



DEPARTMENT OF
ECOLOGY
State of Washington

Response to Comments

Ventilation Upgrades and Closing Unused Hot Cells at Hanford's Waste Encapsulation and Storage Facility (WESF)

December 11, 2014 – March 3, 2015

Summary of a public comment period and responses to comments

March 2016
Publication no. 16-05-006

PUBLICATION AND CONTACT INFORMATION

This publication is available on the Department of Ecology's (Ecology) website at <https://fortress.wa.gov/ecy/publications/SummaryPages/1605006.html>

For more information contact:

Stephanie Schleif
Nuclear Waste Program
3100 Port of Benton Boulevard
Richland, WA 99354

Phone: 509-372-7950

Email: Hanford@ecy.wa.gov

Washington State Department of Ecology - www.ecy.wa.gov

- Headquarters, Lacey 360-407-6000
- Northwest Regional Office, Bellevue 425-649-7000
- Southwest Regional Office, Lacey 360-407-6300
- Central Regional Office, Yakima 509-575-2490
- Eastern Regional Office, Spokane 509-329-3400

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Response to Comments

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December 11, 2014 – March 3, 2015

Department of Ecology
Nuclear Waste Program
3100 Port of Benton Boulevard
Richland, Washington 99354

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INTRODUCTION

The Washington State Department of Ecology's Nuclear Waste Program (NWP) manages dangerous waste within the state by writing permits to regulate its treatment, storage, and disposal.

When a new permit or a significant modification to an existing permit is proposed, Ecology holds a public comment period to allow the public to review the change and provide formal feedback. (See [Washington Administrative Code \[WAC\] 173-303-830](#) for types of permit changes.)

This Response to Comments is being issued to address public comments received during a comment period held December 11, 2014 through March 3, 2015. That comment period supported a permit modification for the Hanford Waste Encapsulation and Storage Facility (WESF) that was proposed by the United States Department of Energy (permittee).

In addition to the public comment period that was held specifically for WESF Hot Cells A through F, as detailed above, Ecology received some comments specific to the WESF during a comment period held on the renewal of the draft Rev. 9 Site-wide Permit, from May 1 through October 22, 2012. We will use this Response to Comments Document to address those comments.

The purpose of this Response to Comments is to:

- Describe and document public involvement actions.
- List and respond to all significant comments received during the renewal of Rev. 9 Site-wide Permit and the WESF Hot Cell A through F public comment periods.

This Response to Comments is prepared for:

Comment period:	Ventilation Upgrades and Closing Unused Hot Cells at Hanford's Waste Encapsulation and Storage Facility, December 11, 2014 – March 3, 2015 Renewal of the draft Rev. 9 Site-wide Permit, from May 1 through October 22, 2012
Permit:	<i>Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit for the Treatment, Storage, and Disposal of Dangerous Waste, Part V, Closure Unit Group 6, Waste Encapsulation and Storage Facility Hot Cells A through F</i>
Permittee(s)	U.S. Department of Energy Richland Operations CH2M HILL Plateau Remediation Company
Original issuance date:	September 27, 1994

For more information related to the Hanford Site and nuclear waste in Washington, please visit our website: www.ecy.wa.gov/programs/nwp.

REASONS FOR MODIFYING THE PERMIT

The proposed changes are Class 3 permit modifications to the Hanford Facility Dangerous Waste Permit, which regulates the storage, treatment, and disposal of Hanford's dangerous chemical and mixed chemical and radioactive waste. This modification will move one Dangerous Waste Management Unit (DWMU) (Hot Cell A through F) within the WESF Operating Unit Group (OUG) 14 from Part III, Operating Unit Group, of the Hanford Permit to Part V, Closure Unit Group 6, of the permit.

Large amounts of legacy contamination throughout some hot cells and the ventilation system require the stabilization of the contamination, as well as upgrades to the ventilation system. The proposed changes are necessary to support replacement of the K3 ventilation exhaust system at WESF, which is permitted under the Hanford Air Operating Permit. The current filters are beyond their design life and are deteriorating. Therefore a new system is being installed to ensure continued safe operations at WESF.

To replace the K3 ventilation system, the permittee must stabilize WESF hot cell contamination left over from prior waste processing activities by filling the cells with grout. The stabilization effort requires a revision to the WESF Part A Application, which details facility information, and submittal of a closure plan to detail this interim step to closure at WESF. The closure plan will address Hot Cells A through F, which are no longer operational.

Land Disposal Restriction (LDR) Treatment Variance

In addition to the proposed permit modifications, the permittee submitted to Ecology, in accordance with [WAC 173-303-140](#), a request for a site-specific treatability variance from applicable LDR treatment standards for specific waste items in Hot Cells B and C. These waste items hold a small amount of floor sweepings containing strontium fluoride, process debris and other waste material produced during the last steps of cleanup and shutdown of operations. This request was submitted to Ecology in January 2015.

Ordinarily, this type of waste would be treated by mixing the waste material with a stabilizing agent, followed by sampling and analysis to confirm that LDR treatment standards have been met. However, these materials are highly radioactive, with half-lives of about 30 years for cesium-137 and 29 years for strontium-90. Meeting LDR treatment standards requires intrusive activities and handling of this waste, increasing risk of exposure to workers and the environment and generation of additional mixed waste. In addition, the high radiological nature of the waste items interferes with laboratory analyses needed to confirm treatment was successful.

The variance will allow stabilization by an alternative treatment method of macroencapsulation of these waste items. This method uses grout to surround the waste, which protects human health and the environment by reducing the leachability of contaminants and minimizing waste generation and potential radiological exposure to workers. The requested treatability variance detailed the justification and protectiveness of this alternative.

PUBLIC INVOLVEMENT ACTIONS

Ecology and the permittees encouraged public comment on the Part A and Closure Plan during a 60-day public comment period held December 11, 2014 through February 20, 2015. The public

comment period was extended until March 3, 2015, to allow the public time to review the supporting Treatability Variance submitted by the permittees to support the Closure Plan.

The following actions were taken to notify and involve the public:

- A public notice announcing the comment period was sent to about 1900 subscribers to the Hanford mailing list.
- An advertisement announcing the comment period was placed in the Tri-City Herald on December 11, 2014.
- A notice announcing the start of the comment period was sent to the Hanford-Info email list, which had about 1500 subscribers.
- The comment period was shared on Ecology's Hanford Education & Outreach Facebook page on December 16, 2014.
- The permittees held a public meeting January 7, 2015, at 5:30 pm at Richland Public Library.

The Hanford information repositories located in Richland, Spokane, and Seattle, Washington and Portland, Oregon received the following documents for public review:

- Public notice
- Transmittal letter
- WESF Part A
- WESF Closure Plan
- Treatability Variance Request

The following public notices for this comment period are in Appendix A of this document:

1. Fact Sheet
2. Advertisement in the *Tri-City Herald*
3. Notice sent to the Hanford-Info email list
4. Post on Ecology Hanford Education & Outreach Facebook page

Ecology also encouraged public comment on the Hanford Site-wide Permit, Rev. 9 during a comment period held May 1 through October 22, 2012. We took the following actions to notify and inform the public about the 2012 comment period:

- A public notice announcing the comment period was mailed to the subscribers to Hanford postal mailing list and interested members of the public.
- Copies of the public notice were shared at Hanford Advisory Board meetings.
- A display advertisement was placed in the Tri-City Herald on April 29, 2012.
- A notice announcing the start of the comment period was sent to the [Hanford-Info email list](#), which had about 1,000 subscribers.
- The comment period was posted as an event on Ecology's [Hanford Education & Outreach Facebook page](#).

Ecology held six public hearings:

- May 15, 2012, 7:00 pm at University Heights Center in Seattle
- May 16, 2012, 7:00 pm at Red Lion Hotel on the River in Portland
- June 5, 2012, 6:30 pm at Spokane City Council Chambers
- June 6, 2012, 6:30 pm at the Richland Public Library
- September 13, 2012, 7:00 pm at Ambridge Event Center in Portland
- September 15, 2012, 7:00 pm at Seattle Center

Approximately 385 members of the public attended, and more than 5000 comments were collected at the public hearings. Hearing transcripts are in Appendix C of this document.

The Hanford information repositories located in Richland, Spokane, and Seattle, Washington, and Portland, Oregon, received the following documents for public review:

- Public notice
- Transmittal letter
- Fact Sheet for the proposed Hanford dangerous waste permit reissue
- Draft reissued permit

The following public notices for this comment period are in Appendix A of this document:

1. Public notice (focus sheet)
2. Advertisement in the *Tri-City Herald*
3. Notice sent to the Hanford-Info email list
4. Event posted on Ecology Hanford Education & Outreach Facebook page

LIST OF COMMENTERS

Commenter Identification:

The table below lists the names of organizations or individuals who submitted a comment on the WESF Hot Cells A through F Permit modification. It also includes comments specific to WESF that were submitted during the draft Rev. 9 Site-wide Permit Renewal comment period. The last column lists the page number where you can find Ecology's response to the comment(s).

Commenter	Organization	Comment Number	Page Number
Steven Gary	Citizen	1	6
Margaret L. Wills	Citizen	2	6
Mary Ryan-Hotchkiss	Citizen	3	7
Deb Muhlbeier	Citizen	4	7
Ken Niles	Oregon Department of Energy	5	7
Pam Borso	Citizen	6	9
Mike Conlan	Citizen	7	9
Lucy Schneid	Citizen	8	10
Carl Holder	Citizen	9	10
Russell Jim	Confederated Tribes and Bands of the Yakama Nation ERWM	10	11 - 16
Thurman Cooper	CBCG Consulting Services	11	17
Marion Moos	Citizen	12	17
US Department of Energy	Federal Government	13	17
US Department of Energy	Federal Government	14	18
US Department of Energy	Federal Government	15	19
US Department of Energy	Federal Government	16	19
US Department of Energy	Federal Government	17	20

RESPONSE TO COMMENTS

Description of Comments:

Ecology accepted comments on the Closing Unit Group 6, WESF Hot Cells A through F from December 11, 2014, until March 3, 2015. This section provides a summary of comments received during the public comment period and our responses, as required by [Revised Code Washington \(RCW\) 34.05.325\(6\)\(a\)\(iii\)](#). All comments are listed individually and each is addressed separately. Ecology's responses directly follow each comment in italic font. Verbatim copies of all written comments are attached in Appendix B.

Comment #1 from Steven Gary, Citizen, dated December 31, 2014

To USDOE,

I urge you to remove the cesium and strontium capsules from water storage and put into dry casks ASAP. This must be funded for years 2015 and 2016. At least two "hot cells" need to be equipped and available to do the work safely and efficiently. Also a back-up should be included in case of an accident. Leaving the high-level radioactive wastes near the surface at Hanford by "grouting" hot cells is not a good long term strategy. I would rather see them cut up and treated as highly radioactive wastes. Let's do it right this time.

Ecology Response:

The upgrades to the WESF Ventilation System that are supported by this Permit Modification are the first step to eventual movement of the cesium and strontium capsules to dry storage. Hot Cell G will remain operational to support any required maintenance or repair of any capsules in storage in the pool cells.

Comment #2, from Margret Wills, Citizen, dated January 1, 2015

Please remove Cesium and strontium capsules from water storage and into dry casks. This must be funded in 2015-16.

Do not do this without back-up. Please refer to suggestions from Heart of America. They know what they are talking about.

Earthquakes are happening and more are waiting to happen. Saving money and putting things off can be very dangerous and more expensive in the long run.

Listen to Heart of America. They say it better than I can. Just know there are a lot of us who agree with them and are concerned!!!

Ecology Response:

The upgrades to the WESF Ventilation System that are supported by this Permit Modification are the first step to eventual movement of the cesium and strontium capsules to dry storage. Hot Cell G will remain operational to support any required maintenance or repair of any capsules in storage in the pool cells.

Comment #3 from Mary Ryan-Hotchkiss, Citizen, dated January 2, 2015

My letter is in response to the announcement that public hearing is scheduled for January 7, in Richland, and that comments may be sent through Feb 12:

Dear sir or madam;

It is vital and prudent to clean up this gargantuan mess of radioactive wastes, which has contaminated and continues to threaten the Columbia River and our aquifer systems. This is the price we must pay because we made those weapons of mass destruction. I ask that you especially remove cesium and strontium capsules from water storage and into dry casks.

Given the experience at Fukushima it's also time to act to remove the waste from WESF and close the CGS reactor.

Ecology Response:

The upgrades to the WESF Ventilation System that are supported by this Permit Modification are the first step to eventual movement of the cesium and strontium capsules to dry storage.

Comment #4 from Deb Muhlbeier, Citizen, dated January 4, 2015

Please make arrangements for dry storage immediately. The risk of earthquake is more extreme, with the newly discovered fault in Idaho... Please update the current ventilation to meet or exceed the existing system please don't skimp on costs.. the cost should be a non-issue in order to keep everyone safe.

Ecology Response:

The upgrades to the WESF Ventilation System that are supported by this Permit Modification are the first step to eventual movement of the cesium and strontium capsules to dry storage.

Comment #5 from Ken Niles, Oregon Department of Energy, dated January 5, 2015

Dear Ms. Schleif:

Thank you for the opportunity to review and comment on proposed permit changes for Hanford's Waste Encapsulation and Storage Facility. We have two comments on this proposed change. First, we don't believe that a public comment period should begin when all pertinent documents are not yet available. The draft permit modification references a variance request related to specific waste items in Hot Cells B and C – which we do have some concerns and questions about. The notice for the public comment period indicates that the variance will not be available until late January – more than halfway through the public comment period. Once that document becomes available, we may submit additional comments related to that variance request.

Second, while we understand the rationale behind the request to grout the majority of the hot cells, we do have to wonder whether doing so removes a potential option for handling cesium that may be removed from the tank waste stream as part of the Office of River Protection's plans to move forward with direct-feed of low-activity waste. DOE-ORP is currently looking at removal of cesium from some tank waste so that it can be vitrified in the low-activity vitrification facility, prior to the entire Waste Treatment Plant becoming operational. DOE-ORP representatives have mentioned to our advisory group – the Oregon Hanford Cleanup Board, and to the regional Hanford Advisory Board – that DOE has not yet decided on whether to return that removed cesium back to the tanks, or to somehow retain it in some other form for later treatment or disposal.

We do not support the idea of returning cesium back to the tanks after it has been removed. We would like to see whether it would make sense to convert that cesium into a similar form as is currently stored in capsules at WESF. While it would somewhat increase the volume of cesium in storage, it would not result in creation of a new waste form that does not have a disposal path. If this is viable, would the reduced capacity of hot cell availability at WESF preclude that from happening? We strongly encourage this be evaluated prior to Ecology granting the permit changes to allow grouting of most of the WESF Hot Cells.

We have previously indicated that we believe that moving the existing cesium capsules from pool storage at WESF to dry storage should be a high priority for DOE, due to concerns about possible concrete degradation in the pools. That position has not changed.

Should you have questions or want to discuss any of our comments, please contact me at 503-378-4906 or ken.niles@state.or.us.

Ecology Response:

We agree with the concern you shared in your first comment. In order to allow the public an adequate amount of time to review the Part A, Closure Plan and associated request for a Treatability Variance, we extended the public comment period to March 3, 2015 to ensure the public had a total of 30 days to review all the documents together.

The WESF hot cells were designed to receive cesium carbonate from B Plant, convert it to cesium chloride, place it inside capsules, and then weld the capsules. B Plant has been placed into a cold and dark configuration and the WESF hot cell equipment needed to make the capsules was shutdown in 1984. Most of the cesium processing and capsule testing/inspection equipment has been removed from the cells. Utilities, chemicals, tanks, and piping have been disconnected and/or removed. There is no current capability to make new capsules at WESF.

WESF has the capacity to store additional capsules, but is not currently permitted to accept or store any additional capsules. However, it isn't clear at this time how much cesium would be produced by the proposed process and over what time period. Therefore, it's not known if WESF has sufficient excess capacity to store the necessary number of new capsules. It's also uncertain how the timeline of this proposed process would match up with the timeline for placing the existing WESF capsules into dry storage.

The upgrades to the WESF Ventilation System that are supported by this Permit Modification are the first step to eventual movement of the cesium and strontium capsules to dry storage. To address your second comment, at the present time DOE has not decided on whether the removed cesium from the direct feed law process will be returned to the tanks or retained in some other form for treatment or disposal. That decision will be based on what is best for the direct feed process and the ultimate disposition of the material.

Comment #6 from Pam Borso, Citizen, January 5, 2015

I am writing to comment on the proposed treatment of the High Level Nuclear Waste found in the tanks at Hanford. The cesium and strontium should be treated as High Level Nuclear Waste. Removing these materials from water storage to dry storage needs to be funded and in addition there should be back up plans in case of accidents.

In addition, "grouting" hot cells, instead of planning to cut them up and treat them as highly radioactive wastes is not a good long-term cleanup strategy, because it would leave high level radioactive waste near the surface at Hanford.

Please be attentive to the safety needs of handling this dangerous material.
Thank you for this opportunity to comment.

Ecology Response:

The upgrades to the WESF Ventilation System that are supported by this Permit Modification are the first step to eventual movement of the cesium and strontium capsules to dry storage. We agree with your concern in leaving grouted hot cells in place. Ecology worked with DOE to ensure that the grouted hot cells will be safely cut up and removed to be disposed of at an appropriate disposal facility.

Comment #7 from Mike Conlan, Citizen, January 6, 2015

USDOE:

- Removing cesium and strontium capsules from water storage and into dry casks is an urgent safety problem that must be funded in 2015 and 2016.
- It's not wise to bet that the work can all be done in one "hot cell." At least two hot cells need to be equipped and available to do the work safely and efficiently, including having a back-up in event of accidents.
- "Grouting" hot cells, instead of planning to cut them up and treat them as highly radioactive wastes is not a good long-term cleanup strategy, because it would leave the high-level radioactive wastes near the surface at Hanford.

Ecology Response:

The upgrades to the WESF Ventilation System that are supported by this Permit Modification are the first step to eventual movement of the cesium and strontium capsules to dry storage. Hot Cell G will remain operational to support any required maintenance or repair of any capsules in storage in the pool cells. We agree with your concern in leaving grouted hot cells in place. Ecology worked with DOE to ensure that the grouted hot cells will be safely cut up and removed to be disposed of at that appropriate disposal facility.

Comment #8 from Lucy Schneid, Citizen, January 8, 2015

It is so evident the Department of Energy is not taking the danger of Hanford seriously. What must happen before you begin doing what needs to be done?! Removing cesium and strontium capsules from water storage into dry casks is an urgent safety problem that needs to be funded in 2015 and 2016!

Are there scientists, serious scientists, to wrap their heads around the issues at Hanford? It is not wise to bet that the work can all be done in a single "hot cell." At least two hot cells need to be equipped and available to do the work safely and efficiently, including having a back-up in event of accidents.

"Grouting" hot cells - seriously? - instead of planning to cut them up and treat them as highly radioactive wastes is not a good long-term cleanup strategy. That would leave radioactive wastes right near the surface at Hanford.

