nation, changing our state forever.

Toxic materials going to Asia where increased gas house emissions will continue to rise causing catastrophic consequences worldwide, creating both environmental and social injustices locally, regionally, nationally, and globally.

I stand in total support and solidarity with our Native peoples and their desire to take only what they need to survive and to respect Mother Earth.

Our white European ancestry of consumption must include giving up our dependence on fossil fuels.

What about our small communities along the pathway of increased shipments of crude oil? Toxic, deadly, noise pollution, and possible spills.

There is a small town in Washington along the Salish Sea, Bow, Washington. Its residents have, for years and years, fought to have the train whistles that sound off at four train crossings, creating 200 blasts every day.

They are in litigation and now are faced with spending tens of thousands of their own money in order to mitigate the effects of increased number of trains.

Are there not limits? Are communities taken into consideration?

In the mid '80s, there was an oil spill in Port Angeles. Anyone in making decisions about crude oil should be made to go to these sites of disaster to clean up birds. There are no words to describe walking into the makeshift local high school, with experts flown in, transportation costs out of their pocket, to help guide through the process of trying to clean up the waterfowl. So many died. Our birds, salmon, wildlife, they don't cope with these dangers. They just die.

I truly believe that the Pope's message to congress and to the United Nations is the start of global conversation starting with the sentence, Will this decision greatly impact the continuance and reliance on fossil fuels and is it necessary and will environmental and social justice be served and embraced locally, regionally, nationally, and globally?

The range of criteria for making critical decisions has grown exponentially as well as the possible results, consequences of those decisions.

Again, personal financial gain for private enterprise and 84 jobs do not in any way offset the thousands of negative consequences. Do not let this go forward.

Response GP877-2

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses potential impacts from rail and vessel transport—1.25 unit train trips and less than one tank vessel trip per day on average—in the extended study area qualitatively for the reasons described in the Master Response for the Geographic Scope of the EIS. Chapter 5 acknowledges that the routine transport of crude oil in the extended study area related to the proposed action could increase impacts similar in nature to those described in Chapter 3, *Affected Environment, Impacts, and Mitigation*.

Final EIS Chapter 5 reflects additional information characterizing potential risks related to rail and vessel transport in the extended study area under existing conditions, the no-action alternative, and the proposed action. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about the potential risks under cumulative conditions. Although the proposed action could result in an increase in the likelihood of an incident involving the release of crude oil, individually and cumulatively, the potential consequences would be similar in nature and magnitude to those that could occur under existing conditions and the no-action alternative and could not be completely eliminated. Depending on the specific circumstances of the incident, there is the potential for significant impacts. The potential impacts described in Section 4.7, *Impacts on Resources,* would apply to the extended study area.

Chapters 4, 5, and 6 of the Final EIS reflect updated information about ongoing efforts to address existing safety concerns within the extended study area. These efforts would also help to reduce any risks related to the proposed action.

GP878, **Anonymous**

Comment GP878-1

Hi, lots of people have talked about the lack of evidence that is in the DEIS or in some cases there's none. It's not just very plentiful. I don't know how you have enough evidence to make the decisions that you have made in many instances, especially in the instances that have to do with the birds of migration through our territory and stop in Grays Harbor, Bowerman's Basin.

I have a really, really long sight list. Most you see in Oregon. I have many sightings of just about every bird except for one. And that one species of bird I had only one sighting in all of my many years, 20-some, of living in Oregon. And now I've moved to Washington. And I can see this bird by the dozens or dozens of dozens during spring migration. What's the difference? I always thought that Washington was as beautiful as Oregon, but not more beautiful. So why do they stop here?

Well, the bird I'm talking about can begin it's trip north from Central America. It stops in San Francisco, feeds a while, and then flies further north to Grays Harbor, Bowerman Basin in the north bay. It stays there for a few days, feeds, rests before it goes on its last leg of its journey to the Canadian tundra where it nests. I want to ask you, what do you think would happen to that bird if it were here during an oil spill? Deny these permits.

Response GP878-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including impacts on birds.

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP879, **Anonymous**

Comment GP879-1

Westway and Imperium oil terminals simply stated, the issue is greed versus safety. But the question you must face in good conscience is will Hoquiam or Aberdeen be the next town of Lac-Megantic, Quebec that was incinerated by an oil train.

Even with new North Dakota law, the volatility of Bakken crude oil remains 13.7 pounds per square inch vapor pressure. The train that exploded in Lac-Megantic had an average vapor of ten PSI. Bakken crude should be stabilized, but this would require expensive treatment. North Dakota does not have plans to make the oil safer.

Keeping the volatile gases in solution during shipping, while extraordinarily dangerous, makes it extremely profitable. You're sitting here with the responsibility of public safety. The question facing you is simply will you support public safety or corporate greed? And you will be remembered for this very act.

Thank you.

Response GP879-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP880, **Anonymous**

Comment GP880-1

Good evening. I am Mother Goddess Liberty, and I'm here for the people of the planet. My title is Liberty Enlighten the World. I carry the sword of knowledge, the sword of truth and enlightenment.

But this is not enlightenment this enlightenment that I carry. It's light of my hand, the Declaration of Independence. The most sacred words of the document in the world, We hold those truths to be self-evident that all men, he meant men and women, are created equal. We are endowed, that means gifted by our Creator, with certain unalienable -- means you cannot take them away, the state cannot take them away -- rights.

These are the right to life, liberty, and the pursuit of happiness. Governments are instituted, created by the sovereigns, to protect these rights. The first right is the right to life.

This council -- this city council voted not to have this facility. They are the sovereigns of this land. Who are you to deny their stopping this?

