6.0 Tables

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Table 1
Contaminants Above Screening Levels in Surface Sediment
RM 1.2-1.7 East

Sample Location Name	Sample River Mile Location	Sampling Event	Sample Collection Date	Contaminant	Concentration Value	Concentration Units		TOC % DW	Concentration (mg/kg OC)	SQS[1]	CSL[1]	SQS/CSL Units	SQS Exceedance Factor[2]	CSL Exceedance Factor[2]
Metals and Trace Elements														
JHGSA-SD1-32-0010	1.6	JamesHardieOutfall	7/3/2000	Zinc	1500	mg/kg dw		2.04		410	960	mg/kg dw	3.7	1.6
PAHs														
JHGSA-SD1-02-0010	1.6	JamesHardieOutfall	7/3/2000	Chrysene	4.1	mg/kg dw		1.48	280	110	460	mg/kg OC	2.5	0.61
PCBs														
DR144	1.5	EPA SI	8/17/1998	PCBs (total calc'd)	0.308	mg/kg dw		1.84	16.7	12	65	mg/kg OC	1.4	0.26
JHGSA-SD1-COMP32-00	1.7	JamesHardieOutfall	7/3/2000	PCBs (total calc'd)	0.69	mg/kg dw		1.01	68	12	65	mg/kg OC	5.7	1.0
LDW-SS60	1.6	LDWRI-SurfaceSedimentRound1	1/19/2005	PCBs (total calc'd)	0.25	mg/kg dw	J	1.08	23	12	65	mg/kg OC	1.9	0.35
B4b	1.4	LDWRI-Benthic	8/28/2004	PCBs (total calc'd)	0.4	mg/kg dw		2.79	14	12	65	mg/kg OC	1.2	0.22
LDW-SS325	1.3	LDWRI-SurfaceSedimentRound3	10/4/2006	PCBs (total calc'd)	0.27	mg/kg dw		2.11	13	12	65	mg/kg OC	1.1	0.2
Other SVOCs														
B4b	1.4	LDWRI-Benthic	8/28/2004	Benzyl alcohol	70	ug/kg dw	J	2.79		57	73	ug/kg dw	1.2	0.96
DR092	1.6	EPA SI	8/27/1998	Phenol	520	ug/kg dw		0.7		420	1200	ug/kg dw	1.2	0.43

Key:

AET - Apparent Effects Threshold
DW - Dry weight
CSL - Cleanup Screening Level
PAH - Polynuclear aromatic hydrocarbon
PCB - Polychlorinated biphenyl
OC - Organic carbon
TOC - Total organic carbon
SQS - Sediment Quality Standard
SVOC - Semivolatile organic compound

Notes:

1. SQS and CSL values are substituted with AET values for dry weight comparison where organic compounds are not OC-normalized (when TOC % DW is outside of the 0.5-4.0% range).
2. Exceedance factors are the ratio of the detected concentration to the CSL or SQS (or to AET values where applicable); exceedance factors are shown only if they are greater than 1.

Source:

Lower Duwamish Waterway Group, 2007. Online Lower Duwamish Waterway Group Draft Remedial Investigation Report (November 2007) Database. http://www.ldwg.org.

Table 2
Contaminants Above Screening Levels in Subsurface Sediment
RM 1.2-1.7 East