Listen, people: what if there was an earthquake near here? It would simultaneously release vast amounts of radiation from WESF, preventing crews from restoring water to the pool holding the waste fuel rods atop the CGS reactor! These are not just words! It is time to act! Remove the waste from WESF and close the CGS reactor! Not only a safety benefit, ratepayers in WA and OR would actually save millions of dollars a year!!!

Ecology Response:

The upgrades to the WESF Ventilation System that are supported by this Permit Modification are the first step to eventual movement of the cesium and strontium capsules to dry storage. Hot Cell G will remain operational to support any required maintenance or repair of any capsules in storage in the pool cells. We agree with your concern in leaving grouted hot cells in place. Ecology worked with DOE to ensure that the grouted hot cells will be safely cut up and removed to be disposed of at an appropriate disposal facility.

Comment #9 from Carl Holder, Citizen, January 18, 2015

In the 1970s, the radioactive isotopes of the chemical elements cesium and strontium which generate a large amount of heat, were removed from the high-level waste tanks at Hanford to reduce the temperature of the waste inside the tanks. Both elements were ultimately placed in sturdy, stainless steel containers in WESF for safe storage and monitoring. WESF stores nearly 2,000 cesium and strontium capsules in underwater pools.

These sturdy, stainless steel containers should be repositioned, 1. because the decay heat can safely be dissipated without water cooling. Ambient air cooling is now safe, the decay heat becoming less over time. A dry and more economical disposition path is desirable. These capsules are at the top of Hanford's highly radioactive waste HLW inventory. These all-accounted-for capsules are almost all of the radioactive waste at WESF. With an approved removal plan and reposition site, removal could happen expeditiously.

Mr Pollet <http://www.hanfordcleanup.org/> of HAB and WA State Rep says that the capsules are most dangerous waste and potential containment to the Hanford site. Too dangerous of a risk to allow continued operation of Columbia Generating Station. I disagree with his engineering and assessment of risk however, with this being said, repositioning and a path permanent plan should be considered.

I have such a plan including beneficial reuse.

Prior to wasting another dime on that decrepit WESF facility consider a reposition plan.

Ecology Response:

The upgrades to the WESF Ventilation System that are supported by this Permit Modification are the first step to eventual movement of the cesium and strontium capsules to dry storage.

Comment #10 from Russell Jim, Confederated Tribes and Bands of the Yakama Nation ERWM, January 22, 2015

Factsheet:

- The Factsheet should have stated more clearly that the proposed modifications would result in closure of portions of the facility. Delete statement that it is interim step to closure as this is confusing to the public and RCRA doesn't allow 'interim closure' as discussed during the meeting.
- If closure of the RCRA TSD portion of WESF is anticipated to be coordinated with the B Plant Remedial Action under CERCLA, this information should be included in the Factsheet and what this entails.
- The Fact Sheet and the power point presentation by RL-DOE during the public meeting January 7, 2015 were useful. However, some areas could have used considerably more detail, such as including in the Factsheet the fact that there was a Defense Nuclear Safety Board inspection (including a link and resulting requests/suggestions, etc) and that the proposed modifications are driven by the results of that inspection. For full public understanding, the Factsheet should have also included some type of statement to the effect that the modifications are ultimately in support of the movement of the cesium and strontium waste capsules from wet into dry storage. Include reference link to DOE/RL-2012-47, 2013, Mission Needs Statement for the Management of the Cesium and Strontium Capsules.
- Factsheet should have provided more details as to the current status of WESF's operational components to clarify the statement that "filters are beyond their design life and are deteriorating. Therefore a new system is being installed to ensure continued safe operations at WESF" (e.g. the facts regarding the electrical system, manipulators, statue of the cranes, etc.).
- Additionally, the Factsheet should have included the LDR treatment variance documentation. To hold a public comment meeting and not include this information does not fulfill the requirements to provide the public the necessary information to be able to make informed decisions and comments on the proposed modifications. YN requests that Ecology provide the public an opportunity to view the wavier prior to issuance of a draft permit modification. Finally, since these are modifications to the RCRA permit, the Factsheet should clarify if this action is a ventilation replacement or an upgrade and specifically why the ventilation system is or is not included within the RCRA permit and definitively identify closure as final closure under the WAC 173-303-610 requirements.
- The Factsheet (and the Closure Plan) should provide the estimated volume of grout necessary per each area; summarize the total weight and volumes.

- The Factsheet should include a discussion of the SEPA determination and provide a link to the SEPA checklist.
- Factsheet should have included the history/failure of commercial use of the capsules for better public understanding.

Ecology Response:

The fact sheet that DOE wrote to accompany this permit modification served only as a notice to the public as required under [WAC 173-303-830\(4\)\(c\)\(ii\)](#). When Ecology drafts the permit and submits the Part A and Closure Plan for public comment, it will be accompanied by a Fact Sheet as detailed in [WAC 173-303-840\(2\)\(e\)](#) and (f). As Ecology prepares this document to support the draft permit and the second public comment period we will take into consideration all of the comments provided above to ensure that the Fact Sheet is more descriptive and informational.

In order to allow the public an adequate amount of time to review the Part A, Closure Plan and associated request for a Treatability Variance, we extended the public comment period to March 3, 2015 to ensure the public had a total of 30 days to review all the documents together.

A SEPA determination for this permit modification request will be put out for public comment with the second public comment period on the draft permit.

Part A:

- Part A: Identify the unit at WESF as a miscellaneous unit rather than an S99 storage unit. The public does not have access to the Part A instructions to be able to have a clear understanding of this type of classification. Miscellaneous units are identified within WAC 73-303 and much easier to understand.

Ecology Response: *Ecology agrees with your comment and the DWMU has been identified as a miscellaneous unit (X99) in the Part A.*

- Suggest Ecology delete or consider moving from Section XI, information and other text describing the past production operations and closure of Hot Cells A-E to Section under “Comments” (e.g., the sentence “The closing DWMU consists of Hot Cells A through F, which are being filled with grout as a part of a legacy contamination stabilization project and ventilation replacement in 2015.”)

Ecology Response: *Instructions for filling out a Part A application are provided in Ecology guidance publication number 030-31. The permittees correctly filled out Section XI Nature of Business in the Part A application to meet those criteria as listed under Ecology guidance 030-31.*

- Enlarge the boundaries of the TSD unit to include the hot cell service area, the operating areas and other building service areas associated with the hot cells. These areas provide support for instrumentation monitoring, utility support, or manipulator repairs and as such should at the minimum be considered ancillary equipment. The Closure Plan should be modified to reflect inclusion of these areas. Also include the air ventilation system as the Hot Cell ventilation system is connected to RCRA TSD units. Similarly, edit the Closure Plan to change TSD boundary.

Ecology Response: *The Part A and Closure Plan correctly identify three Dangerous Waste Management Units (DWMUs). These units are all miscellaneous units. The ventilation system, hot pipe trench, hot cell service area and other building areas are described in this Closure Plan only as they relate to closing the Hot Cells A through F DWMU.*

Closure Plan:

- Closure Plan: YN has the following comments and concerns: There is a lack of necessary details to be able to meet compliance with WAC 173-303-610 clean closure. The following are some concerns:
 - Statement is made that significant modifications to hot cells will be performed to enable replacement of ventilation system (i.e., penetrations of floors and walls are expected to be needed) yet there is no details provided within the closure plan.

Ecology Response: *The modifications that will be performed to support the stabilization activities include sealing hot cell penetrations to prevent leakage of grout and drilling holes to allow introduction of the grout to sealed areas. Details of the grouting process are included in Section H-A5. Ecology worked with DOE to identify the locations and specifications of modifications needed to the hot cells to support this work.*

- Closure activities are described as interim actions. There is nothing in the regulations which support interim closure.

Ecology Response: *Ecology agrees with your comment above. Ecology worked with DOE to ensure that all [WAC 173-303-610](#) requirements for clean closure are detailed in the closure plan. Hot cells A-F will be clean closed through cutting up of the hot cells, disposal of the cells at an appropriate disposal facility and sampling to ensure closure performance standards are met. See Sections H-A4 and H-A5 for details.*

- Lacking detailed closure schedule (including details of a committed path forward for disposal of RCRA wastes by removal or decontamination).

Ecology Response: *Details have been added to Section H-A5, Closure Activities which include stabilization, demolition, and management of waste generated. Section H-A6 detailing schedules for closure has been updated to reflect timeframes for pre-closure preparation activities, Closure activities and extended closure activities.*

- Lacking detailed explanation to be able determine there's enough information to support an extended closing period. Is there a firm TPA Milestone date associated with the movement of the capsules to dry storage? Final closure must have a date in the permit or it isn't closure.

Ecology Response: *Ecology has determined that there is enough information to support DOE's request for an extended closure period requested under [WAC 173-303-610\(4\)\(b\)](#). There is no TPA Milestone supporting closure of the WESF hot cells A through F.*

- Lacking detailed explanation of where or how WAC 173-303-630 or -640 regulations can or can't be met.

Ecology Response: *Hot Cells A through F is a miscellaneous unit regulated under [WAC 173-303-680](#). Closure Plan, Table H-A2, [WAC 173-303-680\(2\)](#) through -680(4) Requirements, have been added to address requirements for this miscellaneous unit. Once the hot cells have been stabilized (Section H-A5.4, Stabilization), continued inspections will be performed until final facility closure*

as identified in Section H-A5.1, Table H-A3. [WAC 173-303-320\(2\)](#) Inspection Schedule for Hot Cell A through Hot Cell F.

- Statements that once approved, DOE doesn't need to seek any additional modification requests for future actions.

Ecology Response: Ecology agrees with your comment above. This language has been removed from the closure plan. The permittees must seek a permit modification if needed as required under [WAC 173-303-830](#).

- Lack of details to support the leaving of process feed piping and other sub-structures in place (with or without grout filling). What is to be done to ensure that there haven't been any broken RCRA pipelines which could have resulted in contamination of subsurface/substructure soils? Also, lack of details regarding 'core drilling' in the pipe trench.

Ecology Response: Details about core drilling to access the pipe trench from the canyon above the hot cells have been added to section H-A5, including figures showing core drilling locations. There is a layer of concrete between the bottom of the hot pipe trench and the substructure soils.

Final closure activities including sampling to meet closure performance standards, will be performed to ensure that any remaining contamination will be below the cleanup levels specified in the closure plan.

- Lack of details regarding the grouting of cells, tanks and "buoyant vessels."

Ecology Response: Details about grouting the cells have been added to Section H-A5.

- Lacking details as to the replacement of the ventilation system. Clarification is needed as to why or why not the ventilation system is under the RCRA permit.

Ecology Response: The K3 Ventilation system is not part of the Hot Cell A through Hot Cell F closing DWMU, so details of the ventilation system are not included in the closure plan. A brief overview of the WESF Ventilation System is provided in Section H-A3.4.10 for informational purposes only. The K3 ventilation system is licensed through Washington State Department of Health.

- Additional details need regarding K3 filter pit.

Ecology Response: The K3 filter pit is not part of the Hot Cell A through Hot Cell F DWMU. A brief overview of the grouting of the filter pit is included in Section H-A5.

- Concerns with the use of fly-ash in grout. Lacking details to support its use given the recent EPA guidance on fly-ash regulation. Concerns with the use of Portland cement and leaching and pH issues associated with 'hot' wastes.

Ecology Response: "Coal Combustion Residual Beneficial Use Evaluation: Fly Ash Concrete and FGD Gypsum Wallboard" published by EPA, February 2014 performed analysis to determine the leachate of COPCs from fly ash concrete (compared with Portland Cement).

The conclusion is as follows:

"Based on the analysis set forth in this document, the evaluation concludes that environmental releases of COPCs from coal combustion residuals (CCR) fly ash

concrete and FGD gypsum wallboard during use by the consumer are comparable to or lower than those from analogous non-CCR products, or are at or below relevant regulatory and health-based benchmarks for human and ecological receptors. Thus, EPA supports the continued beneficial use of coal fly ash in concrete and FGD gypsum in wallboard. Furthermore, the Agency believes that these beneficial uses provide significant environmental and economic benefits, and opportunities to advance Sustainable Materials Management (SSM)."

Based on this report and the conclusion Ecology does not consider the use of fly ash in concrete a concern.

- Concerns that the yet to be defined CERCLA process will result in simply imploding B-Plant and WESF and leaving significant amounts of unknown and unaccounted for hazardous mixed wastes in and underlying the WESF facility and non-compliance with RCRA closure requirement. Radionuclides are not regulated under Dangerous Waste Regulations at WAC 173-303. Instead they are regulated under CERCLA regulations at 40 CFR 300. However, Ecology should ensure that anticipated remedial actions for radioactive constituents shall be consistent with the closure activities required under WAC 173-303. Another concern with closure coordination with CERCLA; how will fate and transport of COCs be determined if the macroencapsulation fail and how does that affect RCRA closure certification?
 - Note: following comment made during 1/7/2015 public meeting: *Question by a retired WESF worker; "Did DOE account for the amount of cesium which was underlying the liner of Hot Cell E?" Apparently he had experienced working conditions when the hot cell liner would be breached and cesium would be spilled from whatever container after it was dropped on the floor. He recounted "that the floor would be washed clean with water in prep for the welders to do the needed repairs. The fluids would flow under the liner, down the grooves in the concrete towards the service galley. The rad count so elevated in that area that it required the placement of 'bricks' to reduce the dose exposure to acceptable levels. Under the liner and in this area, its gotta be screaming hot." "No" was the response but that that would occur sometime in the unknown future when the building was demolished."*

Ecology Response: *Comment 1: B Plant and WESF are identified as two different units under the Hanford Site Dangerous Waste Permit. WESF hot cells A-F will be clean closed through macroencapsulation of the hot cells, removal and disposal at an appropriate disposal facility. Details of closure for the DWMUs associated with B Plant will be detailed in the B Plant closure plan for the closure unit group.*

Comment 2: The liner leak that occurred in Hot Cell D/E is well documented in the WESF operating record. The presence of cesium underneath the cell liner is accounted for in inventory estimates. The stabilization activity which will add grout to the hot cells will also install a concrete monolith in the service gallery to replace the shielding function of the lead bricks that are currently installed. Final closure activities including sampling to meet closure performance

standards, will be performed to ensure that any remaining contamination will be below the cleanup levels specified in the closure plan.

- Lacking details to ensure that no mixed waste is underlying the hot cells.

Ecology Response: *Section H-5.11, Sampling and Analysis Plan and Constituents to be Analyzed has been added to the document. This provides the sampling and analysis plan, which includes sampling of the soil underlying Hot Cell A through Hot Cell F, to confirm clean closure levels have been demonstrated.*

- Lacking details to ensure that sometime in the IQPE will be able to make a determination that clean closure requirements have been made. What will Ecology do at the point if clean closure requirements can't be determined?

Ecology Response: *Details have been added to Section H-A5.13, Role of the Independent, Qualified, Registered Professional Engineer to include the roles and responsibilities of the IQRPE. Once the permittees have submitted to Ecology the clean closure certification, certified by the IQRPE, we will validate that final facility clean closure has been achieved as detailed in the closure plan. If Ecology does not agree with the certification, it will not be approved and additional steps will need to be taken by the permittee to achieve clean closure.*

- Lacking SAP details and details regarding any waste generated through these actions.

Ecology Response: *Section H-5.11, Sampling and Analysis Plan and Constituents to be Analyzed has been added to the document. This provides the sampling and analysis plan to confirm clean closure levels have been demonstrated.*

- Recent analyses suggest that concrete in the WESF storage pool may have become embrittled by long-term exposure to high gamma radiation. YN requests this information be included in the Closure Plan. YN recommends that Ecology include specific and detailed Permit conditions requiring annual physical assessment of the soundness of this facility.

Ecology Response: *This closure plan is associated with the Hot Cell A through Hot Cell F DWMU. The pool cell area is a separate DWMU and issues associated with the pool cell area are not be discussed in the Hot Cell A through Hot Cell F closure plan. Further, potential structural degradation of the pool cell concrete due to radiation exposure has been evaluated (BNWL-1967, CHPRC-02499 as referenced in the closure plan).*

General Comments: How has Ecology ensured that WESF has been in compliance with the Interim Status requirements to have a complete Closure Plan? What is Ecology doing to finalize the Permit for WESF?

Ecology Response:

Ecology performs compliance inspections on all units covered under [WAC 173-303-400](#) Interim Status Facility Standards to determine the units' compliance with their specific Interim Status requirements. Compliance or non-compliance with these requirements is determined during these inspections. Ecology is actively working to complete the renewal of Rev. 9 of the Site-wide Permit.

Comment #11 from Thurman Cooper, CBCG Consulting Services, January 28, 2015

Why should this community always turn to failure rather than seeking progressive solutions to our problems.

Lets maintain these hot cells and find a commercially successful project for these Cs and Sr isotopes.

Ecology Response:

The upgrades to the WESF Ventilation System that are supported by this Permit Modification are the first step to eventual movement of the cesium and strontium capsules to dry storage.

Comment #12, from Marion Moos, Citizen, February 3, 2015

I support Permit Modification class 3 to the Hanford Facility Dangerous Waste Permit Operating Group 14

To replace the K3 ventilation system, DOE-RES F hot cell continuation left over from pirar waste processing activities by filing cell with grout.

Land Disposal Restriction (LDR), Treatment variance

I support to Wasington Department of Ecology a request for a site specific treatability variance from applicable LDR treatment standards for specific waste items held a small amount of floor sweepings containing strong fluroude, processing debris, and other waste material produced during the last steps of clean up and shut down or operations.

Ecology Response:

Thank you for your comment.

Comment #13 from US Department of Energy during the Rev 9 Permit Renewal Public Comment Period

Comment Text:

The Part A form needs to be updated to reflect the Part A submitted with the comment package or a later version that would be considered the current Part A form for WESF when the permit is issued. The following changes should be made.

Section XI first paragraph contains a maximum dimension that needs to be updated, and Hastelloy C-276 needs to be added.

Basis Text:

Section C.1.1.2 contains dimensions that are larger than the maximum dimension listed. The sentence should be updated to reflect the maximum described in Addendum C. In addition to the stainless steel, Addendum C contains figures that identify Hastelloy C-276. This should be added to the stainless steel description.

Recommendation Text:

The 3rd sentence of the first paragraph in Section XI should be revised to state: "The waste is stored in stainless steel and Hastelloy C-276 capsules whose maximum outer height is

approximately 56 centimeters (~22 inches) and maximum diameter is approximately 8 centimeters (~3 inches).”

Replace the proposed revision of the Part A with the most current version. The Permittees will submit a new Part A for with the public comment package.

Ecology Response:

Comment accepted, the text within the Part A has been revised and updated correctly.

Comment #14 from US Department of Energy during the Rev 9 Permit Renewal Public Comment Period

Comment Text:

The Part A form needs to be updated to reflect the Part a submitted with the comment package or a later version that would be considered the current Part A form for WESF when the permit is issued. The following changes should be made.

In Section X, an air permit should replace an existing reference in the list of Other Environmental Permits, and an existing reference should be deleted.

Basis Text:

To properly reference other permits for WESF, the row for AIR-02-1218 should be replaced with FF-01 (Radioactive Air Emissions License for the Department of Energy, Richland Office, Hanford Site), and the reference to EPA-1999-8-12 should be deleted.