There has been a flip flop. Government now thinks they're the sovereigns. The people are the sovereigns. The meek will inherit this earth and as you can see the meek is standing up to do just that.

The whole world is being threatened by climate change. That means everyone in government has to stop this threat to the safety and happiness of all of us.

Response GP880-1

Comment acknowledged.

GP881, **Anonymous**

Comment GP881-1

Ah-hoy-ya, greeting. I'm a native of Grays Harbor and Cowlitz Indian tribal member, my ancestors chased food and trees in a livelihood for many years. And if you look at the tribes in our region, we have all settled on the coast for natural resources, a way to live and survive. Natural resources have provided us jobs, but they also provide us with food.

I think it's very important that we not be tricked into believing that jobs and the incomes that would be derived from this, once again with another project coming in with a few handful of jobs that then leave our area and we are then put into another economical situation.

We've been struggling to get out of this. This would be devastating to us here on the harbor. Amazing, that people in the eastern state come to watch shorebirds -- of all things, shorebirds

because they follow the migration of these birds. Why would they want to come here if we have a disaster?

And like many, many people have said, it's not if, it is when. The media is amazing in presenting issues to us up front immediately, but they're also amazing in not following up. Out of sight, out of mind.

Let's talk about EXXON VALDEZ. Let's talk about Texas. Let's talk about all of these disasters. Let's go back to see what kind of recovery we've had from these situations. I blame the media for not showing us that, so it's up to us to prove some of that.

Thank you.

Response GP881-1

Comment acknowledged.

GP882, **Anonymous**

Comment GP882-1

Well, this won't take two minutes. Well I hate public speaking but I would feel badly if I left without saying a little something. I live in Hoquiam. I'm -- the way I see it I think I'm about 620 feet from the rails. So yeah, that's a concern, but I think my biggest concern is the big picture.

And I think climate change is real. I think we're in it, and it concerns me to be possibly part of the generation that leaves the world a little less better -- less well than the way we found it. And I've tried to -- tried not to be a contributor, but I feel maybe I haven't done the best I know how.

So, that's my concern is the oil companies use kind of a divide and conquer strategy. And we are just a little community. And somebody's got to stand up to these guys. And I don't know why it shouldn't be us. This is not going to benefit our area. It's not going to benefit the world.

So, let's stand up to them and do the right thing. That's all.

Thank you.

Response GP882-1

Comment acknowledged.

GP883, **Anonymous**

Comment GP883-1

Well, I moved here three years ago from Wyoming. I had ten years of challenges of the oil and gas industry there over the air pollution they were creating. On a science basis, I'm a retired physicist and nuclear engineer.

And as I've gone through this crude-by-rail project beginning two years ago, the thing that stood out in my mind is what appears to be an absence of detailed preparation to address a spill.

A spill will happen. I don't care what that industry says. They can be as careful as they claim to be. There will be a spill. And what worries me, then, is the number of jurisdictions that are likely to be brought into play over such a thing.

And I'm wondering if anything has been done at the state level to identify the different jurisdictional players, how they should interact, how they can interact, how well they're trained to interact, how large their budgets are to interact, what they know about the equipments they're going to need to react, how they're going to procure those equipments, if they are at all, and how well-trained they're going to be to use those equipments.

Then add to that, the industry. What preparations are going to -- or actually, requirements are going to be imposed upon them by the state and the local municipalities to immediately notify of an accident, a spill? Who will have the prime responsibility for disseminating that notice? Who will have the prime responsibility for reacting, organizing all of the jurisdictions to react to a spill situation.

What real attention has the industry and the state given to the issue of seismic damage to the storage apparatus, tanks, et cetera, pack lines? What have they done to certify, absolutely, that the kind of earthquake that's posited for this area can be ridden through by that equipment?

Response GP883-1

Draft EIS Chapter 4, Section 4.2.1, *What framework prevents incidents from happening?* describes the formalized planning framework in place to address risks related to oil spills, fires, or explosions from the terminal operations, rail transport, or vessel transport. The responsible party may vary during the transport of crude oil. This section describes the requirements for planning and preventive equipment and design. Section 4.2.2, *What framework prepares for an incident?* describes federal and state regulations to prepare for an incident, the integration of plans, and drill and exercise requirements.

Final EIS Section 4.2.3, *What framework provides responses to an incident?* has also been updated to better reflect existing response capabilities and resources in the study area, including information identifying existing gaps from the Marine and Rail Oil Transport Study (Ecology 2015). Final EIS Section 4.7, *Impacts on Resources,* has been updated to better reflect how the proposed action could affect emergency service responses.

Final EIS Chapter 4 reflects additional mitigation measures proposed to address gaps in emergency preparedness planning and response capabilities. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions.

Chapter 4, *Environmental Health and Safety*, identifies other proposed measures to ensure that broader prevention, preparedness, and response planning involves the appropriate stakeholders and that updates to any plans applicable to reducing risks related to the proposed action contain appropriate applicant information and participation. To the extent possible, as outlined in the Master Response for Mitigation Framework, measures that address the need for more coordinated and focused planning clarify the role of the applicant as appropriate.

Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7

describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation.

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP883-2

And more importantly, given that the University of Washington studies show that this area could subside as much as ten feet, and thereby become underwater, what has the industry and the state done to address that likelihood, if they are going to store in large tanks?

And then another consideration would be, should that kind of event take place when there's a long string of railcars parked down there loaded with oil, they will start to float. And who knows where they'll go when they're caught up in the backwash of a tsunami.

Response GP883-2

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunamis, and impacts remaining after mitigation.

Comment GP883-3

A myriad of details requiring very fine-tuned thinking and preparation for all kinds of scenarios that are entirely possible for this area have to be in place before major operations of this type are permitted to begin.