Sample Location Name	Sample River Mile Location	Sample Depth Interval (feet)	Sampling Event	Sampling Event Year	Contaminant	Concentration Value	Concentration Units		TOC % DW	Concentration (mg/kg OC)	SQS[1]	CSL[1]	SQS/CSL Units	SQS Exceedance Factor[2]	CSL Exceedance Factor[2]
Metals and Trace Elements															
LDW-SC27	1.4	0 to 2	LDW Subsurface Sediment 2006	2006	Mercury	0.52	mg/kg dw		2.24		0.41	0.59	mg/kg dw	1.3	0.88
PAHs															
LDW-SC23	1.2	2 to 3	LDW Subsurface Sediment 2006	2006	Acenaphthene	0.57	mg/kg dw		1.39	41	16	57	mg/kg OC	2.6	0.72
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Acenaphthene	1.5	mg/kg dw		2.29	66	16	57	mg/kg OC	4.1	1.2
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Acenaphthene	2.1	mg/kg dw		1.3	160	16	57	mg/kg OC	10	2.8
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Anthracene	8.8	mg/kg dw		1.3	680	220	1200	mg/kg OC	3.1	0.57
LDW-SC23	1.2	2 to 4	LDW Subsurface Sediment 2006	2006	Benzo(a)anthracene	3.2	mg/kg dw		2.14	150	110	270	mg/kg OC	1.4	0.56
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Benzo(a)anthracene	2.7	mg/kg dw		2.29	120	110	270	mg/kg OC	1.1	0.44
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Benzo(a)anthracene	7.1	mg/kg dw		1.3	550	110	270	mg/kg OC	5	2
LDW-SC23	1.2	2 to 4	LDW Subsurface Sediment 2006	2006	Benzo(a)pyrene	2.5	mg/kg dw		2.14	120	99	210	mg/kg OC	1.2	0.57
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Benzo(a)pyrene	3	mg/kg dw		1.3	230	99	210	mg/kg OC	2.3	1.1
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Benzo(g,h,i)perylene	0.73	mg/kg dw		1.3	56	31	78	mg/kg OC	1.8	0.72
LDW-SC23	1.2	2 to 4	LDW Subsurface Sediment 2006	2006	Benzofluoranthenes (total-calc'd)	6	mg/kg dw		2.14	280	230	450	mg/kg OC	1.2	0.62
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Benzofluoranthenes (total-calc'd)	6.4	mg/kg dw		1.3	490	230	450	mg/kg OC	2.1	1.1
LDW-SC23	1.2	2 to 4	LDW Subsurface Sediment 2006	2006	Chrysene	7.2	mg/kg dw		2.14	340	110	460	mg/kg OC	3.1	0.74
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Chrysene	3.1	mg/kg dw		2.29	140	110	460	mg/kg OC	1.3	0.3
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Chrysene	7.8	mg/kg dw		1.3	600	110	460	mg/kg OC	5.5	1.3
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Dibenzo(a,h)anthracene	0.18	mg/kg dw		1.3	14	12	33	mg/kg OC	1.2	0.42
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Dibenzofuran	0.65	mg/kg dw		1.3	50	15	58	mg/kg OC	3.3	0.86
LDW-SC23	1.2	2 to 4	LDW Subsurface Sediment 2006	2006	Fluoranthene	7.4	mg/kg dw	J	2.14	350	160	1200	mg/kg OC	2.2	0.29
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Fluoranthene	10	mg/kg dw		2.29	440	160	1200	mg/kg OC	2.8	0.37
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Fluoranthene	24	mg/kg dw		1.3	1800	160	1200	mg/kg OC	11	1.5
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Fluorene	1.8	mg/kg dw		1.3	140	23	79	mg/kg OC	6.1	1.8
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Indeno(1,2,3-cd)pyrene	0.93	mg/kg dw		1.3	72	34	88	mg/kg OC	2.1	0.82
C	1.7	0 to 3	Hardie Gypsum-2	1999	Phenanthrene	2.2	mg/kg dw		1.9	120	100	480	mg/kg OC	1.2	0.25
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Phenanthrene	12	mg/kg dw		1.3	920	100	480	mg/kg OC	9.2	1.9
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Pyrene	14	mg/kg dw		1.3	1100	1000	1400	mg/kg OC	1.1	0.79
LDW-SC23	1.2	2 to 4	LDW Subsurface Sediment 2006	2006	Total HPAH (calc'd)	31.5	mg/kg dw	J	2.14	1500	960	5300	mg/kg OC	1.6	0.28
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Total HPAH (calc'd)	25	mg/kg dw		2.29	1100	960	5300	mg/kg OC	1.1	0.21
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Total HPAH (calc'd)	64	mg/kg dw		1.3	4900	960	5300	mg/kg OC	5.1	0.92
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Total LPAH (calc'd)	25	mg/kg dw		1.3	1900	370	780	mg/kg OC	5.1	2.4
PCBs															
2	1.6	0 to 4	Hardie Gypsum-1	1998	PCBs (total calc'd)	0.29	mg/kg dw		2.3	13	12	65	mg/kg OC	1.1	0.2
LDW-SC31	1.7	0 to 1	LDW Subsurface Sediment 2006	2006	PCBs (total calc'd)	0.37	mg/kg dw		2.52	15	12	65	mg/kg OC	1.3	0.23
LDW-SC31	1.7	1 to 3	LDW Subsurface Sediment 2006	2006	PCBs (total calc'd)	0.33	mg/kg dw		2.18	15	12	65	mg/kg OC	1.3	0.23
LDW-SC23	1.2	4 to 6	LDW Subsurface Sediment 2006	2006	PCBs (total calc'd)	0.88	mg/kg dw		1.46	60	12	65	mg/kg OC	5	0.92
LDW-SC23	1.2	6 to 8	LDW Subsurface Sediment 2006	2006	PCBs (total calc'd)	0.4	mg/kg dw		2.25	18	12	65	mg/kg OC	1.5	0.28
LDW-SC27	1.4	0 to 1	LDW Subsurface Sediment 2006	2006	PCBs (total calc'd)	2	mg/kg dw		1.8	110	12	65	mg/kg OC	9.2	1.7
LDW-SC27	1.4	0 to 1	LDW Subsurface Sediment 2006	2006	PCBs (total calc'd)	0.25	mg/kg dw		1.54	16	12	65	mg/kg OC	1.3	0.25
LDW-SC27	1.4	0 to 2	LDW Subsurface Sediment 2006	2006	PCBs (total calc'd)	3.3	mg/kg dw		2.24	150	12	65	mg/kg OC	13	2.3
LDW-SC27	1.4	1 to 2	LDW Subsurface Sediment 2006	2006	PCBs (total calc'd)	1.51	mg/kg dw		1.82	83	12	65	mg/kg OC	6.9	1.3
LDW-SC27	1.4	1 to 2	LDW Subsurface Sediment 2006	2006	PCBs (total calc'd)	3.2	mg/kg dw		1.22	260	12	65	mg/kg OC	22	4
LDW-SC27	1.4	2 to 3	LDW Subsurface Sediment 2006	2006	PCBs (total calc'd)	0.29	mg/kg dw		2.27	13	12	65	mg/kg OC	1.1	0.2
LDW-SC27	1.4	2 to 3	LDW Subsurface Sediment 2006	2006	PCBs (total calc'd)	0.84	mg/kg dw		2.14	39	12	65	mg/kg OC	3.3	0.6
Phthalates															
LDW-SC23	1.2	2 to 4	LDW Subsurface Sediment 2006	2006	Bis(2-ethylhexyl)phthalate	1.6	mg/kg dw		2.14	75	47	78	mg/kg OC	1.6	0.96
LDW-SC23	1.2	3 to 4	LDW Subsurface Sediment 2006	2006	Bis(2-ethylhexyl)phthalate	0.78	mg/kg dw		1.3	60	47	78	mg/kg OC	1.3	0.77