Recommendation Text:

In Section X, replace the row for AIR-12-1218 with the following information. Column A Permit Type should be “E,” Column B Permit Number should be FF-01, and Column C Description should be “Radioactive Air Emissions License for the Hanford Site.” Delete the row in the section for permit EPA-1999-8-12.

Replace the proposed revision of the Part A with the most current version. The Permittees will submit a new Part A form with the public comment package.

Ecology Response:

Comment accepted, the text within the Part A has been revised and updated correctly.

Comment #15 from US Department of Energy during the Rev 9 Permit Renewal Public Comment Period

Comment Text:

Section H.1.4 second paragraph should be updated to refer to Hot Cells, not just Cells.

Basis Text:

Throughout Addendum C, the unit description refers to the Cells as Hot Cells. The text should be updated to refer to the unit as “Hot Cells.”

Recommendation Text:

The second Paragraph of Section H.1.4 should be revised to state: “The capsules are stored in 13 feet of shielding water in Pool Cells 1 and 3 through 7. To move a capsule into Hot Cell G, it is first moved through transfer ports into Pool Cell 12. The transfer ports connect Pool Cells 1 through 8 to Pool Cell 12. A transfer port has a ball valve that can be opened and closed to transfer capsules or water between each of the pool cells and Pool Cell 12. The transfer port is located approximately 1 meter (3 feet) above the pool cell floor. Once in Pool Cell 12, the capsule is moved down Pool Cell 12 with tongs towards Hot Cell G and placed on a capsule transfer cart equipped with a trolley device for raising the capsules into Hot Cell G. Capsules are transferred individually to Hot Cell G through the capsule transfer chute between Hot Cell G and Pool Cell 12.”

Ecology Response:

Comment accepted, the text within the Closure Plan has been revised and updated correctly.

Comment #16 from US Department of Energy during the Rev 9 Permit Renewal Public Comment Period

Comment Text:

Replace the word “file” with “portion.”

Basis Text:

Throughout the draft permit the term “file” is routinely used when referring to the operating record. This term inappropriately implies a singular location. The regulations do not require a singular location. Hence, the term introduces an element of confusion and misrepresents what the regulations allow. An element of contradiction is also introduced relative to Permit Condition I.M.2, which allows records to be maintained at multiple locations (on-site or off-site)”

Recommendation Text:

The first paragraph of Section H.1.6 should be revised to state: “WESF records of the operating life of the dangerous waste management units covered by this plan, including the contents of the Hanford Facility Operating Record, WESF portion required by Permit Condition III.1.2, will be reviewed to ensure that there is no documentation indicating a leak of a capsule while in the pool cells. The records to be reviewed include the following:”

Ecology Response:

Comment accepted, the text within the Closure Plan has been revised and updated correctly.

Comment #17 from US Department of Energy during the Rev 9 Permit Renewal Public Comment Period

Comment Text:

Delete the parenthetical phrase about WESF becoming active in July 1997.

Basis Text:

Information in the parenthetical phrase about WESF becoming active is incorrect and non-germane. WESF started operations in 1974. Additionally, the parenthetical phrase is seemingly in conflict with a statement in Addendum A Section XI regarding WESF initiating waste management operation.

Recommendation Text:

The first paragraph of Section H.1.6 should be revised to state: “WESF records of the operating life of the dangerous waste management units covered by this plan, including the contents of the Hanford Facility Operating Record, WESF portion required by Permit Condition II.I.2, will be reviewed to ensure that there is no documentation indicating a leak of a capsule while in the pool cells. The records to be reviewed include the following:”

Ecology Response:

The text within the Closure Plan has been revised and updated correctly.

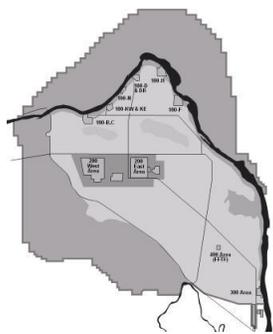
APPENDIX A: COPIES OF ALL PUBLIC NOTICES

Public notices for the Ventilation Upgrades and Closing Unused Hot Cells at Hanford's Waste Encapsulation and Storage Facility comment period, December 11, 2014 through March 3, 2015:

1. Public notice (fact sheet)
2. Advertisement in the *Tri-City Herald*
3. Notice sent to the Hanford-Info email list
4. Event posted on Ecology Hanford Education & Outreach Facebook page

Public notices for the Renewal of the draft Rev. 9 Site-wide Permit comment period, May 1 through October 22, 2012:

1. Public notice (focus sheet)
2. Advertisement in the *Tri-City Herald*
3. Notice sent to the Hanford-Info email list
4. Event posted on Ecology Hanford Education & Outreach Facebook page



Public Comment Period on Proposed Permit Changes for Hanford Waste Encapsulation and Storage Facility

The U.S. Department of Energy, Richland Operations Office (DOE-RL) is [proposing permit modifications](#) to improve ventilation and grout six hot cells that are no longer in use at the [Waste Encapsulation and Storage Facility \(WESF\)](#). We are holding a 60-day comment period, and we want your input!

December 2014

U.S. Department of Energy

Background

In the 1970s, the radioactive isotopes of the chemical elements cesium and strontium, which generate a large amount of heat, were removed from the high-level waste tanks at Hanford to reduce the temperature of the waste inside the tanks. Both elements were ultimately placed in sturdy, stainless steel containers in WESF for safe storage and monitoring. WESF stores nearly 2,000 cesium and strontium capsules in underwater pools. During operations, WESF hot cells protected workers and allowed them to safely handle radioactive materials.

Permit modifications

The proposed changes are Class 3 permit modifications to the [Hanford Facility Dangerous Waste Permit Operating Unit Group 14](#), which regulates the storage, treatment and disposal of Hanford's dangerous and mixed dangerous waste. Large amounts of legacy contamination throughout some hot cells and the ventilation system require the stabilization of the contamination, as well as upgrades to the ventilation system. The proposed changes are necessary to support replacement of the K3 ventilation exhaust system at WESF, which is permitted under the Hanford Air Operating Permit. The current filters are beyond their design life and are deteriorating. Therefore a new system is being installed to ensure continued safe operations at WESF.

To replace the K3 ventilation system, DOE-RL must stabilize WESF hot cell contamination left over from prior waste processing activities by filling the cells with grout. The stabilization effort requires a revision to the WESF Part A Application, which details facility information, and submittal of a closure plan to detail this interim step to closure at WESF. The closure plan will address Hot Cells A through F, which are no longer operational.

Land Disposal Restriction (LDR) Treatment variance

In addition to the proposed permit modifications, DOE-RL will also submit to the Washington Department of Ecology (Ecology) in accordance with WAC 173-303-140, a request for a site-specific treatability variance from applicable LDR treatment standards for specific waste items in Hot Cells B and C. These waste items hold a small amount of floor sweepings containing strontium fluoride, processing debris and other waste material produced during the last steps of cleanup and shutdown of operations. This request will be submitted to Ecology in January 2015.

Ordinarily, this type of waste would be treated by mixing the waste material with a stabilizing agent, followed by sampling and analysis to confirm that LDR treatment standards have been accomplished. However, these materials are highly radioactive, with half-lives of about 30 years for Cesium-137 and 29 years for Strontium-90. Meeting LDR treatment requires intrusive activities and handling of this waste, increasing risk of exposure to workers and the environment and generation of additional mixed waste. In addition, the high radiological nature of the waste items interferes with laboratory analyses needed to confirm treatment was successful.

If approved, a variance will allow stabilization by an alternative treatment method of macroencapsulation of these waste items. This method uses grout to completely surround the waste, which protects human health and the environment by reducing the leachability of contaminants and minimizing waste generation and potential radiological exposure to workers. The requested treatability variance will detail the justification and protectiveness of this alternative treatment.

Class 3 Modifications are the most significant of the three modification classes and address changes that substantially alter a facility or its operations.

- Requirements:
 - Fact sheet and public notification via the Hanford email and postal mail list
 - 60-day public comment period on the permit modification request (includes public meeting)
 - 45-day public comment period on the permitting decision



Copies of the [proposed permit modification and supporting documentation](#) are available at the Administrative Record, 2440 Stevens Drive, Richland, WA. The variance request will be available in late January 2015. The permittee's compliance history during the life of the permit being modified is available from Ecology at (509) 372-7950, or email Hanford@ecy.wa.gov.

Public Comment

We want your feedback! The public comment period runs from **Dec. 11, 2014 through Feb. 12, 2015**. A public meeting will be held **Jan. 7, 2015 at 5:30 p.m.**, at the **Richland Public Library, 955 Northgate Drive, Richland, WA**

How you can help

A 60-day public comment period on *proposed Class 3 modifications to Part III of Hanford's Dangerous Waste Permit* will run from **Dec. 11, 2014 through Feb. 12, 2015**. A public meeting will be held **Jan. 7, 2015 at 5:30 p.m., at the Richland Public Library, 955 Northgate Drive, Richland, WA**. Please submit comments by **Feb. 12, 2015** to:



Stephanie Schleif
 Washington Department of Ecology
 3100 Port of Benton Blvd
 Richland, WA 99354
 Email: Hanford@ecy.wa.gov



The documents are available for review at the Public Information Repositories listed below.

Portland State University Government Information Branford Price Millar Library 1875 SW Park Avenue Portland, OR 97207-1151 Attn: Claudia Weston (503) 725-4542	University of Washington Suzzallo Library Government Publications Dept. Box 352900 Seattle, WA 98195-2900 Attn: Cass Hartnett (206) 685-3130	U.S. Department of Energy Public Reading Room Washington State University, Tri Cities Consolidated Information Ctr., Rm. 101-L 2770 Crimson Way Richland, WA 99352 Attn: Janice Scarano (509) 372-7443	Gonzaga University Foley Center Library East 502 Boone Avenue Spokane, WA Attn: John Spencer (509) 313-6110
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Administrative Record and Public Information Repository:
Address: 2440 Stevens Center Place, Room 1101, Richland, WA
Phone: 509-376-2530 **Web:** www2.hanford.gov/arpir/

We want your input on Proposed Permit Changes for Hanford's Waste Encapsulation and Storage Facility



The U.S. Department of Energy, Richland Operations Office (DOE-RL) is proposing permit modifications to improve ventilation and grout six hot cells that are no longer in use at the Waste Encapsulation and Storage Facility (WESF).

Located in the center of the Hanford site, WESF stores nearly 2,000 cesium and strontium capsules in underwater pools. During operations, WESF hot cells protected workers and allowed them to safely handle radioactive materials.

In addition to the proposed permit modifications, DOE-RL will also submit to the Washington Department of Ecology a request for a site-specific treatability variance from applicable Land Disposal Restriction treatment standards for specific waste items in Hot Cells B and C. This request will be submitted in January 2015.

A public comment period runs from **December 11, 2014 through February 12, 2015**.

DOE-RL and the Washington Department of Ecology want your input on these modifications! Submit comments by February 12, 2015, in writing, by mail or electronically to:

Stephanie Schleif
Washington Department of Ecology
3100 Port of Benton Blvd
Richland, WA 99354
Email: Hanford@ecy.wa.gov



The DOE-RL contact person for this permit change is Kris Skopect, 509-376-5803. The Department of Ecology contact person is Stephanie Schleif, 509-372-7950.

Copies of the proposed permit modification and supporting documentation are available at the Administrative Record, 2440 Stevens Drive, Richland, WA.

The permittees' compliance history during the life of the permit being modified is available from the Washington State Department of Ecology contact person.

You are invited to attend a public meeting to discuss the proposed permit modification and provide comments. The meeting is scheduled for:

When: January 7, 2015, 5:30
Where: Richland Public Library
955 Northgate Dr.
Richland, WA 99352

Please e-mail us at ClassPRMTMods@rl.gov if you require special accommodations to participate in the meetings.

Comment period extended for proposed permit modifications for Hanford's Waste Encapsulation and Storage Facility

The U.S. Department of Energy, Richland Operations Office (DOE-RL) is extending the public comment period for the proposed permit modifications to improve ventilation and grout six hot cells that are no longer in use at the Waste Encapsulation and Storage Facility (WESF).

The first permit modification package did not include all the information the Washington State Department of Ecology needs to process the modification. An updated letter with the permit modification request is available in the public information repositories and on the DOE-RL and Ecology website:

<http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0082935H>

*The 60-day comment period was originally scheduled to run from **Dec. 11, 2014 through Feb. 12, 2015**. The comment period will now end **February 20, 2015**. Learn more about the proposal and give your input at a public meeting **Jan. 7, 2015** at 5:30 p.m., at the Richland Public Library, 955 Northgate Drive, Richland, WA.*

Located in the center of the Hanford site, WESF stores nearly 2,000 cesium and strontium capsules in underwater pools. During operations, WESF hot cells protected workers and allowed them to safely handle radioactive materials.

In addition, DOE-RL will also submit to Ecology a request for a site-specific treatability variance from applicable Land Disposal Restriction treatment standards for specific waste items in Hot Cells B and C. This request will be submitted in January 2015.

Submit comments by February 20, 2015, in writing, by mail or electronically to:

Stephanie Schleif
Washington State Department of Ecology
3100 Port of Benton Blvd
Richland, WA 99354
Email: Hanford@ecy.wa.gov

Contacts:

Kris Skopeck, DOE-RL, (509) 376-5803
Stephanie Schleif, Ecology, (509) 372-7950

Copies of the proposed permit modification and supporting documentation are available at the Administrative Record, 2440 Stevens Drive, Richland, WA.

The permittees' compliance history during the life of the permit being modified is available from the Washington State Department of Ecology contact person.

Public meeting:

January 7, 2015, 5:30 p.m.
Richland Public Library
955 Northgate Dr.
Richland, WA 99352



Please e-mail us at ClassPRMTMods@rl.gov if you require special accommodations to participate in the meetings.

From: ^TPA <TPA@RL.GOV>
Sent: Friday, November 07, 2014 9:19 AM
To: HANFORD-INFO@LISTSERV.WA.GOV
Subject: Upcoming Public Comment Period to Authorize Waste Encapsulation Storage Facility Ventilation Upgrades

This is a message from the U.S. Department of Energy

The U.S. Department of Energy (USDOE) plans to propose a permit modification to authorize construction to support ventilation upgrades and to grout and close hot cells that are no longer in use at the [Waste Encapsulation Storage Facility](#) (WESF). Hot cells are shielded work spaces for remote handling of radioactive materials. WESF stores 1,936 cesium and strontium capsules, representing a third of the total radioactivity of Hanford Site wastes.

A 60-day public comment period on this proposed change is expected to begin in early December.

This change is a Class 3 modification to the [Hanford Facility Dangerous Waste Permit](#), which regulates the storage, treatment, and disposal of Hanford's dangerous and mixed dangerous and radioactive waste. Class 3 modifications are the most significant of the three modification classes and address changes that substantially alter a facility or its operations.

All Class 3 permit changes require public comment on the proposed permit modification request, as well as a public meeting. The Washington Department of Ecology will hold a second public comment period before authorizing this Class 3 modification.

From: ^TPA <TPA@RL.GOV>
Sent: Thursday, December 11, 2014 7:47 AM
To: HANFORD-INFO@LISTSERV.WA.GOV
Subject: Public Comment Period on Proposed Permit Changes for Hanford Waste Encapsulation and Storage Facility
Attachments: WESF Class 3 Fact Sheet FINAL.pdf

This is a message from the U.S. Department of Energy, Richland Operations Office

*The U.S. Department of Energy, Richland Operations Office (DOE-RL) is [proposing permit modifications](#) to improve ventilation and grout six hot cells that are no longer in use at the [Waste Encapsulation and Storage Facility \(WESF\)](#). We are holding a 60-day comment period, and we want your input! The public comment period runs from **Dec. 11, 2014 through Feb. 12, 2015**. A public meeting will be held **Jan. 7, 2015** at 5:30 p.m., at the Richland Public Library, 955 Northgate Drive, Richland, WA*

Background

In the 1970s, the radioactive isotopes of the chemical elements cesium and strontium, which generate a large amount of heat, were removed from the high-level waste tanks at Hanford to reduce the temperature of the waste inside the tanks. Both elements were ultimately placed in sturdy, stainless steel containers in WESF for safe storage and monitoring. WESF stores nearly 2,000 cesium and strontium capsules in underwater pools. During operations, WESF hot cells protected workers and allowed them to safely handle radioactive materials.

Permit modifications

The proposed changes are Class 3 permit modifications to the [Hanford Facility Dangerous Waste Permit Operating Unit Group 14](#), which regulates the storage, treatment and disposal of Hanford's dangerous and mixed dangerous waste. Large amounts of legacy contamination throughout some hot cells and the ventilation system require the stabilization of the contamination, as well as upgrades to the ventilation system. The proposed changes are necessary to support replacement of the K3 ventilation exhaust system at WESF, which is permitted under the Hanford Air Operating Permit. The current filters are beyond their design life and are deteriorating. Therefore, a new system is being installed to ensure continued safe operations at WESF.

To replace the K3 ventilation system, DOE-RL must stabilize WESF hot cell contamination left over from prior waste processing activities by filling the cells with grout. The stabilization effort requires a revision to the WESF Part A Application, which details facility information, and submittal of a closure plan to detail this interim step to closure at WESF. The closure plan will address Hot Cells A through F, which are no longer operational.

Class 3 Modifications are the most significant of the three modification classes and address changes that substantially alter a facility or its operations. Class 3 Modifications requirements include:

- Fact sheet and public notification via the Hanford email and postal mail list
- 60-day public comment period on the permit modification request (includes public meeting)
- 45-day public comment

Land Disposal Restriction (LDR) Treatment variance

In addition to the proposed permit modifications, DOE-RL will also submit to the Washington Department of Ecology (Ecology) in accordance with WAC 173-303-140, a request for a site-specific treatability variance from applicable LDR treatment standards for specific waste items in Hot Cells B and C. These waste items hold a small amount of floor sweepings containing strontium fluoride, processing debris and other waste material produced during the last steps of cleanup and shutdown of operations. This request will be submitted to Ecology in January 2015.

Ordinarily, this type of waste would be treated by mixing the waste material with a stabilizing agent, followed by sampling and analysis to confirm that LDR treatment standards have been accomplished. However, these materials are highly radioactive, with half-lives of about 30 years for Cesium-137 and 29 years for Strontium-90. Meeting LDR treatment requires intrusive activities and handling of this waste, increasing risk of exposure to workers and the environment and generation of additional mixed waste. In addition, the high radiological nature of the waste items interferes with laboratory analyses needed to confirm treatment was successful.

If approved, a variance will allow stabilization by an alternative treatment method of macroencapsulation of these waste items. This method uses grout to completely surround the waste, which protects human health and the environment by

reducing the leachability of contaminants and minimizing waste generation and potential radiological exposure to workers. The requested treatability variance will detail the justification and protectiveness of this alternative treatment.

Copies of the [proposed permit modifications and supporting documentation](#) are available at the Administrative Record, 2440 Stevens Drive, Richland, WA. The variance request will be available in late January 2015. The permittee's compliance history during the life of the permit being modified is available from Ecology at (509) 372-7950, or email Hanford@ecy.wa.gov.