And I see no indications, public or otherwise so far, that that level of preparation -- planning, preparation, oversight, has been formulated, let alone analyzed and decided upon as to implementation.

Those are all of the fine details that I believe ecology and these municipalities that are in here really need to sit down and think hard about.

Response GP883-3

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP883-4

Oh. And I guess one other aspect of this is that since the Imperium, now renamed, movement organization is pressing hard to obtain these port rights, they should be imposed upon to place a very substantial monetary bond in escrow. And it would have to be along the order of a billion dollars, in my judgment, to start paying immediately the cost of response to a spill.

One of the big constraints I know is going to be on the state municipalities will be funding. And the industry is bringing this on and so the industry should bear the brunt of the costs that are going to be incurred in preparing for and reacting to that inevitable spill incident.

Response GP883-4

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

GP884, **Anonymous**

Comment GP884-1

Well, I just would say I'm opposed to any of the oil expansion and oil trains coming into Washington State and just believe competitive pricing with alternative fuels is one reason to stop the fossil fuel development.

And I do some fishing, and I was involved with the tours and the development, and know that any oil spills have a detrimental effect on the oceans.

And I did travel up to Alaska. It was the same year as the Valdez oil spill up there. And just to think of the environmental disaster that happened up there, if that could happen around Washington State, it would be just devastating to a lot of tourism, and also all of the marine life, and fisheries, probably. And then they have a lot of the shore birds and the wildlife refuges around the area here.

And just another oil train is potential for accidents and fires. I was a volunteer firefighter for a while and I just don't want to see any huge accidents around any towns or in the Columbia River area.

And I really think we have a chance to do a lot of alternative energy, because Oregon has -- they're on the verge of really expanding wind energy off the coast of Oregon. And I think we can just replace a lot of the oil industry and oil energy with other types of energy. We don't have to have all the environmental effects of the oil spills.

Response GP884-1

Comment acknowledged.

GP885, **Anonymous**

Comment GP885-1

I would like to say that I am strongly against the oil terminal because of the significant risks to human health in this community from the potential of explosions, and that those risks even include death for members of this community.

And I'm also against it because of the risks to the marine environment, which this local economy and the tribes depend on.

Response GP885-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP886, **Anonymous**

Comment GP886-1

I was just thinking about this whole thing. We don't want them here in town. What happens if something breaks over and one of those things goes all over the place for the City, and my thoughts on the whole thing were that they don't pay -- big oil doesn't pay any taxes. They offshore it elsewhere. It was in the paper even. The biggest corporations aren't paying any taxes in our country. They owe $2.2 trillion in taxes, all the big corporations, and why should we accommodate them here, and where is their money to come down here and find another way of doing this and paying for this?

Response GP886-1

Draft EIS Chapter 4, *Environmental Health and Safety,* Sections 4.4.5, 4.5.5, and 4.6.5, discuss who would pay for the response and cleanup of an oil spill at the terminal or during rail or vessel transport, respectively. Refer to the Master Response for Liability and Responsibility for Incidents for a discussion of liability and the levels of financial responsibility required by federal and state law and an explanation of how these issues are addressed in the Draft EIS and Final EIS.

Comment GP886-2

And another thing I'd like to know if the City of Aberdeen and the local cities around here, is the government against what's going on, you know? It would be pretty trippy. So that's all I can think of so far. I am concerned about all of that.

I saw these trains coming through town, but I was kind of concerned about it. The water is already polluted out there.

We can't get clams anymore. What if we get another big spill to that type of effect that could cause a lot of marine biology damage, and who covers it, you know? All of a sudden nobody is talking about who's going to take care of any damage, and so I would rather see a pipeline come in here than trucks and stuff like that.

I'm from California, and I've seen what the ships do from coming in there. They're blocking Long Beach. It's blocked up with all of these big trucks and everything else coming in there. It's going to be the same way here in this town and at our expense, I think. So that's probably about all I have to say, I guess.

I'm concerned about it after finding out what they're doing in our little town here. I guess I don't have much more to say. I'm just the average citizen, you know, wondering why in the heck we're supporting all of this, and what are they going to do for our city here getting to bring oil here besides causing a lot of congestion. I don't see both open sides on this thing. So what the heck? Thank you

Response GP886-2

Comment acknowledged.

GP887, **Anonymous**

Comment GP887-1

I'm against the oil trains coming in here because of the environment, because of the dangers of what it could do to the people who live here, to their livelihoods.

I live a block from the train tracks so I'm a little nervous about that. If there was, you know, an explosion, I'd be gone, and I'd like to live to be an old lady. I guess that's all I have to say.

Response GP887-1

Comment acknowledged.

GP888, **Anonymous**

Comment GP888-1

The reason I'm talking with you is because I had a phone call from someone who was evidently from Seattle and is concerned about the oil trains going through Seattle as well, and they wanted to know if I would be here on this day to see what you folks had to say. And I told them, Listen, I will go. I just don't believe in lip service. I don't believe in people who talk and don't have an agenda, okay.

I've been told by a very wise man, if you present the problem also present a possible solution. Not the solution but a possible solution because it gives us something to hold onto and fight for, okay.

I wanted to know about legalities and wanted to know what are our legal rights, okay, and what's in it -- I know what's in it for the oil people. What's in it for Aberdeen, what's in it for Grays Harbor?

We have so much to lose. We have the wildlife, we have the water fowl, we have so much that is pure and pristine, and it brings people here, it brings the tourism here eventually. We need that. We need to protect that. I wanted to know what's in it for us. Evidently there's nothing in it for us. I'm very, very strong on this because I don't like unfairness, okay.