Key:
AET - Apparent Effects Threshold
DW - Dry weight
CSL - Cleanup Screening Level
PAH - Polynuclear aromatic hydrocarbon
PCB - Polychlorinated biphenyl
OC - Organic carbon
TOC - Total organic carbon
SQS - Sediment Quality Standard

Notes:
1. SQS and CSL values are substituted with AET values for dry weight comparison where organic compounds are not OC-normalized (when TOC % DW is outside of the 0.5-4.0% range).
2. Exceedance factors are the ratio of the detected concentration to the CSL or SQS (or to AET values where applicable); exceedance factors are shown only if they are greater than 1.

Source:
Lower Duwamish Waterway Group, 2007. Online Lower Duwamish Waterway Group Draft Remedial Investigation Report (November 2007) Database. http://www.ldwg.org.

Table 3
Facilities of Concern Identification

Facility Identified	Physical Address	Facility/Site ID NO.	Included/Excluded	Ecology Program
Ace Radiator	311 S BRANDON ST	59441643	Excluded*	Hazwaste - HWG, HWP- All Inactive Toxics-SCS- Inactive
AIR TEC CO PARCEL C	5701 1ST AVE S	57633623	Excluded*	Toxics- LUST,UST,Volclnst-Inactive Toxics-SCS-Active
ALL METAL CO	5610 AIRPORT WAY S	5274463	Excluded*	Watqual- WQGSWI- Active
Art Brass Plating Inc Seattle	5516 3RD AVE S	88531932	Included	Hazwaste- ENFORFNL, HWG, HWP, TIER 2, TRI- Active Toxics- VOLCLNST- Active
BAXTER RUTHERFORD	911 S HOSMER ST	4738343	Excluded*	Toxics- LUST-Inacvtive Toxics-UST-Active
BLASER DIE CASTING CO	5700 3RD AVE S	7118747	Included	Toxics-SCS-Active
BOBS TEXACO SERVICE	5304 1ST AVE S	47157762	Excluded*	Toxics- LUST,UST-Active
Phillips Services Corp	734 S LUCILE ST	47779679	Included	Hazwaste-HWTSDF, HWG, TIER 2, TRI-Inactive HWOTHER-Active Toxics-SCS-Active
Capital Industries Inc	5801 3RD AVE S	11598755	Included	Hazwaste-HWG,HWP-Active Hazwaste-Tier 2, TRI-Inactive SCS-Active
Consolidated Freightways Seattle	6050 E MARGINAL WAY S	54757868	Excluded*	Hazwaste- HWG-Inactive Hazwaste-Tier 2-Active Toxics-LUST, VOLCLNST-Inactive Toxics-SCS,UST-Active
Drive Line Services of Seattle Inc	108 S BRANDON ST	2521	Excluded*	Hazwaste-HWG- Inactive Toxics-IRAP-Inactive
General Electric Aviation Div	220 S DAWSON ST	2522	Excluded*	Hazwaste-HWG, HWP, TRI-Inactive Hazwaste-ENFORFN, Tier 2- Active Toxics-SCS-Active
Miller Paint Company Corson Ave	5959 CORSON AVE S	51945779	Excluded*	Hazwaste-HWG, LIST-Inactive Toxic-UST-Inactive
Mobile Crane Co Inc	5900 2ND AVE S	96851494	Excluded*	Hazwaste-HWG Toxics-LUST, VOLCLNST-Inactive Toxic-UST-Active
OTT REAL ESTATE PROPERTY	5903 1ST AV S	17634	Excluded*	Toxics- IRAP-inactive
PNB BUILDING	707 S ORCAS ST	27585467	Excluded*	Toxic-LUST-Inactive Toxic-UST-Active
SAHLBERG EQUIPMENT	5950 4TH AVE S	2450	Excluded*	Hazwaste- HWG-Inactive Toxics-INDPNDNT- Active
UNION PACIFIC RAILROAD CO DAWSON ST	402 S DAWSON ST	44577768	Excluded*	Hazwaste- HWG-Inactive Hazwaste-HWOTHER, Tier2-Active Waterqual- WQGSWI
Certainteed Gypsum Manufacturing	5931 E MARGINAL WAY S	2253	Included	Hazwaste-HWG-inactive Hazwaste-Tier2- Active Toxic-LUST,USTVOLCLNST-Inactive Waterqual-WQGSWI