From: ^TPA <TPA@RL.GOV>
Sent: Tuesday, December 30, 2014 11:17 AM
To: HANFORD-INFO@LISTSERV.WA.GOV
Subject: Comment Period Extended for Proposed Permit Modifications for the Waste Encapsulation and Storage Facility

This is a message from the U.S. Department of Energy, Richland Operations Office

The U.S. Department of Energy, Richland Operations Office (DOE-RL) is extending the public comment period for the proposed permit modifications to improve ventilation and grout six hot cells that are no longer in use at the Waste Encapsulation and Storage Facility (WESF). The first permit modification package did not include all the information the Department of Ecology needs to process the modification. An updated letter with the permit modification request is available in the public information repositories and on the DOE and Ecology website:

<http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0082935H>

The 60-day comment period was originally scheduled to run from Dec. 11, 2014 through Feb. 12, 2015. The comment period will now end February 20, 2015. Learn more about the proposal and give your input at a public meeting Jan. 7, 2015 at 5:30 p.m., at the Richland Public Library, 955 Northgate Drive, Richland, WA.

From: ^TPA <TPA@RL.GOV>
Sent: Thursday, February 05, 2015 7:26 AM
To: HANFORD-INFO@LISTSERV.WA.GOV
Subject: COMMENT PERIOD EXTENDED FOR PROPOSED PERMIT MODIFICATIONS FOR THE WASTE ENCAPSULATION AND STORAGE FACILITY

This is a message from the U.S. Department of Energy, Richland Operations Office

The U.S. Department of Energy, Richland Operations Office (DOE-RL) is extending the public comment period for the proposed permit modifications to improve ventilation and grout six hot cells that are no longer in use at the Waste Encapsulation and Storage Facility (WESF). The comment period is extended to **March 3, 2015** to give the public time to review the [Petition for Site-Specific Variance from Land Disposal Restriction \(LDR\) Treatment Standards](#).

On January 28, 2015, DOE-RL submitted to the Washington Department of Ecology (Ecology) the request for a site-specific treatability variance from applicable LDR treatment standards for specific waste items in Hot Cells B and C. These waste items hold a small amount of floor sweepings containing strontium fluoride, processing debris and other waste material produced during the last steps of cleanup and shutdown of operations. The cover letter and petition can be found in the Administrative Record on [Hanford.gov](#): <http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=1501290069>.

The permit modification request is available in the [public information repositories](#), on [Ecology's website](#), and in the Administrative Record on [Hanford.gov](#): <http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0082935H>

The initial 60-day comment period was originally scheduled to run from Dec. 11, 2014 through Feb. 12, 2015, was later extended to end on February 20, 2015, and **now ends on March 3, 2015**.

Please submit comments by email (preferred), U.S. Mail, or hand deliver them no later than March 3, 2015 to:

Stephanie Schleif
Washington Department of Ecology
3100 Port of Benton Boulevard
Richland, WA 99354
Hanford@ecy.wa.gov



Ecology's Hanford Education & Outreach Network

Published by Heather John (?) · December 16, 2014 ·

We want your feedback! The U.S. Department of Energy is proposing permit modifications to improve ventilation and grout six hot cells that are no longer in use at the Waste Encapsulation and Storage Facility (WESF) at #Hanford.

The public comment period runs from Dec. 11th through Feb. 12th, 2015, and a public meeting will be held January 7th at 5:30 at the Richland Public Library. Check out the fact sheet in the link below to learn more:

<http://www.hanford.gov/.../CAL-WESF-Class-3-Fact-Sheet-FINAL...>



91 people reached

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Nitya Chandran likes this.



Write a comment...



Hanford Facility Dangerous Waste Permit



The Waste Treatment plant is the permit's largest unit.

The Washington Department of Ecology invites you to comment on the draft permit for the treatment, storage, and disposal of dangerous wastes at the U.S. Department of Energy's Hanford Site. The site is north of Richland, Washington. The permit's formal name is the Hanford Facility Dangerous Waste Permit. The public comment period is from May 1 to September 30, 2012, and formal public hearings are scheduled. Permittees and a map are on the reverse.

What about the State Environmental Policy Act or SEPA

SEPA applies to Ecology's permit decisions. The level of SEPA documentation varies because the units vary, and some have had more evaluation than others. We have compiled all the SEPA documentation, and it is also available for public review from May 1 to Sept. 30.

You can find it with the draft permit and on Ecology's SEPA register <http://apps.ecy.wa.gov/sepa/>

Why it matters

The permit is Ecology's tool for regulating hazardous waste at Hanford. The Hazardous Waste Management Act is the state's version of the federal Resource Conservation and Recovery Act. It sets out regulations the Department of Energy and its contractors must meet to protect our environment and health of the people of Washington. Ecology's job is to protect, preserve and restore Washington's environment. At Hanford that means making sure cleanup activities follow state rules for protecting our air, land and water. The permit is an important part of how we do it.



Will there be public hearings?

Yes. They will start with an overview of the draft permit, and a chance for informal questions and answers. After that the formal part of the hearing will begin. *See reverse for locations, dates and times.*

Is it online?

Certainly. Visit our website for the permit, the Fact Sheet, presentations, cards explaining the parts of Hanford that are in the permit and more. www.ecy.wa.gov/programs/nwp/permitting/hdwp/ Or visit a **public repository** see locations on reverse.

What happens after September 30?

- Comment period closes
- We review the comments and revise permit if needed – goal: 90 days
- We issue final permit and responsiveness summary
- Permit becomes effective 30 days after final is issued (if permit is not appealed.)



Protecting the Columbia River, is part of Ecology's mission.

What does the permit cover?

The permit covers the treatment, storage, and disposal of chemically hazardous and mixed wastes across the entire Hanford Site.

We have defined 39 separate parts of Hanford (called units) that have specific requirements (called conditions) for them. Most of the units are either operating or closing.

Operating units actively treat, store, or dispose of waste.

Closing units no longer receive waste and have begun actions to reduce threats to environmental and human health.

The permit has four post-closure units which have continued monitoring

And the permit has two units—one for soils and groundwater—another for parts of Hanford being cleaned up under the rules of CERCLA.

If we don't think the cleanup is good enough, we reserve the right to require more work for those areas.

How can you comment on the Hanford Sitewide Permit?

In person... attend a public hearing

Seattle

May 15 – 7 pm
University Heights Center
5031 University Way NE

Spokane

June 5 – 6:30 pm
Spokane City Council Chambers
W 808 Spokane Falls Blvd.

Portland

May 16 – 7 pm
Red Lion Hotel on the River
909 N Hayden Island Drive

Richland

June 6 – 6:30 pm
Richland Public Library
955 Northgate Drive

In writing... the most effective comments are those that:

- Provide specific information describing what condition you think is inappropriate.
- Provide factual and regulatory support for the comment.
- Suggest changes to fix the problem.
- Include supporting material, unless we already have the material. *(For example, if the comment references a regulation on managing dangerous waste, we have it already. If the comment references a report or letter that is not part of the application or is not a commonly available reference, then we likely do not have it.)*

Who does the permit regulate?

The permittees are Hanford's owners and operators. The U.S. Department of Energy (USDOE) is Hanford's owner and manages the site supervision out of two offices:

USDOE Richland Operations Office
PO Box 550, Richland, WA 99352

USDOE Office of River Protection
PO Box 450, Richland, WA, 99352

The operators (those performing actual cleanup work) at Hanford are USDOE and its contractors. They are listed in the permit and the permit's fact sheet.

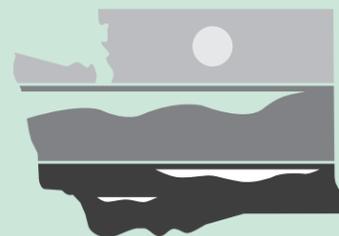
How should I submit written comments?

You can email, mail, or hand-deliver comments to: **Andrea L. Prignano**

MAIL
3100 Port of Benton Blvd.
Richland, WA 99354

EMAIL (preferred)
Hanford@ecy.wa.gov

COMMENT DEADLINE
September 30



DEPARTMENT OF
ECOLOGY
State of Washington



Ecology - Nuclear Waste Program
3100 Port of Benton Boulevard
Richland, WA 99354

Visit a public reading room to look at the permit.

Department of Energy Reading Room

2770 Crimson Way - CIC, Room 101L
Richland, WA 99354
Janice Parthree (509) 372-7443

PSU Branford Price Millar Library

1875 SW Park Avenue
Portland, OR 97207
Liz Paulus (503) 725-4542

University of WA Suzzallo Library

PO Box 352900
Seattle, WA 98195
Hilary Reinert (206) 543-5597

Gonzaga University Foley Center

502 E Boone Avenue
Spokane, WA 99258
John Spencer (509) 313-6110

Tell us what you think!

**Public Comment Period May 1- September 30 on
the Hanford Facility Dangerous Waste Permit.**

Special accommodations: If you need this publication in an alternative format, call the Nuclear Waste Program at (509) 372-7950. Persons with hearing loss, call 711 for Washington Relay Service. Persons with speech disability call 877-833-6341.



 Please pass along or recycle



**Do you care about our
air, land and water?
Hanford's cleanup matters!**

The Department of Ecology invites you to comment on the permit that regulates cleanup at Hanford – the Hanford Facility Dangerous Waste Permit. The permit ensures that the treatment, storage and disposal of chemically dangerous and mixed (also radioactive) waste at Hanford meets state regulations that protect our air, land and water.

Ecology is reissuing the permit, so the entire permit is up for review.

Find it at www.ecy.wa.gov/programs/nwp/permitting/hdwp

Comment period: May 1 – September 30.

**Permit Public Workshop: May 3 from 9 a.m.-4 p.m.
at the Dept. of Ecology's office
(3100 Port of Benton Blvd., Richland)**

For more information, email

Hanford@ecy.wa.gov or call 800-321-2008.



DEPARTMENT OF
ECOLOGY
State of Washington

Subject: Hanford's sitewide permit comment period starts today!
From: "Brown, Madeleine (ECY)" <mabr461@ECY.WA.GOV>
Reply-To: DOE1@RL.GOV
Date: Tue, 1 May 2012 16:58:48 +0000
Content-Type: multipart/alternative

Parts/Attachments:  text/plain (31 lines) ,  text/html (36 lines)

This is a message from Washington's Department of Ecology

COMMENT PERIOD STARTS TODAY! - For Hanford's draft Dangerous Waste Permit.

We invite you to review and comment on the draft permit for the treatment, storage, and disposal of dangerous wastes at the US Department of Energy's Hanford site. The comment period starts today and closes September, 30, 2012.

Here is what you can find on our permitting webpage, www.ecy.wa.gov/programs/nwp/permitting/hdwp:

- The draft permit's [public notice](#)
- [Frequently Asked Questions](#), newly updated
- Places you can find the permit
- Links to the draft permit
- The permit's [fact sheet](#)
- The fact sheets for each unit
- A [map](#) showing location of permit units
- Schedule for public hearings and our workshop
- Links on each unit's web page allow you to submit comments on that unit via email.

You can send general comments on the permit via the permitting [website](#).

Contact us at Hanford@ecy.wa.gov or 800-321-2008 if you would like more information.



Ecology's Hanford Education & Outreach Network



May 1, 2012 · 🌐

The public comment period for Ecology's draft Hanford Facility Dangerous Waste Permit starts today! The comment period will run through Sept. 30. The full permit is available for review on our website.

Hanford Dangerous Waste Permit

The permit is the state of Washington's tool to regulate waste at Hanford. The storage, treatment, and disposal of dangerous and mixed (both dangerous and radioactive) waste is regulated through this permit. Our goal is to ensure Hanford's cleanup protects human health and Washington's ...

ECY.WA.GOV

Boost Unavailable



Like



Comment



Share



Liz Mattson, Alexis Weaver and Jen Gregory

2 shares



Write a comment...



APPENDIX B: COPIES OF ALL WRITTEN COMMENTS

From: Carl Holder <holdercarl@hotmail.com>
Sent: Sunday, January 18, 2015 7:42 PM
To: Hanford (ECY)
Subject: WESF Public Comment - reposition plan comment

In the 1970s, the radioactive isotopes of the chemical elements cesium and strontium which generate a large amount of heat, were removed from the high-level waste tanks at Hanford to reduce the temperature of the waste inside the tanks. Both elements were ultimately placed in sturdy, stainless steel containers in WESF for safe storage and monitoring.

WESF stores nearly 2,000 cesium and strontium capsules in underwater pools.

These sturdy, stainless steel containers should be repositioned, 1. because the decay heat can safely be disipated without water cooling. Ambient air cooling is now safe, the decay heat becoming less over time. A dry and more economical disposition path is desirable. These capsules are at the top of Hanford's highly radioactive waste HLW inventory. These all-accounted-for capsules are almost all of the radioactive waste at WESF. With an approved removal plan and reposition site, removal could happen expeditiously.

Mr Pollet <http://www.hanfordcleanup.org/> of HAB and WA State Rep says that the capsules are most dangerous waste and potential containment to the Hanford site. Too dangerous of a risk to allow continued operation of Columbia Generating Station. I disagree with his engineering and assessment of risk however, with this being said, repositioning and a path permanent plan should be considered.

I have such a plan including beneficial reuse.

Prior to wasting another dime on that decrepit WESF facility consider a reposition plan.

Carl Holder
Pasco WA



Confederated Tribes and Bands
of the Yakama Nation ERWM

Established by the
Treaty of June 9, 1855

January 20, 2015

Mr. Ron Skinnarland
Washington Department of Ecology
3100 Port of Benton Blvd.
Richland, WA 99354

Dear Mr. Skinnarland:

Yakama Nation appreciates the opportunity to provide comments on the proposed Class 3 permit modifications to the Waste Encapsulation and Storage Facility (WESF) Dangerous Waste Permit submitted by US DOE, 15-AMRP-0028.

The Confederated Tribes and Bands of the Yakama Nation is a federally recognized sovereign pursuant of the Treaty of June 9, 1855 made with the United States of America (12 Stat. 951). The U.S. Department of Energy Hanford site was developed on land ceded by the Yakama Nation under the 1855 Treaty with the United States. The Yakama Nation retains reserved rights to this land under the Treaty.

We look forward to discussing our concerns regarding these proposed modifications to the Hanford RCRA permit with you.

Sincerely,

Russell Jim
Yakama Nation ERWM Program Manager

cc:

Jane Hedges, Washington Department of Ecology
Matt McCormick, U.S. Department of Energy
Ken Niles, Oregon Department of Energy
Stuart Harris, CTUIR
Gabe Bohnee, Nez Perce

Yakama Nation ERWM Program comments on US DOE proposed modifications to the RCRA Permit for the WESF facility

Factsheet:

- The Factsheet should have stated more clearly that the proposed modifications would result in closure of portions of the facility. Delete statement that it is interim step to closure as this is confusing to the public and RCRA doesn't allow 'interim closure' as discussed during the meeting.
- If closure of the RCRA TSD portion of WESF is anticipated to be coordinated with the B Plant Remedial Action under CERCLA, this information should be included in the Factsheet and what this entails.
- The Fact Sheet and the power point presentation by RL-DOE during the public meeting January 7, 2015 were useful. However, some areas could have used considerably more detail, such as including in the Factsheet the fact that there was a Defense Nuclear Safety Board inspection (including a link and resulting requests/suggestions, etc) and that the proposed modifications are driven by the results of that inspection. For full public understanding, the Factsheet should have also included some type of statement to the effect that the modifications are ultimately in support of the movement of the cesium and strontium waste capsules from wet into dry storage. Include reference link to DOE/RL-2012-47, 2013, Mission Needs Statement for the Management of the Cesium and Strontium Capsules.
- Factsheet should have provided more details as to the current status of WESF's operational components to clarify the statement that "filters are beyond their design life and are deteriorating. Therefore a new system is being installed to ensure continued safe operations at WESF" (e.g. the facts regarding the electrical system, manipulators, status of the cranes, etc.).
- Additionally, the Factsheet should have included the LDR treatment variance documentation. To hold a public comment meeting and not include this information does not fulfill the requirements to provide the public the necessary information to be able to make informed decisions and comments on the proposed modifications. YN requests that Ecology provide the public an opportunity to view the waiver prior to issuance of a draft permit modification. Finally, since these are modifications to the RCRA permit, the Factsheet should clarify if this action is a ventilation replacement or an upgrade and specifically why the ventilation system is or is not included within the RCRA permit and definitively identify closure as final closure under the WAC 173-303-610 requirements.
- The Factsheet (and the Closure Plan) should provide the estimated volume of grout necessary per each area; summarize the total weight and volumes.
- The Factsheet should include a discussion of the SEPA determination and provide a link to the SEPA checklist.
- Factsheet should have included the history/failure of commercial use of the capsules for better public understanding.

Part A:

- Part A: Identify the unit at WESF as a miscellaneous unit rather than an S99 storage unit. The public does not have access to the Part A instructions to be able to have a clear understanding of this type of classification. Miscellaneous units are identified within WAC 73-303 and much easier to understand.
- Suggest Ecology delete or consider moving from Section XI, information and other text describing the past production operations and closure of Hot Cells A-E to Section under "Comments" (e.g., the sentence "The closing DWMU consists of Hot Cells A through F, which are

being filled with grout as a part of a legacy contamination stabilization project and ventilation replacement in 2015.”)

- Enlarge the boundaries of the TSD unit to include the hot cell service area, the operating areas and other building service areas associated with the hot cells. These areas provide support for instrumentation monitoring, utility support, or manipulator repairs and as such should at the minimum be considered ancillary equipment. The Closure Plan should be modified to reflect inclusion of these areas. Also include the air ventilation system as the Hot Cell ventilation system is connected to RCRA TSD units. Similarly, edit the Closure Plan to change TSD boundary.

Closure Plan:

- Closure Plan: YN has the following comments and concerns: There is a lack of necessary details to be able to meet compliance with WAC 173-303-610 cleans closure. The following are some concerns:
 - Statement is made that significant modifications to hot cells will be performed to enable replacement of ventilation system (i.e., penetrations of floors and walls are expected to be needed) yet there is no details provided within the closure plan.
 - Closure activities are described as interim actions. There is nothing in the regulations which support interim closure.
 - Lacking detailed closure schedule (including details of a committed path forward for disposal of RCRA wastes by removal or decontamination).
 - Lacking detailed explanation to be able determine there's enough information to support an extended closing period. Is there a firm TPA Milestone date associated with the movement of the capsules to dry storage? Final closure must have a date in the permit or it isn't closure.
 - Lacking detailed explanation of where or how WAC 173-303-630 or -640 regulations can or can't be met.
 - Statements that once approved, DOE doesn't need to seek any additional modification requests for future actions.
 - Lack of details to support the leaving of process feed piping and other sub-structures in place (with or without grout filling). What is to be done to ensure that there haven't been any broken RCRA pipelines which could have resulted in contamination of subsurface/substructure soils? Also, lack of details regarding 'core drilling' in the pipe trench.
 - Lack of details regarding the grouting of cells, tanks and "buoyant vessels."
 - Lacking details as to the replacement of the ventilation system. Clarification is need as to why or why not the ventilation system is under the RCRA permit.
 - Additional details need regarding K3 filter pit.
 - Concerns with the use of fly-ash in grout. Lacking details to support its use given the resent EPA guidance on fly-ash regulation. Concerns with the use of Portland cement and leaching and pH issues associated with 'hot' wastes.
 - Concerns that the yet to be defined CERCLA process will result in simply imploding B-Plant and WESF and leaving significant amounts of unknown and unaccounted for hazardous mixed wastes in and underlying the WESF facility and non-compliance with RCRA closure requirement. Radionuclides are not regulated under Dangerous Waste Regulations at WAC 173-303. Instead they are regulated under CERCLA regulations at 40 CFR 300. However, Ecology should ensure that anticipated remedial actions for radioactive constituents shall be consistent with the closure activities required under WAC 173-303. Another concern with closure coordination with CERCLA; how will fate

and transport of COCs be determined if the macroencapsulation fail and how does that affect RCRA closure certification?