Now, another thing is I wanted to know about legalities. What are our legal rights? Everybody has legal rights in something. There's got to be something that we have legal rights in because you can't fight a battle if you don't know what the ground rules are, okay. so that was important to me as well.

He didn't have any answers for me, which is why I'm here because I'm kind of hoping you guys would address it.

Anyway, I've been passed some information. I'm told if I have any questions or if I have any comments. They asked me if I wanted to speak, I told them, no, I'm shy, but I do have opinions, which I just shared with you, okay.

I'd like to see if you guys really believe what you're doing and have some muscle behind you because that's the only way we're going to get anything done. We have to have some muscle. I understand that the Governor is not thrilled about this and is not taking a stand either way, and I'm disappointed because I thought he was a good man for the job. I'm very disappointed.

I will support -- after hearing what is being said inside, I will support you guys or if I feel that there's not enough there, not enough people believe in what they're doing, you're going to lose me, okay. Because I won't fight for something unless I know that there's somebody behind it. Amen.

Response GP888-1

Comment acknowledged.

GP889, **Anonymous**

Comment GP889-1

I'm speaking for the shellfish growers of Grays Harbor. So there's one element that I wasn't able to get onto paper or in my oral testimony.

The thing that concerns me about crude oil is it looks like crude oil from Canada will be part of the product that gets shipped out of Grays Harbor because the railroad has said they have to take the product -- it's a foreign product, so it's not restricted by our own law, and the other thing is if there's a profit motive, it will be handled in Grays Harbor by these two, possibly three projects.

So one of my concerns for the growers and myself is the fact that the crude oil that comes out of Canada or Bitumin is heavier than water and when the thinners evaporate out of it, it sinks. When it sinks, it will move along the bottom, and it will be tied up into the mud and sand in the bay if they don't get it really quick.

The problem is within an hour, under the right conditions, this crude oil, Dilbit or Bitumin, will go out in the ocean or be trapped in the harbor because there's no way they're going to get containment or a mitigated process to stop this crude oil once it is spilled.

So here's what I think will happen. The product gets spilled, it's not captured, the solvent will dissolve and go into the air, the toxins will settle to the bottom and, from there, will roll up and down the bay, back and forth, north and south, east and west on every tide change or wind or anything that will make a move.

So, within the harbor, the Corps of Engineers moves a million cubic yards of earth picked up by the Corps dredging to maintain the channel depth. So, when the Corps dredges this up, within that million cubic yards will be oil, tar balls, and everything that's left over from the spill.

Grays Harbor has no place to dump this kind of dredge spoils. It will be in the environment for longer than one dredge cycle. So, for many years, the Corps will be dredging up a million cubic yards, and they have no place to dump it. And, by state law, they have to dump it on an upland site, which will drive the cost of the dredging up beyond the cost/benefit ratios.

So basically any kind of spill that comes out of Canada, which is Bitumin or Dilbit, will force the harbor into being closed down for shellfish, fishing, any other activities at 30 percent of where Grays Harbor County's economic benefits come from. So basically 30 percent of all of the economic activity in Grays Harbor is from the estuary and the ocean.

So basically that's what I have to say. I think this was not in the EIS. I think nobody has even thought about this, and I've -- the growers are really concerned that this kind of product will destroy the estuary for a long time.

Thank you very much. I just have to say that because this is something that can't be mitigated, it hasn't even been taken into consideration, and it's such a destructive course. We basically lose all our production in the estuary and the ocean and the clam beds. Thank you.

Response GP889-1

The analysis of impacts in the Draft EIS considers the crude oils identified under the proposed action: Bakken crude oil and diluted bitumen. Final EIS Chapter 4, Section 4.3, *Risk Considerations*, reflects updated information about the chemical properties of these two types of crude oils. For additional information about the most likely sources of crude oil, refer to the Master Response for Crude Oil Extraction, Transport, and Combustion. For additional information about how different types of oil were considered in the oil spill modeling presented in Draft EIS Chapter 4, *Environmental Health and Safety,* and Appendix N, *Oil Spill Modeling*, refer to the Master Response for Oil Spill Modeling Methods.

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. These measures include the provision of additional firefighting equipment, spill response and recovery equipment and other tools, and annual emergency response training opportunities to local jurisdictions. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion.

Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for additional information about the analysis of emergency planning and response capabilities. For information about the analysis of potential impacts in the extended study area, refer to the Master Response for Geographic Scope of the EIS.

GP890, **Anonymous**

Comment GP890-1

Well, I guess where I'd like to start is in 2010 the Seattle Times reported that only two-thirds of passenger trains run on time. So only two-thirds run on time between Seattle and Portland. The desire by the State was to reach 90 percent on-time performance.

And, with this project, EIS states that most crude oil shipped by rail in Washington is currently going through the Columbia Gorge but could transfer over to other routes, and in the same Chapter Five, BNSF has not specified a train route for crude oil trains in Washington State. So I'm concerned about the effect on passenger rails.

And so I have a couple of statistics for on-time performance for passenger trains.

With the Cascades, the on-time performance for the last 12 months is 74.6 percent, and in August of 2015, it was 81.9 percent. And, of the causes of delay, the train interferences was the primary cause of delay, and that was that 39.6 percent and 76.9 percent of 39.6 was on BNSF Railways.

The Empire Builder, which also uses the tracks shared by freight trains, the on-time performance in the last 12 months was 54.6 percent. In August of 2015, it was 38.7 percent. The primary cause of delay was traffic signals, and that was 32.4 percent, and 89.3 percent was on BNSF Railway Company. The second cause of delay was train interference. That was at 25.5 percent, and 81.4 percent of that was BNSF.