Table 3
Facilities of Concern Identification

Facility Identified	Physical Address	Facility/Site ID NO.	Included/Excluded	Ecology Program
Chevron 90636	5940 E MARGINAL WAY S	1792892	Excluded*	Hazwaste-HWG, HWOTHER,Tier2-Inactive Toxic-LUST,UST-Active
Longview Fibre Paper & Packaging Inc	5901 E MARGINAL WAY S	2226	Included	Hazwaste-HWG,HWOTHER-Inactive Hazwaste-Tier2-Active Toxics-LUST,UST,INDPNDNT-Active Waterqual-WQGSWL-Active
Saint Gobain Containers	5801 E MARGINAL WAY S	94925241	Included	Hazwaste-HWG,HWP-Inactive Hazwaste-Tier2,TRI-Active Toxic-LUST,UST-Inactive Waterqual-WQGSWI-Active Airqual-Aqops

* As a precautionary measure, these additional upland facilities were considered as they are listed in Ecology's Facility/Site Database and lie within the general area of groundwater that generally flows to the RM 1.2-1.7 East source control area. Four upland facilities were included for review (see Section 4.3) due to known groundwater contamination that may pose a threat to RM 1.2-1.7 East sediments. However, these excluded facilities were not selected for review as there are no indications that they are contributing to the existing co-mingled plume.

Table 4
Storm Drain Outfall Details

Outfall Identification (Windward, 2007a)	Other Identification According to Facility or Source	Land Owner/Outfall Operator (Windward, 2007a)	Pipe Daimeter/ Construction Material (Windward, 2007a)	Flow Rate* (Windward, 2007a)	Notes from Sources	Permit	Proposed Designation
2007	005 (St Gobain) (CRA, 2006)	King County	18-in CMP	none	King County Storm Drain		public SD
2008	004 (St Gobain) (CRA, 2006)	King County	8 inch steel	none	King County Storm Drain		public SD
2009	003 (St. Gobain) (CRA, 2006)	King County	6-inch ductile	none	King County Storm Drain		public SD
2010	002 (St. Gobain) (CRA, 2006)	King County	6-inch PVC	none	King County Storm Drain		public SD
2011	001 (St. Gobain) (CRA, 2006)	King County	12-inch PVC	none	King County Storm Drain		public SD
2013		Longview Fibre	12-inch concrete	trickle	Direct discharge to LDW	SO3000206D	permitted private SD
2014		James Hardie	24-inch concrete	3 gpm	May also be covered under this permit as an additional overflow outlet	SO3000056D	permitted private SD
2015		James Hardie	N/A	none	Permit transferred to BPD Gupsum in Jan. 2004 with direct discharge to LDW. Ecology database lists three outfalls (Nos. 1 to 3)	SO3000056D	permitted private SD
2016		James Hardie	N/A	none	Permit transferred to BPD Gupsum in Jan. 2004 with direct discharge to LDW. Ecology database lists three outfalls (Nos. 1 to 3)	SO3000056D	permitted private SD
2017		James Hardie	12-inch PVC	none	Permit transferred to BPD Gupsum in Jan. 2004 with direct discharge to LDW. Ecology database lists three outfalls (Nos. 1 to 3)	SO3000056D	permitted private SD

*Visual observations from field survey completed May 16 to 20, 2003, and June 2 to 11, 2003.