- Note: following comment made during 1/7/2015 public meeting: *Question by a retired WESF worker; "Did DOE account for the amount of cesium which was underlying the liner of Hot Cell E?" Apparently he had experienced working conditions when the hot cell liner would be breached and cesium would be spilled from whatever container after it was dropped on the floor. He recounted "that the floor would be washed clean with water in prep for the welders to do the needed repairs. The fluids would flow under the liner, down the grooves in the concrete towards the service galley. The rad count so elevated in that area that it required the placement of 'bricks' to reduce the dose exposure to acceptable levels. Under the liner and in this area, its gotta be screaming hot."* "No" was the response but that that would occur sometime in the unknown future when the building was demolished."
- Lacking details to ensure that no mixed waste is underlying the hot cells.
- Lacking details to ensure that sometime in the IQPE will be able to make a determination that clean closure requirements have been made. What will Ecology do at the point if clean closure requirements can't be determined?
- Lacking SAP details and details regarding any waste generated through these actions.
- Recent analyses suggest that concrete in the WESF storage pool may have become embrittled by long-term exposure to high gamma radiation. YN requests this information be included in the Closure Plan. YN recommends that Ecology include specific and detailed Permit conditions requiring annual physical assessment of the soundness of this facility.
- General Comments: How has Ecology ensured that WESF has been in compliance with the Interim Status requirements to have a complete Closure Plan? What is Ecology doing to finalize the Permit for WESF?

From: Deb Reed <deb.reed@rocketmail.com>
Sent: Sunday, January 04, 2015 10:03 PM
To: Hanford (ECY)
Subject: Handford

Please make arrangements for dry storage immediately.. The risk of earthquake is more extreme, with the newly discovered fault in Idaho... Please update the current ventilation to meet or exceed the existing system..please don't skimp on costs.. the cost should be a non-issue in order to keep everyone safe.

Regards,
Deb Muhlbeier
Des Moines, WA 98198

From: Jean Vanni <JVanni@ynerwm.com>
Sent: Thursday, January 22, 2015 11:41 AM
To: Schleif, Stephanie (ECY)
Cc: Jean Vanni; Dahl, Suzanne (ECY)
Subject: RE: permafrix mods
Attachments: comments on WESF mods 2015.doc

Hi Stephanie. I was able to access the website and see now that there are no new modification ongoing for Permafrix, so disregard that last email.

However, attached are informal comments on WESF. Russell was out sick most of last week and was swamped when he returned on the 20th. I hope that Ecology will consider YN concerns with the draft permit as they will be relevant. Let me know if you'd like to meet or just call. Thank you, Jean

From: Jean Vanni
Sent: Thursday, January 22, 2015 9:36 AM
To: ssch461@ECY.WA.GOV
Cc: Jean Vanni
Subject: permafrix mods

Hello Stephanie. I can't remember is there a permit modification ongoing for Permafrix?
thank you,
Jean vanni

From: Lucy Schneid <jlschneid@comcast.net>
Sent: Thursday, January 08, 2015 12:30 PM
To: Hanford (ECY)
Subject: USDOE cleanup of Hanford

It is so evident the Department of Energy is not taking the danger of Hanford seriously. What must happen before you begin doing what needs to be done?! Removing cesium and strontium capsules from water storage into dry casks is an urgent safety problem that needs to be funded in 2015 and 2016!

Are there scientists, serious scientists, to wrap their heads around the issues at Hanford? It is not wise to bet that the work can all be done in a single "hot cell." At least two hot cells need to be equipped and available to do the work safely and efficiently, including having a back-up in event of accidents.

"Grouting" hot cells - seriously? - instead of planning to cut them up and treat them as highly radioactive wastes is not a good long-term cleanup strategy. That would leave radioactive wastes right near the surface at Hanford.

Listen, people: what if there was an earthquake near here? It would simultaneously release vast amounts of radiation from WESF, preventing crews from restoring water to the pool holding the waste fuel rods atop the CGS reactor! These are not just words! It is time to act! Remove the waste from WESF and close the CGS reactor! Not only a safety benefit, ratepayers in WA and OR would actually save millions of dollars a year!!!

February 3, 2/2015
operations 1318 W. 14th Ave
Spokane, WA 99204
U.S. Department of Energy, Richland office
(DOE-RL)

I support Permit modifications Class 3
to the Hanford Facility
Dangerous Waste Permit Operating

Group 14

To replace the K3 ventilation
system, DOE-RES F hot cell
contamination left over from prior
waste processing activities by filing cells
with grout.

Land Disposal Restriction (LDR),
Treatment variance

I support to Washington Department of
Ecology a request for a site specific
treatability variance from applicable LDR
treatment standards for specific waste items
held a small amount of floor sweepings
containing strong fluorous, processing debris,
and other waste material produced during the
last steps of cleanup and shut down of operations

Remain, Marion A. Moss, 1318 W. 14th Ave
Spokane, WA 99201
Member: ^{Hart} ~~Hart~~ of America.

From: Mary Ryanhotchkiss <mryanhotchkiss@gmail.com>
Sent: Friday, January 02, 2015 8:47 AM
To: Hanford (ECY)
Subject: Hanford Clean up

My letter is in response to the announcement that public hearing is scheduled for January 7, in Richland, and that comments may be sent through Feb 12:

Dear sir or madam;

It is vital and prudent to clean up this gargantuan mess of radioactive wastes, which has contaminated and continues to threaten the Columbia River and our aquifer systems. This is the price we must pay because we made those weapons of mass destruction. I ask that you especially remove cesium and strontium capsules from water storage and into dry casks.

Given the experience at Fulishima it's also time to act to remove the waste from WESF and close the CGS reactor.

Mary Ryan-Hotchkiss

35 NW 107th Ave.

Portland OR 97229

From: Mike <mikeconlan@hotmail.com>
Sent: Tuesday, January 06, 2015 11:33 AM
To: Hanford (ECY)
Subject: Comment on WESF Mess

USDOE:

- Removing cesium and strontium capsules from water storage and into dry casks is an urgent safety problem that must be funded in 2015 and 2016.
- It's not wise to bet that the work can all be done in one "hot cell." At least two hot cells need to be equipped and available to do the work safely and efficiently, including having a back-up in event of accidents.
- "Grouting" hot cells, instead of planning to cut them up and treat them as highly radioactive wastes is not a good long-term cleanup strategy, because it would leave the high-level radioactive wastes near the surface at Hanford.

Mike Conlan Redmond WA



Oregon

John A. Kitzhaber, MD, Governor

January 5, 2015

Ms. Stephanie Schleif
Washington Department of Ecology
3100 Port of Benton Blvd
Richland, WA 99354



OREGON
DEPARTMENT OF
ENERGY

625 Marion St. NE
Salem, OR 97301-3737
Phone: (503) 378-4040
Toll Free: 1-800-221-8035
FAX: (503) 373-7806
www.Oregon.gov/ENERGY

Dear Ms. Schleif:

Thank you for the opportunity to review and comment on proposed permit changes for Hanford's Waste Encapsulation and Storage Facility. We have two comments on this proposed change.

First, we don't believe that a public comment period should begin when all pertinent documents are not yet available. The draft permit modification references a variance request related to specific waste items in Hot Cells B and C – which we do have some concerns and questions about. The notice for the public comment period indicates that the variance will not be available until late January – more than halfway through the public comment period. Once that document becomes available, we may submit additional comments related to that variance request.

Second, while we understand the rationale behind the request to grout the majority of the hot cells, we do have to wonder whether doing so removes a potential option for handling cesium that may be removed from the tank waste stream as part of the Office of River Protection's plans to move forward with direct-feed of low-activity waste. DOE-ORP is currently looking at removal of cesium from some tank waste so that it can be vitrified in the low-activity vitrification facility, prior to the entire Waste Treatment Plant becoming operational. DOE-ORP representatives have mentioned to our advisory group – the Oregon Hanford Cleanup Board, and to the regional Hanford Advisory Board – that DOE has not yet decided on whether to return that removed cesium back to the tanks, or to somehow retain it in some other form for later treatment or disposal.

We do not support the idea of returning cesium back to the tanks after it has been removed. We would like to see whether it would make sense to convert that cesium into a similar form as is currently stored in capsules at WESF. While it would somewhat increase the volume of

cesium in storage, it would not result in creation of a new waste form that does not have a disposal path. If this is viable, would the reduced capacity of hot cell availability at WESF preclude that from happening? We strongly encourage this be evaluated prior to Ecology granting the permit changes to allow grouting of most of the WESF Hot Cells.

We have previously indicated that we believe that moving the existing cesium capsules from pool storage at WESF to dry storage should be a high priority for DOE, due to concerns about possible concrete degradation in the pools. That position has not changed.

Should you have questions or want to discuss any of our comments, please contact me at 503-378-4906 or ken.niles@state.or.us.

Sincerely,

A handwritten signature in black ink, appearing to read "Ken Niles". The signature is fluid and cursive, with a large, sweeping initial "K".

Ken Niles
Assistant Director for Nuclear Safety

CC: Kevin Smith, DOE-ORP Manager
Doug Shoop, DOE-RL Deputy Manager
Oregon Hanford Cleanup Board
Steve Hudson, Hanford Advisory Board Chair

From: borsope@aol.com
Sent: Monday, January 05, 2015 3:16 PM
To: Hanford (ECY)
Subject: DOE-RL WESF Comment

I am writing to comment on the proposed treatment of the High Level Nuclear Waste found in the tanks at Hanford. The cesium and strontium should be treated as High Level Nuclear Waste. Removing these materials from water storage to dry storage needs to be funded and in addition there should be back up plans in case of accidents. In addition, "grouting" hot cells, instead of planning to cut them up and treat them as highly radioactive wastes is not a good long-term cleanup strategy, because it would leave high level radioactive waste near the surface at Hanford.

Please be attentive to the safety needs of handling this dangerous material.
Thank you for this opportunity to comment.

Pam Borso
P O Box 154
Custer, Wa 98240

From: Peg Wills <peg.wills@gmail.com> on behalf of Peg Wills <peg@planetwills.com>
Sent: Thursday, January 01, 2015 8:27 PM
To: Hanford (ECY)
Subject: Hanford's High-level Nuclear Waste tanks

Please remove Cesium and strontium capsules from water storage and into dry casks . This must be funded in 2015-16.

Do not do this without back-up. Please refer to suggestions from Heart of America. They know what they are talking about.

Earthquakes are happening and more are waiting to happen. Saving money and putting things off can be very dangerous and more expensive in the long run.

Listen to Hear of America. They say it better than I can. Just know there are a lot of us who agree with them and are concerned!!!

Margaret L. Wills, 16225 Sw Ellerson St, beaverton, OR 97007

From: Steven Gary <gramgary@earthlink.net>
Sent: Wednesday, December 31, 2014 8:02 PM
To: Hanford (ECY)
Subject: Cesium and Strontium Waste

To USDOE,

I urge you to remove the cesium and strontium capsules from water storage and put into dry casks ASAP. This must be funded for years 2015 and 2016. At least two "hot cells" need to be equipped and available to do the work safely and efficiently. Also a back-up should be included in case of an accident. Leaving the high-level radioactive wastes near the surface at Hanford by "grouting" hot cells is not a good long term strategy. I would rather see them cut up and treated as highly radio active wastes. Let's do it right this time.

Sincerely,

Steven Gary
5124 S Graham St
Seattle, WA 98118

From: Thurman Cooper IMAP <tcooper@cbcgllc.com>
Sent: Wednesday, January 28, 2015 2:26 PM
To: Hanford (ECY)
Subject: WESF Hot Cell Closure

Why should this community always turn to failure rather than seeking progressive solutions to our problems.
Lets maintain these hot cells and find a commercially successful project for these Cs and Sr isotopes.

Thurman Cooper - Nuclear Chemist
CBCG Consulting Services
Kennewick Wa. 99336

Comment Number: 19234

Permit Section:

OUG-14 (WESF) Add A

Comment Text:

The Part A form needs to be updated to reflect the Part A submitted with the comment package or a later version that would be considered the current Part A form for WESF when the permit is issued. The following changes should be made.

Section XI first paragraph contains a maximum dimension that needs to be updated, and Hastelloy C-276 needs to be added.

Basis Text:

Section C.1.1.2 contains dimensions that are larger than the maximum dimension listed. The sentence should be updated to reflect the maximum described in Addendum C. In addition to the stainless steel, Addendum C contains figures that identify Hastelloy C-276. This should be added to the stainless steel description.

Recommendation Text:

The 3rd sentence of the first paragraph in Section XI should be revised to state: "The waste is stored in stainless steel and Hastelloy C-276 capsules whose maximum outer height is approximately 56 centimeters (~22 inches) and maximum diameter is approximately 8 centimeters (~3 inches)."

Replace the proposed revision of the Part A with the most current version. The Permittees will submit a new Part A form with the public comment package.

Comment Number: 19235

Permit Section:

OUG-14 (WESF) Add A

Comment Text:

The Part A form needs to be updated to reflect the Part A submitted with the comment package or a later version that would be considered the current Part A form for WESF when the permit is issued. The following changes should be made.

In Section X, an air permit should replace an existing reference in the list of Other Environmental Permits, and an existing reference should be deleted.

Basis Text:

To properly reference other permits for WESF, the row for AIR-02-1218 should be replaced with FF-01 (Radioactive Air Emissions License for the Department of Energy, Richland Office, Hanford Site), and the reference to EPA-1999-8-12 should be deleted.

Recommendation Text:

In Section X, replace the row for AIR-12-1218 with the following information. Column A Permit Type should be "E," Column B Permit Number should be FF-01, and Column C Description should be "Radioactive Air Emissions License for the Hanford Site." Delete the row in the section for permit EPA-1999-8-12.

Replace the proposed revision of the Part A with the most current version. The Permittees will submit a new Part A form with the public comment package.

Comment Number: 7604

Permit Section:

OUG-14 (WESF) H.1.4

Comment Text:

Section H.1.4 second paragraph should be updated to refer to Hot Cells, not just Cells.

Basis Text:

Throughout Addendum C, the unit description refers to the Cells as Hot Cells. The text should be updated to refer to the unit as "Hot Cells."

Recommendation Text:

The second paragraph of Section H.1.4 should be revised to state: "The capsules are stored in 13 feet of shielding water in Pool Cells 1 and 3 through 7. To move a capsule into Hot Cell G, it is first moved through transfer ports into Pool Cell 12. The transfer ports connect Pool Cells 1 through 8 to Pool Cell 12. A transfer port has a ball valve that can be opened and closed to transfer capsules or water between each of the pool cells and Pool Cell 12. The transfer port is located approximately 1 meter (3 feet) above the pool cell floor. Once in Pool Cell 12, the capsule is moved down Pool Cell 12 with tongs towards Hot Cell G and placed on a capsule transfer cart equipped with a trolley device for raising the capsules into Hot Cell G. Capsules are transferred individually to Hot Cell G through the capsule transfer chute between Hot Cell G and Pool Cell 12."

Comment Number: 7606

Permit Section:

OUG-14 (WESF) H.1.6

Comment Text:

Replace the word "file" with "portion."

Basis Text:

Throughout the draft permit the term "file" is routinely used when referring to the operating record. This term inappropriately implies a singular location. The regulations do not require a singular location. Hence, the term introduces an element of confusion and misrepresents what the regulations allow. An element of contradiction is also introduced relative to Permit Condition I.M.2, which allows records to be maintained at multiple locations (on-site or off-site).

Recommendation Text:

The first paragraph of Section H.1.6 should be revised to state: "WESF records of the operating life of the dangerous waste management units covered by this plan, including the contents of the Hanford Facility Operating Record, WESF portion required by Permit Condition II.I.2, will be reviewed to ensure that there is no documentation indicating a leak of a capsule while in the pool cells. The records to be reviewed include the following:"

Comment Number: 7607

Permit Section:

OUG-14 (WESF) H.1.6

Comment Text:

Delete the parenthetical phrase about WESF becoming active in July 1997.

Basis Text:

Information in the parenthetical phrase about WESF becoming active is incorrect and non-germane. WESF started operations in 1974. Additionally, the parenthetical phrase is seemingly in conflict with a statement in Addendum A Section XI regarding WESF initiating waste management operations.

Recommendation Text:

The first paragraph of Section H.1.6 should be revised to state: "WESF records of the operating life of the dangerous waste management units covered by this plan, including the contents of the Hanford Facility Operating Record, WESF portion required by Permit Condition II.I.2, will be reviewed to ensure that there is no documentation indicating a leak of a capsule while in the pool cells. The records to be reviewed include the following:"

APPENDIX C: PUBLIC HEARING TRANSCRIPTS

Mod: We are good to go. Let the record show it is 8:21 P.M. on Wednesday, May 16th, 2012 and this public hearing is being held at the Jantzen Beach Red Lion Hotel located at 909 North Hayden Island Drive in Portland Oregon. This hearing is to receive comments on the draft permit for regulating dangerous and mixed waste at the Department of Energy Sanford site. Information about the draft permit, workshops, and public hearings were posted on Ecology's main webpage under the Public Involvement Calendar, as well as the Ecology Nuclear Waste Program webpage.

I'm going to call a few names at once so that way the first person can come, the other folks can get prepared and as soon as I call your name, please come up, have a seat, and begin your testimony.

Mayor Sam Adams had contacted our office, and I'm not sure, is Mayor Adams here? You're speaking -- okay. We were expecting you. You caught us first, so please come in and state your name and please go ahead and --

Gina Thayer: Sit here?

Moderator: Yes. And again, our comments, unfortunately, are two minutes. Go ahead.

Gina Thayer: My name is Gina Thayer and I'm here on behalf of Mayor Adams, mayor of City of Portland. As some of you may know, he is very passionate about this issue and wanted me to read this letter on his behalf. I'll just pick out some of the parts since we have short time.

As you may know, I care deeply about this issue. I strongly oppose utilizing the Hanford Nuclear Reservation for further storage of nuclear waste, which is why I've testified before the Department of Energy and Hanford officials and submitted multiple letters throughout this process opposing the use of Hanford as a storage site for nuclear waste from other sites. The Washington State Department of Ecology is responsible for protecting the health and environment of the state. Its actions must also prevent detrimental effects on its neighbors.