Let's see. So production is expected to increase from two million barrels -- I'm sorry. Production is expected to increase from 1.2 to two million barrels per day, and with no known route for BNSF which brings oil to this location on the PS&P, I'm concerned that passenger rail will be severely impacted.

In 2010, Washington State received approximately $782 million in federal funds to improve high-speed rail service on a section of Pacific Northwest Cascade Corridor, one of 11 high-speed rail corridors designated by the federal government.

The Pacific Coast Collaborative Leaders Forum articulated their vision for high-speed rail. Rail, particularly high-speed rail, can deliver significant benefits to the region including advancing climate change goals, energy conservation and reduction, and job creation for the region.

The absence of details concerning freight train routes in extensive study areas demands a comprehensive review of the possible impacts on passenger rail. Thank you.

Response GP890-1

Draft EIS Chapter 5, *Extended Rail and Vessel Transport*, addresses the potential for impacts from rail transport—1.25 unit train trips per day on average—in the extended study area qualitatively for the reasons described in the Master Response for Geographic Scope of the EIS. Final EIS Chapter 6, *Cumulative Impacts*, reflects additional information about rail traffic under cumulative conditions.

GP891, **Anonymous**

Comment GP891-1

Last month, September 2015, Daily World articles and network television news described a small, seaworthy, and well designed Boston Whaler type craft which had overturned in rough seas as it attempted to return from the Pacific Ocean into Grays Harbor.

One woman's body was eventually recovered floating in the ocean significantly south off of the Oregon Coast. Her male companion's lifeless body was recovered several days after hers south of Westport.

Shipwrecks of significantly larger sail, steam, and diesel vessels are well documented in the excellent book, "Shipwrecks of the Pacific Coast" by James Gibbs, which should be researched and noted in this EIS.

Gibbs includes a profound map showing locations of 41 large ships lost between Port Angeles and Astoria prior to 1957. On page 54, Gibbs describes the SS YORKMAR, a 7,200-ton Liberty-type freighter owned by Calmar Steamship Corp. which had gone aground in attempting to cross over the Grays Harbor bar December 8, 1952. In ballast, she was driven high on the beach on a flood tide. At low water, the vessel rested high and half dry. She lay on a stretch of beach from which only once in history a stranded ship ever regained its freedom.

Gibbs states, Between Grays Harbor and the Columbia river perhaps more strandings have occurred than on any other sector of the Washington Coast. The entire beach is composed of long sandy stretches piled up by the deposits from the Columbia River carried northward by the prevailing currents which constantly form dangerous shoals. Because of these shoals, government dredges must be constantly employed on Grays and Willapa Harbors.

On Page 44, Gibbs states, At Grays Harbor, the entrance is very narrow and very dangerous if the pilot book is not followed explicitly. Several ships have left their gnarled bones to rest on these treacherous bar sands. Farther north the sand subsides in favor of rugged boulders and terminates in precipitous cliffs that rise sheer from the ocean.

Gibbs' book includes excellent photos of many large ships thrown up against cliffs, broken in half, or sunken in the sea. The fate of these ships along with the EXXON VALDEZ off Alaska filled with the oil which was to despoil a major coastline should be fair warning to us to say no to the shipping of oil from Grays Harbor.

And there have been 50 or 60 big ships that have foundered in that area or trying to get in over the bar or just north of the Westport bar, exceptionally, unusually dangerous area, and these are big ships that have all of the radar and all of the stuff, but they still foundered.

All we need is one ship foundering out there that had oil on it like the EXXON VALDEZ.

I ended my Army time in Valdez 50 years ago. This oil on that beach up there -- how long ago was the EXXON VALDEZ, 25 years, 20 years ago. There's still oil there.

I taught architecture and planning at Mississippi University, and we've had oil spills off of that Gulf Coast. They're still there. They haven't been able to clean it up. We don't clean those things up. They aren't that cleanable. They do damage for extended periods of time.

And whoever would approve this is signing the death note for wildlife, for fish, for crabs, for clams, for you, and for me. They don't need to do that. This needs to be turned down. Thank you.

Response GP891-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP892, **Anonymous**

Comment GP892-1

This is for Westway and Imperium. Basically just one question, if allowed to proceed with your oil transport plan in Grays Harbor County, can you assure its citizens that you will be using only the newest rail tanker cars or are you going to be using the older ones that have been leaking and exploding all over the country? That's it.

Response GP892-1

Draft EIS Chapter 4, Section 4.5.3.1, *Voluntary Measures and Design Features*, describes the applicant's voluntary commitment to not accept crude oil transported by DOT-111 tank cars. The

measure specifies that the applicant will not accept crude oil by rail unless the following actions occur:

- The rail cars meet or exceed the new U.S. Department of Transportation Specification 117 design or performance criteria.
- Existing tank cars are retrofitted in accordance with the U.S. Department of Transportation-prescribed retrofit design or performance standard (80 FR 26643).

GP893, **Anonymous**

Comment GP893-1

(Two women singing.) We present an urgent message here today. Don't develop Westway down in Grays Harbor. All the dangerous fumes and fires are well known though some conspire to erect a terminal to have their way.

Our protest now is here in Aberdeen. Health and safety are essential every day. They don't care about abuses, they came up with lame excuses. We insist that they should clearly stay away.

We demand that this proposal be denied to avoid the tragedies we could describe. They don't offer job and skills, Grays Harbor people may get killed. We demand this proposal be denied.

We present an urgent message here today. Don't develop Westway down in Grays Harbor. All the dangerous fumes and fires are well known though some conspire to erect a terminal to have their way. Thank you.