The current draft of the Hazardous Waste Permit governing Hanford Nuclear Reservation across the Columbia River from Oregon does not address critical aspects of the Tri-Party Agreement from over 20 years ago. Number one, the 40 miles of unlined trenches containing leaking nuclear hazardous waste tanks must be cleaned up rather than covered up by dirt as the current U.S. Department of Energy proposes. Covering up the nuclear waste will allow further contamination of the groundwater which has already migrated the Columbia River.

Number two. The draft permit does not require sentinel walls to be dug around the trenches for monitoring of the ground water.

Three, the draft permit does not prohibit further radioactive hazardous waste from across the nation from being shipped to Hanford by way of the interstate road system or rail system, which will primarily travel through Oregon, exposing large concentrations of our population to high levels of radiation and potentially devastating accidents.

Per the Washington Voter's Initiative I-297 in 2004, the State of Washington is obligated to clean up the World War II and Cold War nuclear waste before more high level nuclear waste is accepted.

Next month --

Moderator: About 30 seconds.

Gina Thayer: Next month, I am proposing a resolution at the U.S. Conference of Mayors in Orlando that will require the Department of Energy to focus a treatment of storage of radioactive waste onsite where appropriate. I've introduced this resolution with the additional support of Carolyn Goodman, the mayor of Las Vegas, Nevada, and we will be encouraging other mayors across the nation to actively support this resolution.

And I have copies of the resolution and we'll be --

Moderator: Do you want us to have that letter? Are you going to give it to us?

Gina Thayer: I've submitted this letter electronically and we are passing around copies of the resolutions so that you guys may see it. And we'll be posting it on Mayor Adams' website.

Moderator: Great. Thank you.

Moderator: Okay. The next person is Gerry Paulette, followed by Chuck Johnson, then Miriam German, and I apologize if I say names wrong, followed by Beth Rakoncay. Again, I apologize if I mispronounce your name. Mr. Paulette?

Gerry Paulette: If you don't mind, I'd rather face the audience, at least partially.

Moderator: That's fine.

Gerry Paulette: Thank you all for being here tonight. It is so important that you are here and speaking up. And thank you to Mayor Adams. Thank you to Paige Knight for a terrific introduction. It's important that you all commit to getting three friends to send in comments as well. Raise your hand if you'll commit to getting three of your friends on Facebook or neighbors to send in comments. Thanks.

The Energy Department decided in 2004 to use Hanford as a national radioactive and chemical mixed waste dump. They already issued the decision. They're only waiting for their environmental impact statement. And they have second proposal pending to use Hanford as a national waste dump, using yet a new landfill right next to the other ones for what they call greater than class C waste, which is extremely radioactive chemical mixed waste. This permit does not have a general condition saying you cannot add any more waste to Hanford. As long as we know that the ground water will be contaminated over and over again for 10,000 years. Ten thousand years. That's unacceptable to say we don't have a general condition saying you can't open a new landfill and you must not add another ounce. That's what ought to be in here.

Secondly, you've heard that the state has attempted what I would call a Band-Aid approach, saying, well, the existing landfills, we have a condition saying you can only take certain types of offsite waste and not very much. That's too little. It's a Band-Aid approach, and it fails to consider the fact that all the wastes mixed together in the ground water, and it's ridiculous to say if one little landfill doesn't contaminate the groundwater above standards, that you're to going to look at them all together because they all contaminate it all together. And it's our river and our children's health. Thank you.

Moderator: Thank you. Chuck Johnson? Followed by Miriam German?

Unidentified Speaker: German.

Moderator: German. I'm sorry. Thank you.

Chuck Johnson: I'm Chuck Johnson. I'm a board member of Columbia Riverkeeper and I'm speaking for myself tonight. I'm concerned about the same things that Gerry Paulette of Heart of America Northwest has laid out, in particular, the fact that there's no ban on bringing additional waste to Hanford in this permit in direct contravention of the State of Washington ballot measure overwhelmingly passed by the people of Washington in 2004.

Secondly, there's no commitment to excavate and clean up tank waste in the Central Plateau. That's not required by the permit, including known plums of plutonium that will find their way to the river.

Thirdly, there's inadequate regulation monitoring of 40 miles of waste trenches on the Hanford site.

These are issues that groups like Columbia Riverkeeper, Heart of America Northwest, Hanford Watch, Physicians for Social Responsibility, and all of the other citizen organizations in both Oregon and Washington have been talking about for decades. Therefore, I'm deeply concerned about the processes that we've been engaged in. I'm especially disturbed that the clear wishes of the citizens of Washington are being ignored in not banning additional waste to the site.

If a Washington agency ignores its own people, what hope do we in Oregon have to overcome the nuclear tyranny that reigns upstream from us on the Columbia River? It's time for those of us in the Northwest to say enough. No more waste at Hanford. Clean up the waste that's already there completely.

If the State of Washington continues to ignore the people on this issue, we'll have no recourse other than civil disobedience. The decisions you are making are of that magnitude and the current inadequate plan cannot stand. Thank you.

Moderator: Thank you. Miriam?

Miriam German: My name is Miriam German. And I'm here from No Nukes Northwest, Occupy Portland, and as a citizen of the planet. I'm here to represent people from Fukushima who were affected in Japan, who I've spoken to, who are dying, who will be dying due to nukes. I'm here to talk about all the people who have died in the Richland area, in the Tri-Cities area due to Hanford. I'm here to speak about the death of all of the people in Denver who have died due to Nukes in Denver and Colorado; in New York, in Georgia. I want it to stop. I want us to talk about death. I want you guys on the board, on the panel to think about people dying from these trucks that are coming through. It's not okay. Death isn't okay if we're causing it.

I don't want to take up two minutes. All I wanted to do is stay that I'm here to represent death because that's what this represents. Think about it.

Moderator: Beth Rakoncay? Rakoncay? You're good.

[Inaudible comment from the room 11:25]

Moderator: Okay. Thank you. I'm sorry.

Beth Rakoncay: It ain't what it looks like.

Moderator: Okay.

Beth Rakoncay: Hi, my name is Beth Rakoncay. I'm with No Nukes Northwest, Occupy Portland, and I too am a citizen of the planet. Deeply, deeply concerned.

My concern is largely with the CGS that's presently still on the Hanford site, and I realize your permit requests are for what you deem just as Hanford's issues. But the CGS is present on that site and it needs oversight as well. Hanford needs oversight and is far lacking in that. One of my concerns largely is Energy Northwest. Energy Northwest has recently entered into agreement to accept depleted uranium from the U.S. Department of Energy. The DOE has more than 770,000 tons of depleted uranium, largely most of which is considered waste, stored at Paducah in Portsmouth, Ohio. However, the DOE is restricted to offering the depleted uranium from those tails, as they're called, the leftover depleted uranium, they're restricted to offering the depleted uranium from tails for enrichment only to federal entities, which limits the deal to the Bonneville Power Administration, which Energy Northwest is working with.

Energy Northwest has entered an agreement to accept the depleted uranium from the U.S. DOE and is contracted with the United States Enrichment Corporation to have the depleted uranium enriched either in Paducah, or after processing, it will be receiving the enriched uranium that can be used to fuel the Columbia generating station, with the last of the incoming fuel, then, being placed in a reactor in 2029. Energy Northwest will sell a portion of the enriched uranium to the Tennessee Valley Authority.

My concern is we may be working on a cleanup, but if there's an issue where money can now be being made from the depleted uranium and just change its name into something else, where's the permit to regulate that? Where's the permit to regulate the greed that we all know exists, either

from the Bechtel, from the government in and of itself, or from this new opportunity to make money? This is my concern and I want this to be addressed and I want this to be a thought. Bring this up. Think about this one. Think about Plan B. What's the next thing somebody's going to come up with to make more money from this? Thank you.

Moderator: Jake Asher, followed by Heidi Strangski-Lambert, and I probably said that wrong and I apologize, Jason Pedegana, okay, followed by Beth -- oh, gosh -- G-i-a --

[Crosstalk]

Moderator: Okay. Thank you. I'm sorry. Handwriting's a little difficult. Hi.

Jake Asher: Hi. I'm Jake Asher. I'm here with No Nukes Northwest and I'm just really concerned that there's not a lot of meetings like this about such a controversial subject. There's a lot of people that are really concerned here and I'm really glad to see that. I think we need more public input. I think we need to hear more people. I think we need more time, because I didn't know about this meeting here today until a week ago. I think we could do a much better job at informing people. I see a lot of billboards and things about not speeding in our cars, but I think we could see some more billboards about why we want to kill our kids. I understand that there's like a 30-day process or something about this permit where we don't get to hear everything about it because it's a living thing, and I have more questions, but I'm going to give you 30 days until that comes up. That's what I got.

Moderator: Heidi.

Heidi Strangski-Lambert: Well, I want to thank you for the ones that came from Olympia and the others that came from the Tri-Cities. I'm from the Tri-Cities, so I know that's quite a drive. Looking at your guys' mission, your mission is to protect the Columbia River. So, when living in the Tri-Cities, you really feel like everything's fine and people defend the elk and the birds and the fish, and how everything's fine, and I'm not an expert and I'm not a scientist, but I do know that radiation lasts thousands and thousands of years. I also know facts like 4.3 million gallons of radiation went directly into the river a day from 1963 to 1985. So, 4.3 million gallons of radiated water went back into the river, but everything's fine. You know? And I know it's a big river. I know of people eat out of there, a lot of people make their living off of it, and a lot of people are dying around it, and a lot of animals and fish and lots of things.

And you guys are the solution. You guys are the tough guys. The Department of Ecology is supposed to be the ones that are protecting that. So, to me, I feel like you guys are -- you say you're monitoring it. Who's monitoring it? Other scientists, or like other people brought up, who's the gauge? What's this gauge that's monitoring? Are we using modern science? Because where do these isotopes go? We know they're there. We know they're out there. So, again, I hear a lot about what's going to happen on Hanford in the gates that's not leased to CGS, not leased to the DOE fed. What's going to happen to the Hanford that's already escaped? What's going to happen to the Hanford that's already loose? The last 80 years we're dumping millions of gallons a day, 4.3 million a day, what happened to all of that? So, my question to the Department of Ecology is, please make the Department of Energy own it. Let them take

responsibility for it. Please quit singing that everything is fine. That's why everyone here is upset, because for decades, we've lived down the river and are dying and are being told it's fine. Or, that trucks are going to down our highway and we're going to get cancer and, you know what? That's our fault because we lived in this era? That's what the government's job is to do, is to protect people, and that's what I'm asking you guys to do.

Moderator: Thank you.

Heidi Strangski-Lambert: Thank you.

Moderator: Jason?

Jason Pedegana: Yeah.

Moderator: You are next, sir.

Jason Pedegana: My name is Jason Pedegana. I'm from No Nukes Northwest and generally concerned citizen of the Cascadian Bioregion and Earth. I'm going to keep it short because my friends here and everybody else, kind of lot of concerned faces in the crowd anyway. Just please look at all these people out here and don't give us the runaround like we have been given for the past 60 years plus about the safety and the -- non-safety. It's frustrating. It's frustrating because, A, a lot of people know. And B, we would like to know more. It's our livelihood. It's our future. It's your future. Would you drive in one of these trucks with a kid or your grandmother or any of your loved ones? I just want to know that my friends and family for the next generations that plan on living here where I was born and raised have the same safety that you guys are promising us right now. That's all. Thank you.

Moderator: Beth Giansir -- I knew I would do that. And he just told me. I apologize. Boy, this -- you've got a lot of tough names tonight.

Beth Giansiracusa: I know. You come to Portland.

Moderator: Beth, Portland's awesome.

Beth Giansiracusa: Thank you. I think so, too. My name is Beth Giansiracusa. I basically represent we the people. Like I said earlier, I was in front of the NDSB -- the acronym for the one that sees everything, which is the Nuclear Defense Safety Board. The issues that came up were the Safety Culture and the 99 problems that were at Hanford. The reason the 99 problems came out was because of whistleblowers that had to go through Occupy or other places. Crazy stuff. And when this starts happening and we trust the government, ha, or the people that -- you take your jobs because I would assume you want to help people, you want to do your job. But when you have a fast track design, when you have things that you automatically know are problems and you move beyond those problems into another reframing because all I see is Hanford is everything gets reframed. Everything is reframed. Every other time, it's reframed. And I want to see the truth. I want to see -- you're owning up to certain problems, but there's a lot of stuff that when you permit, what you're doing is you're permitting harm, that's what a

permit is. It's to permit harm. Unless your permit starts working with the Safety Culture and addresses the fast track design out there, then you're really not doing anything. Everything can be re-undone. Like you said, it's an open book. It's something that you can make as you go because that's what fast track design does. "We're going to change it here. Now we're going to change it here. Now we're going to change it here." So, that's all I have to say. I think you got my point. Thank you.

Moderator: Alexander --

Alexander Veritage: Veritage.

Moderator: -- Veritage. I ought to just give these to you guys to read. You're doing a great job. Followed by Rhonda McMillin, then Mike Wifey, followed by Teresa 99? Okay. So, Alexander?

Alexander Veritage: I'm Alexander Veritage and born and raised in Cascadia, the bioregion of this region. I just really don't know what completely to say. Every time I hear more about Hanford or the whole region or that whole area, it the rabbit hole goes deeper and deeper. Now, hearing about non-lined ditches was the -- how far are we going to go with this? It's just shocking. Eric Fromm, the famous psychoanalysis back in the 1950s talked about the necrophilic personality, the personality that loves death, the culture of death. And it sounds like we have a culture of death. We just want to cause more suffering, more illness and I'm shocked by this. I didn't know what I was going to say with this whole thing. I'm just shocked the more I hear about it. I mean, I thought I was well-informed about Hanford.

I think one of my other concerns is that it's the lack of communication, not just to the public, but the lack of communication between different departments. The federal government, the military industrial complex, corporations, and then the departments within the State of Washington, the department probably to Oregon as well. I mean, and let's throw in Idaho while we're at it, because nobody brings that one up. It's just shocking.

Would it be better if we had a separate country and got rid of the federal government [inaudible 24:23] worked in a different way? I don't know. Free Cascadia. But it's just shocking. So, anyway. Please, wake up. Communicate.

So, take care.

Moderator: Thank you. Rhonda McMillan? Can you scoot a little bit closer to the mic so folks can hear you?

Rhonda McMillan: Sure.

Moderator: Thank you.

Rhonda McMillan: So, I'm Rhonda McMillan-Jelinek. I'm a mother, I'm a grandmother, I'm with Occupy Portland. I want to make this real short and sweet. I was shocked when I started

discovering all of the facts that I've learned over the last couple of months with Hanford. I thought I knew a lot. Apparently I didn't. I implore you to be honest with us. Stop pretending everything is okay. When we went to Hanford in April, I was amazed at the culture of denial that's there. I talked with a couple of the people who went to high school there. The symbol for Richland High School is a mushroom cloud. The rally cry for Richland, Proud of the Cloud. It's time it stops.

Unidentified Speaker: Thank you.

Moderator: Mike Wifey, followed to Teresa 99.

Mike Wifey: Mike Wifey, Occupy Portland. I would just like to address you guys here at the table. I think it's pretty obvious to you that we would not like to see this permitted. We would like to see this shut down after it's cleaned up. So, this is your responsibility and it's time for you stand up. We know how to stand up in our own ways, but since you're already there, you a part of this, you can close it down a lot quicker than we can. So, we're looking to you for not support, but for leadership, okay? Keep that in mind as you make your decisions. We will get civil disobedient if we have to. We've been known to do that before and this is a very good reason to become disobedient. So, let's not let it get to that point, okay?

Moderator: Thank you.

Teresa 99: Hi. I'm Teresa. My real last name is Roberts. I am a dual resident of Portland and Santa Fe. I'm starting to feel -- coming from Los Alamos National Lab terrain and now I'm in Hanford terrain, I'm starting to feel like a fly that's drawn to the nuclear fire. But what I've heard today here is that the plan is not clear, that you have little authority, and there is no precedent of criminal charges, and that the Department of Energy is self-regulating.

So, I'm remembering the last hours before the BP oil spill and I'm remembering that there were intelligent, informed people on that ship, according to the testimony of the survivors, that were saying, "Do the right thing. Don't do that. Don't do that," and the financial guy go to make the call and that's why we had the BP oil spill. So, when I hear about people with a lot of responsibility who apparently have no real bite to their authority and I hear nothing about independent citizen review, then I think, oh, they're going to run this like we run the Portland Police Department. Ya know? Who are being required to hire nine new sergeants because their brutality level is so high. How about we just stop brutalizing people and we don't have to hire nine new sergeants? Or how about if we did some independent citizens review from people who will do it for free. I have heard more intelligent input today from the audience than I have from the officials and I want independent citizen review.

Moderator: Reed Jackson followed by David Griffin, followed by Sandy Polishuk, followed by Chris Arthur.

Reed Jackson: Thank you for allowing me to speak today. My name is Reed Jackson. I'm a little shook up by tonight. I grew up in Canada. I have dual citizenship with -- as the United States. My family was extinguished, most of them, in Germany as Jews. And we fought really

hard in the United States to grow our family. I'm really concerned as my niece and nephews come out, especially with Hanford being so close to us, that they have all their fingers, their toes and they're not deformed like these folks. And I want you to look at this. This is what radiation does to people. And this is what radiation will do if we continue to allow Hanford to pollute our rivers, pollute our lakes, and so on.

I used to fish with my grandfather and my dad on the Columbia as a child. I can no longer do that. I can't eat the fish out of the Columbia River because of the toxic levels that in it. The EPA is not tested with that fish. Even the issues with Fukushima, it took a year for any testing and there's not additional testing that is done. I want this [inaudible 31:00] to be part of the public record. That's all I have today. Thank you.

Moderator: Thank you. Mr. Griffin?

David Griffin: Yep.

Moderator: Okay.

David Griffin: My name is David Griffin. I've got a couple of points to make. Number one, I understand the position that you guys are in. I know you guys are between a rock and a hard place. On the one side, you've got all of us, the pissed off citizenry, and on the other side, you've got pressure coming down from the federal level. I understand that. You guys are in a difficult spot. But, you guys are the gatekeepers. It's up to you guys to stand up and to do the right thing despite the pressure. So, generations are going to be affected by what you guys do or don't do.

The other thing is, some of the stuff that's leaked into the ground up there, Iodine-129, has a half-life of 15.7 million years. Now, what's going to happen at Hanford in 10 or 15 years when the federal government goes bankrupt? What's going to happen? How many generations are going to be affected?

The final point I want to make is that back on April 19th, I contacted all five of the local television stations here in Portland, and all five of them refused to cover this. I contacted them several times. I sent them emails, I even went there in person, hand-delivered flyers to each one of their offices, and I was ignored.

Unidentified Speaker: Same for the *Tri-City Herald*.

David Griffin: So, that's one of the reasons people have not heard about this, because there's a media blackout that I encounter.

Moderator: Sandy Polishuk. Did I say it right?

Sandy Polishuk: [Dead on 33:21].

Moderator: I was bound to score once.

Sandy Polishuk: I'm Sandy Polishuk and today is my birthday.

Moderator: Happy Birthday.

Sandy Polishuk: Well, that's very nice of you, but that's not why I told you. I told you because this is not how I want to be spending my birthday, but I'm also a grandmother, and those of you who are parents and grandparents know that this is really important for the coming generations. It's okay if I get exposed. It takes 20 years for most cancers to really show up and I'll be very happy if I have 20 years more. But that's why I'm here on my birthday.

The first thing I am speaking on behalf of Congressman Earl Blumenauer, my congressman, who is not in the state right now so he could not be here tonight. He sent me a letter that he wrote, I just looked down at it and it's from May 2011, but it's still pertinent, and he wrote it to the Department of Energy around the draft Environmental Impact Statement, and said I could read it into the record and I'm only going to read a little bit and give it to you. But I want to read a little bit towards the end.

Given the urgency -- this is from the letter -- given the urgency of the cleanup situation, the notion of importing more highly radioactive waste for disposal at Hanford is extremely troubling. To move forward with a plan that dramatically increases the amount of radioactivity in wastes that are disposed, stored, or in the soils at Hanford is not what I would consider fiscally or morally responsible.

I'm going to skip a little.

It is critical, however, to remember that even the small steps moving us forward Hanford remain overshadowed by a record of delayed timelines and funding shortfalls. Importing new waste at Hanford at this time could be a major setback in our efforts.

Could I speak a little bit on my own behalf or?

Moderator: I'll give you a minute. Is that okay?

Sandy Polishuk: Okay.

Moderator: Okay.

Sandy Polishuk: This timeline thing is what really upsets me because so much in this permit language, it depends upon trust and I don't think trust has been earned in the cleanup. I think that we are always getting delays and delays, and these language that says you issue the permit and you'll give us the plan afterwards is extremely disturbing and is unacceptable.

Moderator: Thank you. Chris Arthur?

Chris Arthur.

Chris Arthur: Yep.

Moderator: Okay.

Chris Arthur. : Hi. My name is Chris Arthur. I'm a physician. I'm retiring from clinical medicine next month in order to devote my time to the health of the Columbia River because it is so unhealthy.

It's hazardous to transport waste. Obviously, it's hazardous to store it. It's hazardous to let it leak. It's not proven that storage can or will be adequate at Hanford. It is ridiculous to ask us to sign off on something that hasn't been properly planned or timed out. It does reduce trust when somebody says, "Sign up to go across the Atlantic with this aircraft. It's not been built yet, you know. We've got the tail." No.

So, I am asking, please tell us the facts about this vitrification plant. What has it already been doing in the prototypes, right, the small one? What types of stuff can it deal with? So we can see how much percent of problem might be alleviated with it.

The other thing I'd ask is who's making a profit on it? I would like to know.

[Inaudible comment from audience 37:53]

Chris Arthur: Right. The other thing is the education and alerting people and children to hazards. As you can see, I'm wearing a little costume. This is from the mountain that looks after Hanford Plateau, [inaudible 38:09] look at that. The great mountain, the guardian to the Columbia. Has a white eagle and a red eagle, sits on his shoulder. You can see it. It's real stuff. You can go and look at the eagle. You can tell it.

Many Native American myths talk about this. We must put money, time, and effort into cleaning up the mess we made, but we must put love and respect for our life on earth for many generations to come forward. It is not convincing when we just hear straight talk or little bits of stuff we're going to do. What's convincing is when we hear the heart. I call you to speak from the heart and you would be much more convincing and you would come up with a better product. Thank you.

Moderator: Kelly Nokes followed by, it looks like Mellon Burlingham, Leslie March, Warren Zimmerman, and then Lettie Phillips.

Kelly Nokes: Thank you. My name is Kelly Nokes with Columbia Riverkeeper. I want to start off by thanking everyone for taking the time out of their busy schedules to attend tonight's meeting. Public participation is critical to ensuring a long-term solution to Hanford cleanup and we truly appreciate that so many of you decided to attend tonight's hearing.

Columbia Riverkeeper is a nonprofit organization with thousands of members in Oregon and Washington. Our mission is to protect and restore the Columbia River from the headwaters to

the Pacific Ocean. Since 1989, Riverkeeper has played an active role in monitoring and improving cleanup activities at Hanford. Every summer for the past four years, I've led dozens of people on incredible kayak trips down the Hanford Reach of the Columbia River spending time on the Hanford Reach of the Columbia is a reminder of the incredible responsibility we have to future generations to ensure that the federal government lives up to its responsibility to protect the people of the northwest and the Columbia from Hanford's nuclear legacy.

As many of you know, Hanford's legacy is not a local issue. Nuclear contamination from Hanford threatens the Pacific Northwest's people, a world-renowned salmon fishery, as well as countless other cultural and natural resources. The State of Washington must take full advantage of the opportunities to protect the Columbia when it issues the long delayed dangerous waste permit for Hanford. Riverkeeper will be submitting detailed written comments on Ecology's draft permit, as well as providing input as a member of the Hanford Advisory Board. I would also encourage members of the public to visit our website to learn more about the permit and how they can weigh in.

In the short time remaining, Columbia Riverkeeper offers the following comments on the draft dangerous waste permit. First, Ecology should use its full authority to prevent the import of offsite mixed radioactive and hazardous waste to Hanford. Shipping more offsite waste to Hanford conflicts with common sense and the U.S. Department of Energy's own scientific review.

Second, Ecology should require the removal of thousands of untested waste drums in the central waste complex. Currently, the Department of Energy illegally stores thousands of untested waste drums in the central complex. The new state permit fails to do enough to ensure waste is removed and treated on a reasonable schedule.

I'll leave it at that because my time is up, but we will be submitting more detailed comments written.

[Crosstalk]

Moderator: State your name for the record please, and begin.

Helen Burlingham: Yeah. I always like to be heard, believe me. My name is Helen Burlingham. As a fourth generation Chicagoan and somebody who's lived around the world, including countries with dictatorships, you'd think I would be totally cynical and I'm not because I keep thinking the Pacific Northwest is better. I expect better things of Washington State than I've seen in New York State. Let me tell you, I was an environmental activist for 30 years in Western New York, and we have a place there called West Valley, which was under the Department of Energy. It's teeny tiny compared to Hanford and it is a very small place, as I say, in Western New York where they're contaminating the river because there were trenches of supposedly low level nuclear waste.

I appreciate those of you who have to listen to this are treated as the enemy. I have great respect for people who work for the government. And I will say this in a better forum, but I would like

the State of Washington to look at the actual record in Western New York and West Valley. I think it might be a little helpful in dealing with this huge issue. And by the way, when I hear the name Bechtel, I cringe. Anywhere near -- I saw that name in Saigon in 1967 and that's when I found out that our U.S. Aid overseas goes to all our American corporations.

I would just like to say one more thing. Do you remember Roll on Columbia, Roll on? Do you know that was about the dams? Well, this is another dam thing.

Moderator: Leslie March, followed by Warren Zimmerman. Okay.

Leslie March: Hello. I'm Leslie March and I am a member of the National Sierra Club No Nukes Core group, which is about to kick off a national Sierra Club No Nukes campaign. As a matter of fact, just last weekend, we were in Washington D.C., and Helen mentioned West Valley, well, Dr. Marvin Resnikoff was there and he was comparing Hanford to West Valley to me in our conversations.

These comments are being submitted on my behalf and also my family members that live in Washington State and my family members that live on the Columbia River. My family has lived on or near the Columbia River since the early 1900s and I consider it a tragedy that our family name, Hanford, continues to be synonymous with the most polluted site in the United States. Sorry, I get really upset about it. The town of Hanford was founded by my great grandfather and named after his father-in-law and it was supposed to be an honor. It's not.

The double tragedy is that despite many years and billions of dollars, we are still debating how to safely dispose of the radioactive waste. The draft hazardous waste permit, as written, has major flaws. First of all, in order to clean up the site, there needs to be a moratorium against bringing any new waste onto the site. Whether it is going in an existing landfill or not, there needs to be strong language barring any new landfills to be opened on the Hanford site. There is already a strong concern that the groundwater is contaminated and that that contamination is reaching the Columbia River. Why would we increase the chances of this happening by taking on additional risk?

The state needs to add stronger language to require all of the trenches to be cleaned up, not just covered over with more dirt. The state needs to require stepped up characterization of this waste and to perform appropriate withdrawal and treatment of the waste.

And then there are what would be for any standard business illegally stored barrels of uncharacterized waste that are still in the area, which is what people in the Tri-Cities call Hanford. The state needs to require that the contractors step up their investigation of this waste, a comprehensive plan needs to be done sooner rather than later, and contractors need to be held accountable to timelines and given incentives to succeed, not as it is done today when they continue to be rewarded for failure. Forty years of failure.

I know that your permit doesn't cover this, but the state should take steps to prevent the continued production of radioactive waste on the site by Columbia Generating Station. The state

should encourage the development of renewable power to replace the plant and the irradiated fuel pool needs to be emptied and placed in hardened onsite storage.

In conclusion, the State of Washington needs to adopt strict requirements for cleanup, not cover-up. Our past leaders made hard decisions on behalf of national security. But we need to recognize that we are left with this legacy and that we have the responsibility for cleaning Hanford up on behalf of the generations in the future.

Moderator: Do you want to give that to me? Do you want to put your name on it?

Leslie March: Well, actually, I have another [inaudible 48:03].

Moderator: Oh, okay. Nope, that's not it. There. Thank you.

Leslie March: You're welcome.

Warren Zimmerman: All right. Good evening, y'all. I'm Warren Zimmerman and I'm an RN and a geologist and I've been both of those for a lot of years. I'm from Louisiana, as you can probably tell, because I talk kind of funny. But I wanted to say that I've adopted Oregon as my home and I love it out here. It's a great place. The more I learn as a scientist and as a healthcare professional, it scares the hell out of me. I probably shouldn't say that. So, I think we ought to clean up Hanford, the waste from Hanford now, not in geologic time, and include the untested waste drums and the 40 miles of unlined trenches and they had no more offsite waste and that's it, and do it now.

Moderator: Lettie Phillips followed by Nancy Matela, followed by -- oh, my gosh. Oh, gosh. I apologize. It look like D-r-i-j-a B-e -- Bertish?-- did I totally destroy it? I'm sorry. Okay, Lettie Phillips? No? Okay. Nancy Matela.

Nancy Matela: My name is Nancy Matela. I'm with Alliance for Democracy and Citizens for Safe Water and heart of America Northwest, but I'm here to speak for myself. I also am going to give you two for one because I'm also representing our state legislators. Seventeen of them wrote a letter to Secretary Chu and I will read just parts of it, but you get to check off two of them.

My comments basically have been covered by all of you, especially Gerry Paulette and Chuck Johnson and I'm going to give you some specifics about how to make the permit stronger, because basically, it has no teeth in it. It's very weak. Here's three things that you can think about doing.

On page 12 of the FAQ sheet, it says the storage and treatment of mixed waste in Hanford's noncompliant single shell tanks cannot meet the state's requirement because they lack secondary containment. There is currently no practical alternative but to continue to use the single shell tanks while the permittees build and start up a treatment plant for that waste.

I understand that you're going to be addressing that a little bit more thoroughly, is that correct?

Moderator: Yes.

Nancy Matela: Okay. I just wanted to put it on the record that there have been several alternatives to this that have been proposed to DOE and Ecology and they have not been addressed, but there are alternatives. So, we don't feel that it's right to say that there's no practical alternative. Maybe it's not practical in your mind, but our lives are worth the money it takes.

Secondly, right now, the permit handles each of the units separately, as Chuck and Gerry said, that the groundwater is examined on an individual basis and our concern is that if you continue do that, that they'll say, oh, the contamination is below the level and you can have a loophole then to allow other waste to come in. It needs to be combined total.

I can do this in a total of our minutes.

Moderator: Okay.

Nancy Matela: Third, you say that offsite waste is explicitly excluded from the draft permit, and yet, on the FAQ sheet, page 12, it says, quote, "except as authorized via a permit modification decision." If that's not a loophole, I don't know what it is. It sounds to me like DOE can just slide right through that.

So, the letter that 17 of our Oregon representatives and senators sent to Secretary Steven Chu excerpted here, as state legislators representing Portland, Oregon, we urgently and respectfully ask that they Hanford nuclear reservation be removed from the U.S. DOE's list of candidate sites for national permanent storage of radioactive waste. While we recognize the need for energy resources and proper storage of waste, Hanford is not a viable option. We believe that there are important unresolved matters that demand further scrutiny before the site is committed to further storage of nuclear waste. And some of the weaknesses I just mentioned are some of those things that need to be scrutinized.

Although, Hanford is just across the Columbia River from Oregon and is the most contaminated site in the Western Hemisphere, there are over 1 million people living downriver in Portland, Hood River, The Dalles and other Oregon cities and towns. We, the undersigned, urge you to immediately remove Hanford from the list of candidate sites.

I will leave you the letter so you can see the senators and the representatives who wrote the letter.

Moderator: Are you going to be submitting your comments -- or the ones you just read, are you going to be submitting those with the details?

Nancy Matela: I can.

Moderator: That would be great. That would be awesome.

Nancy Matela: So -- yeah.

Moderator: Thank you. Mr. Bertish. I won't try your first name again, I did a horrible job the first time.

Drija Bertish: That's okay.

Moderator: Followed by Gail Owens.

Drija Bertish: Thank you. Drija Bertish, Rosemere Neighborhood Association, Vancouver, Washington. We support fully the comments of Columbia Riverkeeper, Heart of America Northwest, Hanford Watch, the Sierra Club, and all the other conservation organization. Rosemere is a conservation organization. We want to reiterate the plea to refrain -- make sure that there is language introduced into the permit to cease and desist from all additional wastes from being imported into Hanford.

I have a problem with the vitrification plan and how this ties into everything. I have this funny feeling that the federal government, having spent billions and billions of dollars now thinks that they own it, when it was given to us as a cleanup tool, and that because they've spent all this money, that they think they can then use it turn around and start treating waste from elsewhere. That's not what it was proposed for.

And I think that we need to stand up as a state, I know Washington State is very green conscious and this goes against the very fiber of the being of all the citizens of our state as we voted several years ago on, so we would ask that the most important thing to do is to stop quibbling about everybody else's mess, and to focus more on getting those tanks emptied, all the ones that are leaking and getting into the river now, and get them -- build new tanks if need be that are double-lined rather than single lined. Don't wait 40 years to empty the tanks. Vitrify what we can. If don't vitrify --- I don't think the vitrification plan is going to work because it's behind and off schedule and it's over -- it's going to explode, basically, what we've been told. That they can't get it to work and there's going to be this deep, dark recess of hole in the middle of it that no black hole could every protect us from. So, it's a very dangerous proposition. We don't know what we're doing. Ecology and Department of Energy has said for years this is where no man has ever gone before. So let us, instead of trying to make miracles and promises we cannot keep, build something immediately to secure what's already there and focus the permit on that rather than wasting time and money on things that will not work.

I think it's also important that the people have spoken, that we don't want truckloads of waste coming through neighborhoods and cities. We need to get all of the drums offsite that are being stored illegally. We need to get them secured. We need to stop using trenches, no more landfills. I mean, the voices are pretty clear and consensus in this room. And I think it's time -- we've asked -- I feel like a broken record. I've been to so many of these meetings and we've said over and over again, "No more waste. Please, we beg of you," and now it's time for you to say the full authority of the State of Washington under the Attorney General will say no more to this, and if not, we'll sue the federal government and make a big stink. That's where it's at right

now. Let us stop with all the rest of this. It's quibbling. Grow a spine and don't provide any more deference to the Department of Energy and to the federal government. It's coming to that. We have no other choice. So say no, and be done with it.

Moderator: After Ms. Owens is -- it looks like Taizz Medalia, Dorothy Lamb, followed by Jan Castle.

Gail Owens: Hello. My name's Gail Owens. I'm a retired nurse and I have been in Heart of America Northwest for at least 10 years and Occupy Portland Senior Caucus for a while. But I guess, I don't know I don't see anybody else from there, so I'll have to tell them about this.

I'm one of the guinea pigs. I was born in the Tri-Cities about a year before the bombs, so I drank a good 18 years worth of the Columbia water that was filtered through a few meters of gravel, I would imagine, and doused severely with chlorine. But it must have been enough that some people were worried that we might be concerned, so they had the Fred Hutchinson people do some health checking on us and their conclusion was, oh, well, there doesn't seem to be a significant enough increase in cancer or problems. But that was done about 10 years ago.

Strangely enough -- I'm having my 50th class reunion this year, but I've been hearing all kinds of people besides my parents and classmates and seemingly a larger proportion than it should be in the general population of cancer. And they were first members, it wasn't a family trait, including myself. I'm kind of in -- I heard somebody say, yes, it takes 20 years before you develop a case of cancer and I see the pictures there, but no, didn't get a great big dose like the people in Nagasaki and Hiroshima, but there are some scientific facts that may not be absolutely engraved in stone, and I say this kind of as a nurse and also as a member of the public that reads all kinds of articles about what coffee is doing to us. At any rate, I would like to have more confidence in the DOE than I do in the FDA who tested bees for a week on the pesticides and since they survived, it couldn't possibly have anything to do with all of them dying.

I guess that's all.

Moderator: Okay. Thank you. Taizz? Is that -- is it Taizz? Oh, okay. I'm sorry. Taizz? Okay. Oh, pretty. Okay. Thank you.

Taizz Medalia: Hello. I'm Taizz Medalia of Occupy Healthcare Committee. I live right down the road overlooking Swan Island in the Overlook neighborhood. I've been respiratory therapist for 26 years. What I wanted to talk about was that I think there's a significant credibility gap because we have the Hanford Reach, which is the only national monument which has been designated too contaminated to use. But what I'm really here to talk about is I'm so concerned about 20,000 to 30,000 tons of radioactive waste rolling down the interstate coordinators and by the DOE's own estimate, there will be 816 adults that will die from cancer over the next 40 years, and children, we know are 3 to 10 times more likely to get cancer at the same dose. So, I guess I'm wondering, how did this ever become acceptable? How many cases of cancer are acceptable for you to allow this radioactive waste to go rolling down the roads? That's really what I want to ask.

Moderator: Thank you. Dorothy Lamb followed by Jan Castle, then Christine P-e-i-n-e, Peine? Okay. You're on.

Dorothy Lamb: Hanford is not a good place to store radioactive waste. The river is there. The Columbia Gorge, Portland and Vancouver and into the ocean. It's dangerous. It causes cancer. It needs to be put in a safer place. Clean it up, but any additional somewhere else, and don't make any more. I'd also like to request that the agreements are kept that have been made.

I'm a downwinder from the thyroid belt. Had thyroid problems since I was four years old. I don't want to be a downstreamer, which would cause cancer. I don't want there to be a cancer belt. Let's take care of our planet. It's our home.

Jan Castle: My name is Jan Castle. I am a member of Heart of America Northwest, Columbia Riverkeeper, and the Union of Concerned Scientists. I will submit online detailed comments about your plan. What I'd like to say this evening to you folks at Ecology is that I have a concern that in your collaborations with the Department of Energy, that you are buying into their worldview and their version on the limits of what is practical rather than standing apart from them as a regulator.