Response GP893-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP894, **Anonymous**

Comment GP894-1

Three years ago now the American Nurses Association passed this resolution to ban all fracking of oil. Please read these copies of the Nurses Resolution. They began this research and nurses -- registered nurses do research, and they're very serious. It's not cute, little nurses. They actually have people that have doctorates in nursing just to make sure it's okay. And, as you can see from the resolution, it's very well researched. The references are in the back.

I just wanted to say that it began because people were on the farms and they agreed, okay, you may put your fracking equipment on my farm. And what happened to start this ball rolling with the research, nurses went -- received patients to the emergency room who had been fracked they call it. The patients from the fields and from the farms ended up in emergency rooms, and then they ended up in intensive care deathly ill, and even the nurses that touched patients who had been fracked and doctors in emergency rooms ended up in the intensive care unit deathly ill.

And the fracking companies said, No, it's a trade secret. We will not tell you what you have just been poisoned with.

So doctors didn't have the anecdote, and they didn't know how to treat the people just by symptomatic control and hope they lived through this terrible evil that the companies have no conscience. That's one example.

And the nurses insist that people stop harming families especially in these rail towns here. I will not review the devastating effects on health but because people keep hearing that over and over, and why is it ignored.

I do have a few questions. Diesel fumes, were they able to test for worst air quality after the 1,100 diesel spill into the Columbia River last Friday? I guess that's October 2nd.

Can we expect more diesel fuel to pull more trains; right? So diesel evaporates, and those train fumes contain formaldehyde, arsenic, and benzine; right?

So whereas the crude or coal transporters or oil frackers will not help us, will each city need to construct special buildings with air filters during the dangerously high emissions from many more trains.

Will they give out air filter masks?

With newer emission control, will the trains pollute in a way that spreads that pollution over several days?

Will the trains stop running when the pollution becomes too deadly?

With new standards like in Louisiana and Texas, those oil refineries pollute extra on the weekends if they had polluted too little during the weekdays. So will trains do that?

Are tests being done now for the toxins already present from coal, oil, and diesel in our water, air, and land?

We need those tests as a before before adding more pollution trains here.

Some politicians do not seem to understand what the contents of the crude oil tankers are, so I ask if you have not explained what is in these cars to the politicians and also ask them what they should tell their citizens. Should all people with children leave here?

Railroads used to buy the homes of people they forced out. Why not now?

And here's what I wanted to say today. What alternative modes of transportation are now on standby in case traffic is blocked after train accidents? Extra helicopters to get patients to the hospital emergency rooms? Why doesn't a transport corporation pay for that or help with that?

Nurses want polluters to stop harming people and to pay for their health care when negligent.

And, since I have so much time, I will just say I was in New Jersey for September 11th. New Jersey nurses were called, give us your phone numbers, be at the ready when survivors come from New York. We will need help getting them to New Jersey hospitals.

But there were no survivors. There were not enough survivors to need us, and that could happen in any of these rail towns here. And these trains do catch fire and they do explode and they are smelly and dirty. So they will drive out all of the local business and the people that are left are in grave, grave danger from the accidents. And, as a nurse, I agree with firemen, we're not ready. I don't want to see a person with no skin ever.

And I think that's all I have to say. Thank you very much.

Response GP894-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Final EIS Chapter 4, *Environmental Health and Safety,* has been updated to better reflect existing local and statewide emergency service response capabilities and resources, updated planning requirements, clarifications about the potential impacts of the proposed action on local emergency response providers, and additional mitigation measures to reduce risks. Nonetheless, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7, *Impacts on Resources*, describes the types of impacts that could occur in the event of an oil spill, fire, or explosion. Refer to the Master Response for Emergency Response and Planning Gaps Evaluation for additional information.

GP895, **Anonymous**

Comment GP895-1

Simply stated the issue is greed versus safety, but the question you must face in good conscience is will Hoquiam or Aberdeen be the next Lac-Mégantic, the town in Quebec that was incinerated by an oil train.

Consider this, even with the new North Dakota law, the volatility of shipped Bakken crude remains at 13.7 pounds per square inch vapor pressure. The train that exploded in Lac-Mégantic had an average pressure of ten PSI.

Could Bakken oil be made safer for shipment? The answer is yes.

For example, Texas crude oil from the Eagle Forks Formation is more volatile at the well but is stabilized before shipment.

Bakken crude could be stabilized, but this would require expensive treatment.

North Dakota does not have the facilities to make the oil safer. The cold calculus of the Bakken producers is this. Keeping the volatile gases in solution during shipping while extraordinarily dangerous is very profitable.

You're sitting here with a fiduciary responsibility for public safety. The question facing you is simple. Will you support public safety or corporate greed?

Response GP895-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP896, **Anonymous**

Comment GP896-1

My feelings on the environmental impact that this oil will have on the environment are very strong.

I've grown up here, born and raised in Grays Harbor. I'm a fisherman, I'm a farmer. My family farmed out here and fished my whole life.

In coming up as a young person in the fishing industry, it's getting harder and harder to go forward and this would essentially, if there was an oil spill, it would null and void the entire area. That's about it.

Response GP896-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion, including impacts on fisheries.

GP897, **Anonymous**

Comment GP897-1

Ladies and gentlemen

I wish to only speak on one issue concerning the oil transport and storage. The railway bridges. Who owns them? Who is responsible for their maintenance and upkeep? The port, city, county state or federal governments.

When was the last time any maintenance was done on any of the bridges themselves. It appears to be something everyone has overlooked. There are many bridges the trains must cross over before reaching the port. These bridges are very outdated and little or no maintenance has been done. Liability will be on the bridge owners.

As the port commissioners, are you willing to take that responsibility when the potentially devastating tankers come through and lives and any existing jobs are destroyed.

How many years has it been since the Gulf disaster and the oil companies have just finally settled with a mere pittance for what has been destroyed and it is still not returned to its original condition.

The bridges are only one area that hasn't been addressed but I feel it is the weakest link and the one that makes the citizens most in the most danger. Take a good look at the bridge crossing the Wishkah river where it joins the Chehalis river. The disaster waiting to happen there is unthinkable.

Thank you.

Response GP897-1

Draft EIS Chapter 3, Section 3.15.4.5, *Ongoing Maintenance and Inspections*, describes Federal Railroad Administration (FRA) track and bridge maintenance and inspections requirements and train and rail car inspection requirements. PS&P is required to comply with these regulations under existing conditions and would continue to be required to comply if the proposed action is implemented. Final EIS Section 3.15.4.5 reflects PS&P commitments to additional safety measures with respect to the transport of crude oil, information about the requirements of FRA's bridge management program, and the most recent results of FRA's bridge inspection reports. Nonetheless, compliance with existing regulations and implementation of the mitigation described in Chapter 4, Section 4.5.3, *What mitigation measures would reduce impacts related to rail transport?* would not completely eliminate the possibility of an incident. Depending on the specific circumstances, the environmental impacts could be significant.

GP898, **Anonymous**

Comment GP898-1

Thank you for the opportunity to comment again on these two projects. Previous correspondence and testimony expressed that these type of projects will be proposed in an area which is susceptible to sea-level rise, earthquake activity, and is in a tsunami zone.

Despite the logic of the rejection of these proposals due to these major factors, we're still going through the process and asking for the permits to be denied.

As suggested in the DEIS, in all likelihood the project will have an accident, oil will be spilled, an explosion will occur, and the community will suffer loss.

Since this is the basic conclusion of the DEIS that accidents are unavoidable, we ask how is it going to be mitigated then? We would like to see the specific mitigation actions for the areas that are not mitigatable.

The DEIS has determined that the project, one, will increase rail and marine vessel traffic, will increase the risk of derailment, collision, spill, fire or explosions.

Response GP898-1

Refer to the Master Response for Mitigation Framework for more information about the development, implementation, and enforcement of mitigation measures. For more information about risks related to earthquakes, tsunamis, and liquefaction, refer to the Master Response Seismic Risk and Design Requirements.

Comment GP898-2

The project would cause increased air pollution from diesel trains and vessels. It will increase noise, it would have a harmful impact on tribal resources, and increase vehicle delay at railroad crossings large enough to disrupt emergency vehicles to respond. If those are not mitigated, then there is no reason to permit the project.

Response GP898-2

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

Comment GP898-3

Specifically in Table 31-2, the probability of stronger earthquakes in the area should be realized to show the latest data by Goldfinger, Oregon State University.

The 8.0 projections are not ten to 12 percent, it's 37 percent, and a one to three chance that in the next 50 years we will see that size of an earthquake.

Response GP898-3

Refer to the Master Response for Earthquake Probabilities for an explanation of how the probabilities of strong earthquakes reported in the Draft EIS relate to those identified in recent studies.

Comment GP898-4

In your assumption about climate change, you assume sea-level rise will stop at the end of the century, but NASA studies have just concluded that the loss of the ice sheet will continue for centuries. That research needs to be included in the EIS.

Response GP898-4

Final EIS Chapter 6, Section 6.5.1.2, *Cumulative Impacts*, *Climate Change*, considers the impacts of sea-level rise in 2050. It does not assume that this is the endpoint of sea-level change, but it is a reasonable period for considering the impacts on the proposed facilities.

Comment GP898-5

In your EIS, please describe how oil trains will affect the safety and wellbeing of other communities other than Aberdeen and Hoquiam.

Ecology in the City of Hoquiam should use the analysis and findings of this flawed DEIS to reject these terminals since the risk of oil spill during rail transport at the terminal site and during marine vessel transport cannot be fully mitigated, and if a spill occurs, the environmental damage would be significant.

Response GP898-5

Draft EIS Chapter 7, Section 7.2, *Social Policy*, considers the impacts on the communities in the study area. Impacts in the extended study area are addressed qualitatively for the reasons discussed in the Master Response for the Geographic Scope of the EIS.

GP899, **Anonymous**

Comment GP899-1

I'm here to speak out against the dangerous crude oil terminals proposed in Grays Harbor. I'm a master's prepared registered nurse with a PhD in International Health. My area of expertise is critical care and trauma. So I think about that in terms of what I say about this.

I've looked at the numbers that are proposed in terms of predictions and the risk of deaths.

And, when I look at the Department of Transportation numbers, they talk about an average of ten oil trains will derail per year for the next 20 years, which totals 200 derailments. So, when you look at that number, that's very low to the actual number of derailments.

The numbers from the northeast between June 2011 and December 2013, a freight train derailed on average every 3.5 days. That's 104 derailed trains per year. Over 20 years, that adds up to 2,080 train derailments.

So my guess is the truth lies between that 200 and 2,080. That's a very unreliable number. So it's hard to use this to predict actual risk.

If you begin to look at the numbers associated with the death that are related to train derailment you, again, see actual numbers of 47, the Quebec Province crash and explosion to DOT estimates which are 200.

When you start to add them up depending on if you multiply 200 by 47 or 200 by 200, the numbers become -- they have great differences in their meaning. I think we are subjecting ourselves to great risk by doing this.

When I look at the risk of a 100-car train and how much oil it holds and then compare that to the amount of oil that would be held in the terminals, basically the two terminals would be a catastrophe just waiting to happen.

When you superimpose that on the disaster zone that we live in, we are looking at disaster upon disaster happening, and I think we tend to underestimate the occurrence of those rare events.

We talk about 1,000-year floods, but it was just a devastating flood in the Carolinas. We talk about landslides, and we don't think that they happen, but we see them more commonly here. One in the last year right here in Grays Harbor itself.

When you look at the risk to our health, the environment, the economy, the risk is just not worth the oil that would be transported through this area.

And I submit that the risks that have been presented are also underestimated, that they would actually be greater. The only thing that can be predicted with certainty is that if the oil spills, we will not be able to fix it. And, because of this, I believe that we must say no to oil by rail.

Response GP899-1

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that

would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

GP900, **Anonymous**

Comment GP900-1

I worked heavy highway and construction my entire life so we do things that are environmentally sound. And Imperium, their biodiesel was good. All of a sudden, regular oil is not good. In my opinion, what's the difference? If they don't have any spills, which if it's done right, Cherry Point doesn't seem to have a problem with spills and they've been refining oil up there for, what, 50 years.

So I'm not against it, I'm not opposed to it. I don't believe that oil should be on a train. I believe it should be in a pipeline.

I've done lots of pipeline jobs. If they're done correctly, which every weld is inspected, every weld is x-rayed, anywhere it's near water they put concrete coating on the pipe. There's never a cigarette butt or anything left.

So that's my opinion. I'm an engineer, so I can't speak for them. I don't think many of them are going to come by. I'm about the only one that is active politically. Anyway, that's my opinion on it.

Response GP900-1

Comment acknowledged.

GP901, **Anonymous**

Comment GP901-1

Thank you for giving me a voice. I'm a tribal member. This ocean, this land, and these rivers, lifelong, belong to the Quinaults. Quinault Indians belong to this ocean, this land, this river, and Lake Quinault. We live in harmony with nature. We are losing our salmon to global warming, clams to red tide, our forest to greed of big timber. They've tried to exterminate and simulate Native Americans for 500 years. To agree to the Westway Imperium projects, they finally accomplish that if this is not denied.

Thank you.

Response GP901-1

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action.

GP902, **Anonymous**

Comment GP902-1

Well, I came to express my concerns with this project in that the issue of the trains traveling past my farm on a continuous basis is going to be extremely annoying to me, and I do have trouble sleeping with the noises that the trains make now, and if we increase that significantly, I'm afraid that I'm going to be a crabby, old man. I don't want to be that way.

But that's really secondary to the major concern that I have which is living near -- on the Chehalis River and knowing the nature of the land and possibility of rapid water coming down off of the hills and floods my place. It gets completely inundated with flood water. I'm concerned about the safety of the tracks and, with heavy use, the possibility of a spill in the water and damaging the fish significantly.

Response GP902-1

Draft EIS Chapter 3, Section 3.15, *Rail Traffic*, describes the existing state of the rail line and future maintenance projects. The impacts of oil spills on specific resources in the Chehalis River and sensitive species in the river are presented in Final EIS Chapter 4, Section 4.7, *Impacts on Resources.*

Comment GP902-2

And more importantly, I think this issue of building these tanks on land that is prone to danger from a tsunami or earthquake is absolutely ridiculous. I'm sure others have commented on that.

Response GP902-2

Refer to the Master Response for Seismic Risk and Design Requirements for an explanation of how regulatory requirements and proposed mitigation measures would reduce potential impacts related to earthquake and earthquake-related hazards such as tsunami and liquefaction.

Comment GP902-3

The danger of the spills to the wildlife, to the fish in the river, and to the birds are very, very dear to me. I have been a member of the Audubon Society for four years and find the possibility of catastrophic failure in the estuary and wildlife refuge to be something that is taking away from future generations, things that I've enjoyed and been able to share with others.

Response GP902-3

Draft EIS Chapter 4, *Environmental Health and Safety*, presents the analysis of risk of oil spills, fires, and explosions related to the proposed action. The analysis considers the effectiveness of existing regulations and identifies additional mitigation measures in Sections 4.4.3, 4.5.3, and 4.6.3 that would reduce the likelihood of a spill reaching the environment and the potential impacts of an incident at the terminal, along the PS&P rail line, or in Grays Harbor, respectively. As noted, mitigation would not completely eliminate the possibility of an incident. Depending on the location, amount spilled, type of crude oil, and environmental conditions, such as the time of year, water flows, and weather conditions, environmental impacts could be significant. Section 4.7*, Impacts on Resources*, describes the types of impacts that could result from an oil spill, fire, or explosion.

Comment GP902-4

So the other thing that I think bothers me the most is we have recognized now that we are in a situation of severe climate change. The climate change is going to continue. It's a question of how intense it's going to be. And, while we talk about it, we do nothing about changing the manner in which we continue to produce the carbons and other gases that's causing the climate change to increase.

The only thing that this project does is expend a tremendous amount of energy to produce a dirty energy, the oil, which will exacerbate the climate change problem. And quite frankly, the climate change is actually beneficial to me in that I'm a farmer. I'm harvesting beans today, which I didn't used to be able do until the first week of September.

But, in general, the climate change is not good. The forecast for other farmers and drought and other things are going to increase. And, at some point, we simply have to recognize that the economic value and gain to be derived from fossil fuel extrapolation and burning is a failed economy.

Response GP902-4

Refer to the Master Response for Purpose and Focus of the EIS for a discussion of how the Final EIS is used by agency decision-makers in considering permits related to the proposed action. Refer to the Master Response for Crude Oil Extraction, Transport, and Combustion for information on the potential sources of crude oil and the potential for the proposed action to drive production at those sources.