The Richland office of U.S. DOE is a self-perpetuating world unto itself, which continues to operate in the same way with the same rotating cast of contractors no matter who is in charge. And I know you've talked to the same EPA employees that I have who have worked at different DOE sites who will tell you that the Richland office operates differently and much less efficiently than other DOE offices. I'm asking you not to buy into DOE's worldview. They work for the military industrial complex. You work for the people of the state of Washington. You're in a unique position within the Tri-Party agencies. You are the only ones who can require DOE to adhere to state and federal laws regarding cleanup, and in fact, you are violating federal law yourself if you do not do so. EPA can't do this. Only you can. If you do your part, DOE will figure out how to do theirs and how to fund it.

We in Oregon have little official input here, yet more of our citizens than Washington's are at risk from contamination of the Columbia and from transportation of hazardous wastes on our highways. We rely on you, as do your own citizens, to protect us from the hazards of transportation and inadequate storage, treatment, and disposal of hazardous and mixed radioactive wastes. You have the legal authority to require that no more wastes be imported to Hanford until current wastes are thoroughly cleaned up. We ask that you use it. Thank you.

Moderator: Thank you.

Moderator: Christine P-e-i-n-e. I -- thank you. Followed by Ben Cannon, followed by Patty Hovelace, followed by Jack -- it looks like Dresser?

Christine Peine: Thank you everyone who brought this hearing into being and for coming down to Washington. I'm originally a Washingtonian with a degree in environmental design and architecture from the University of Washington, and am thus quite unemployable in Duck Land of Oregon at this time. I was a member of Puget Sound Governmental Conference Green Space

under Bob Schindler, Puget Sound Governmental Conference. I was a member of [COPERG 1:08:06] in the early '90s in Colorado. [I'm a] certified medications administrator [whom] Colorado lapsed.

I was the other Christine on campus with Christine Gregoire, whom I called. If you have a pen ready, her phone number is 360-753-6780, 360-753-6780. And Becky or Betty will take your opinion about this.

Today I called one of our state legislators in Washington and asked if there was a law to prevent any more deposits of radioactivity and chemicals in Hanford and she says, "No, there is no state law in the state of Washington." So, during January of next year, which is a little too late for the September 30th permit, January to April, the end of April is when the Washington State legislature convenes. Now, I at this time did not know when the Oregon legislature convenes. I haven't spend that much time in Salem since I was a little kid.

So, I would like to add this comment that I agree with Paige Knight when she commented that to move radioactivity and radioactive waste, to move it is dangerous. Southern California, Mexico, New Mexico, Turkey Point in Florida, Three Mile Island, if necessary, waste should be deposited back in the mountains of Colorado that are not threatened by earthquake, hurricanes, etc. Treatment sites should be taken onsite. As Paige Knight said, when you move it, there's more waste created. I would definitely support that Hanford cleans up Hanford and that no wastes are transported on our state highways. That's it. Thank you.

Moderator: Thank you. Gwen Cannon? Patty Hovelace? Jack Dresser? There we go. Hi.

Jack Dresser: Hi. I'm Jack Dresser. I'm from Eugene. I'm a psychologist and I'm a member of Veterans for Peace. As a veteran, I'm particularly appalled by the collusion between the Department of Energy and the Department of Defense in providing depleted uranium for weapons that have actually basically turned the Middle East into an inhabitable region, in effect, forever. I provided the photographs of the deformed Iraqi babies that was provided to you by another audience member.

Frankly, I am really tired of being a non-suicidal member of a suicidal species. During your presentation, I repeatedly heard the words safety and nuclear somehow juxtaposed in the same sentence, which is just an Orwellian twist of language.

When we look at Fukushima, which was recently visited by Senator Wyden, one of the things he found reported on was Reactor Four has over 1,500 fuel rods that are hanging by a thread in a badly damaged building just waiting for the next big wave to come along. Two of those fuel rods are enough to destroy most of the human race. So, it is simply insane to be talking about safety and nuclear in the same night, much less the same sentence. And yet, when we look at the Department of Energy budget last year, they had \$22.6 billion allocated for various nuclear uses. They had \$2.2 billion allocated for renewable fuels, renewable energy. That ratio has to be complete reversed. That's a 12:1 ratio.

This industry simply has to be shut down, if humanity and the rest of the life on this planet is going to survive, this industry has to be shut down. Completely. As soon as possible. And forever. One way of accomplishing that is by refusing to allow any disposal sites. If the citizenry surrounding every single candidate disposal site refused to allow it, they'll no longer be able to produce it, and that should be our goal.

Moderator: Anthony Porsey? Did I say it right?

Anthony Porseo: Close.

Moderator: Close. Gosh, darn it. Okay.

Anthony Porseo: I'm Anthony Porseo, Oregon citizen. All of you here have heard a representative of Hanford, maybe the DOE, publicly admit that we lost a billion gallons of highly radioactive waste at the Hanford site. Well, that kind of confirms something that I read about 25 years ago, or in the '80s, about how when the first telescopic cameras that were put into orbit and could take shots of the earth, they discovered that there was a radioactive plum that went from the Hanford site out the Columbia River and all the way down to the San Francisco Bay. Now, this was on the news, but it made a big splash with people who were against nuclear energy, but otherwise, it's kind of gone off.

So, my question would be, is this, I mean, has the government forgot that this a democracy, that such an important issue that involves so many citizens should not be put to a public vote? No. I think they believe that this is too important for the people to decide and that basically, the government is dictating to us while we beg for mercy what our future is going to be, and judging from their past record as far as Hanford is concerned, we really don't have a reason to be very optimistic about the future.

Perfect.

Moderator: Gregory Sottier. Oh, okay. Thank you. Followed by Irene Cook, followed by -- just a second here, sir -- Gregory -- oh, you're signed in twice.

Gregory Sottier: I'm in -- oh, does that mean I get to speak twice?

Moderator: No. But, we've got you down twice. And I still messed up your name, even that second time.

Gregory Sottier: That's all right. Hi, my name is Greg Sottier. A lot has already been discussed, so I don't want to repeat it. But I just want to say that the Hanford site, it's devastated. Especially when you get up into the 200 area, it's like an open wound that's just festering and there's really nothing that can be done to remedy it. The damages are so complete. I know this because I went on a tour just recently and I was quite horrified by what I saw. And also, it was very, very sobering. That said, though, with that devastation and the idea that there may be more devastation arriving via truckload and truckload, and 20,000 tons of nuclear waste being generated by our nuclear power industry each year, has to some place. I have very, very

little faith, unfortunately, in our engineers these days and their ingenuity to contain nuclear waste. I have no faith in the Department of Energy, especially when Fluor Corporation and Bechtel corporation are in the back room.

What that means to me is that you are our last line of defense on this. You are the last line that can say, "You know what? We're actually going to protect the people of this region. We're not going to go with the corporate projection. We're not going to go with the idea that nuclear wastes can be contained safely for thousands and thousands of years." Okay? We need you to protect us. We need you to really draw a line and say, "Hey, look. No more nuclear waste needs to come in here," and let's get effective mediation in place for the existing nuclear waste that's already here.

So, I ask you that. To remember that. The government's not going to do it for us. These giant corporations aren't, either. It's really up to you guys.

Moderator: Thank you. Irene Cook? Barbara Mortacella? Followed by John Howieson, followed by Marcus Lee.

Irene Cook: I do appreciate the position that you folks are in, and you really are our last line of defense because it's really clear that what the DOE intends to do is to write off the Northwest. We are to be a nuclear sacrifice zone. In planning to bring in more waste, in allowing radiation levels hundreds and thousands of times higher at this facility than at any other facility in the United States, and in shipping it across the highway -- you said that the shipments were safe, but not the DOE shipments. Some of that waste is so radioactive that it has to be handled by robots. It's very clear that they have given up on us. Hanford was cited out of ignorance, there is no ignorance now, and there's no innocence on the part of the Department of Energy. They have just given up and you are the only thing that stands between us and the absolute and permanent long-range contamination and ruination of this region.

I feel like what's involved right now is a very deliberate and conscious decision to turn Hanford into a protracted and slow Fukushima, and I ask for the governor to exert her authority and I ask for you to actually advocate for the river and for the people and for the whole environment of the northwest. Thank you.

Moderator: Thank you. John Howieson? Marcus Lee? Followed by Joe Collolly?

Marcus Lee: Hi. I'm Marcus [inaudible 1:22:05] Jr. I am resident of Portland, Oregon. I've been a resident of Oregon since June 1973. My family originally came to Oregon by wagon train, then we all left, and we came back. [Inaudible 1:22:17].

I can only speak for what I know and I'll name names. There seems to be something about unlined trenches or trenches of only one lining. I do know that company across the river here in Vancouver [inaudible 1:22:34] was working on this super strong concrete for the nuclear industry in the mid '80s; I assume they're still around. It was Frank Ward that owned it. Ted [inaudible 1:22:50] vice president and a fellow named Rick Phillips was the superintendent.

Since you're from the State of Washington, you might want to just check with the people across the river and see what happened.

You might want to check also with [inaudible 1:23:05] about concrete about getting stuff lined that's not lined, there's ways of injecting -- there's ways of injecting epoxies, there's ways of injecting, I don't know, concrete, molten lead, whatever it takes.

As for CH2M HILL, I guess everybody has their own opinion of them. A fellow I know used to be CH2M HILL named Neil Handyside. He may have been retired [inaudible 1:23:31]. I know him to be a straight shooter. You might want to talk with him and bring him in.

It sounds like you've got a big mess. It sounds like you need somebody like [inaudible 1:23:41], but unfortunately don't have too many of those around anymore. I don't know who you could pick to oversee this. I've been on about 250 [mud pours 1:23:55] and it has to be everybody on the ball and -- thank you for your time.

Moderator: Thank you. Joe Collolly? Okay. Audrey and/or Jim Metcalf? Malcolm Chaddock? Mr. Pate? No? Joyce Follingstad?

Joyce Follingstad: I'm Joyce Follingstad, psychologist and registered nurse. And actually, there is no better place to be than here tonight. This is absolutely important. Hanford is a catastrophe of the greatest dimension. Right now, one in every two men in the United States will get cancer, one of every three women will get cancer. How much can the citizenry bear? There's a limit to that. I deal almost daily with people that are scared to death that everything they feel in their bodies is cancer. They are surrounded by people with cancer. We cannot bear more.

We need to do a lot better than this permit in cleaning up Hanford. There needs to be regulations that have teeth. I wonder how many of the 1,600 in the Ecology Department are actually on the ground monitoring, regulating, hauling off people that are doing it wrong. We need plans before any permitting, not after. That doesn't even make sense. We need to remove all the waste from the metal sheds, all of those 68,000 drums that are illegally sitting there. We need to have not just trenches that have a piece of plastic and call them lined. We need real waste disposal that is safe. We need to not wait for this vit plant. We've been waiting for decades. And the deal is, we know that waste is safer in a double-lined tank than in a single. And it's time, now, today, to move those wastes. All I have to say -- well, I have a lot more to say, but I would just like to say a line from a song that I will be singing with Aurora [Course 1:27:19] this weekend. Do the ones who make this mess have no babies to hold? Thank you.

Moderator: Sue Churnland? Okay. It didn't sound like I was too bad on the name, either.

Sue Churnland: Great. My name's Sue Churnland and I grew up in Oregon and ever since -- I'm a mom. I'm a business owner. I just love the purity and pristine-ness of Oregon. Yet, even as a young person, I was aware of the situation with Hanford. The literally irreversible situation and the problems that would be left for generations to come. So, when I heard tonight -- or a friend had to tell me that this was happening because there was not that much press about this.

I'm a little surprised after taking it eight years to have this hearing that were are the TV stations? How is public, how is the rest of Portland finding out about a way to have a consensus on this?

There is a tendency -- the federal government seems to have this attitude that federal policy knows best what's best for people. I've seen over and over again in how they've determined the wars and how they spend taxpayer money, how Americans have been given a bad deal. I just -- it just takes standing up to that. And it's got to be a horrible situation for you. I mean, on one hand, I'm sure it's a situation where the federal government's saying, "We've got it under control. There's no problem," and it's real easy just to kind of think that well, maybe they do. But at the same time, what if they don't? And what if it's their own greedy agendas that is causing them to say, "Oh, we think that now Hanford will be the best place to store this waste"? What kind of balancing is happening as far as how can they make these arbitrary decisions without public consensus?

It's just appalling. How do we know that they're using the best technology out there? They've spent all this billions of dollars creating weapons of mass destruction, what kind of money are they doing to restore what they have created? They're putting the burden on the citizens that they said they were trying to protect.

I was even Googling today, Switzerland has come up with some technologies and ways to handle things. So, how are we knowing that the Department of Energy is doing the best job without more consensus, without more input? How do we know that the people testing these sites are doing a proper job without third-party validation? So, to me, it seems like there needs to be a lot more input of many more people and groups being able to give equal chance to check out what's going on out there and have a way to give feedback. There's so many red flags that I just see that this can't possibly be decided this quickly. To give Christine Gregoire a chance to look at this and if -- they don't convene again until January, at least hold off on this. So, again, I really have deep compassion for the work that you do and the difficulty of the decision. So, I am just praying that the best thing happens for all concerned and I wish you well.

Moderator: Thank you. Denmark Wiches, W-i-c-h-e-s? Followed by Cherie Lambert Holenstein, followed by Hugh McGavick, followed by Roy Kennedy.

Denmark Wiches: Well, I second everything that was said up to this point and probably everything that's going to be said after me. Just the size of this group indicates that more hearings are required. Just the size -- the fact that that people have been sitting here for hours and still have something to say indicates that more hearings are necessary.

Does anybody believe that the federal government knows what it's doing? In foreign policy, in banking, in whatever. Why suddenly is the Department of Energy an expert? I say that you should proceed as if the federal government and the DOE does not know what it's doing. That's the premise you should be following. Here in the northwest, we have cultivated a way of life that's very special and we are under assault by many things. How about genetically modified food? How about drones in police hands? How about wars that we didn't ask for? How about coal trains to coal terminals? I'm working with Beyond Coal in Vancouver. How many assaults

to the people have to take? How many fronts do we have to work on and fight on? How many fronts can we possibly tolerate?

Well, here's yet another front. And I'm asking you to fight. In Washington we have on the ballot this coming November marijuana legalization because that's another front for us to fight. Some people came up to me and said, well, the federal government won't approve if Washington voters agree with legalization. My response was so what? I'm ready for a fight. Draw some lines in the sand, damn it, throw the gauntlet on the ground, clench your fists, grit your teeth, yell some. Isn't it clear that DOE has made this mess?

If a patient is sick in a room with a compromised immune system with a bacterial infection, does it make sense to bring in more bacteria to that person? Hanford is a sick person with a compromised immune system. It makes no sense to bring in more of what made it sick in the first place. Not a single isotope more should cross Oregon's or Washington's border. Not one more isotope.

Moderator: Cherie?

Cherie Lambert Holenstein: It's Cherie, Cherie Lambert Holenstein.

Moderator: Okay.

Cherie Lambert Holenstein: That's okay. Yeah. For two and a half decades, I've attended your hearings. My comments have varied, but my message has always been the same. One, clean up the poison that is Hanford as much as possible. It can never be totally cleaned up. And two, do not, do not accept any more waste. Your job should be to stand up to the state and federal governments because you more than most of us know the terrible nightmare that is Hanford. I will submit written testimony with the accurate information that the Heart of America Northwest provides me. And thank you, Gerry and the staff.

Just a brief aside. I find this picture and caption very interesting. I live in Portland and I've buried many cats and dogs in my yard, and even friends' and my kids' girlfriend/boyfriends' cats and dogs. I have a big yard. And the city code requires that the hole to put the animal in has to be as deep as the animal measures from tip of the nose to the start of the tail. When we buried our 95-pound malamute, that was over three feet deep and I don't live near any river. And yet, this picture shows me 40 miles of unlined trenches filled 50 feet deep with radioactive and toxic waste and this is leaking into the river. This is leaking into our rivers. So, please, please, work for Mother Earth. Please. Not the federal government. Not the state government. Thank you.

Moderator: Thank you. Hi.

Hugh McGavick: Hello. I'm Hugh McGavick. I come here, you are not the enemy. You are people who are fulfilling your public service obligations and I appreciate you coming to Oregon just across that big river out there that's so central to the whole thing.

I understand that public hearings are legislatively mandated. I understand that due process requires that you give citizens an opportunity to be heard. You don't have to listen to them. You don't have to pay attention to them. You don't have to agree with them, but you need to hear them and that's what you're doing now. Thank you for hearing me.

I urge you to do more than check off the due process box of letting me think that I'm making a difference because I'm speaking up, because there is so much at stake here. You are not my enemy. Are you commissioned and you have accepted and taken an oath of some sort of office, I suspect, to uphold the laws and to be the gatekeeper which your mission statement requires, to protect, preserve, and ensure the people and the resources. This is your opportunity, it's your moral imperative when you took this job.

The frustration in this room I hear is this is a fait accompli and we can't do anything except bitch and moan a little bit, and it's going to happen anyway. And if that's what it is, that's what it is. I don't give you that presumption. I hold a higher place for you. I affirm you come from a place of integrity. I affirm you come from a place that you will exercise your power to stop DOE if they are acting contrary to the best interests of your constituents: the people, the land, the river, the air, the world, the Earth. If you can do that, then you will have fulfilled your mission. And if you can't, then resign your position and make a statement that this is a charade. I affirm it's not a charade. I affirm you are all well-intended and I thank you for your best efforts.

Moderator: Okay. Roy Kennedy? Theodor Tsongas? Theodora.

Theodora Tsongas: Hi. My name's Theodora Tsongas. I'm an environmental health scientist and I work with the Oregon Physicians for Social Responsibility in their environmental health group, and I'm also on the board of the Radiochemical Health Effects Archives that follows the story of people's lives that are affected by being downwinders.

I just want to really reaffirm what other people have said tonight. Really, really, really, you have the possibility to do something very courageous, and you need to accept the responsibility and take this opportunity to be courageous and do something that's really important, because history will remember you for being strong. If you say that no waste can be brought in to Hanford, if you put that into the permit, then you will stop the trucks from coming through any place to get here. No additional waste of any kind. As the gentleman said, no more radionuclides. Not any. Take the responsibility. Do it. You can do it, and we are behind you. We will support you. Thank you.

Moderator: Thank you. Laura Feldman? Louisa Hamacheck?

Louisa Hamacheck: Hi, thank you for being here and giving us a chance to give you some more work.

Moderator: It's okay.

Louisa Hamacheck: I'm Louisa Hamacheck from Eugene, and I'm concerned about the watershed of the Columbia River Basin. I've been travelling around Hanford, to the

communities that surround Hanford in circles, close to Hanford within 10 miles, farther and farther out. I noticed all the poor Mexicans are living as close to Hanford as anybody I mean more than anyone else. That it's almost all Hispanic communities close. Anyways.

The concern that I have is, for one, the Department of Energy is not to be trusted, and I would like to see that you become stronger, and as many have said. At first I was thinking to straight up to have your strength in the Tri-Party Agreement to see that the EPA, given the \$2 billion a year that's given to the Department of Energy to take care of this waste at Hanford, that if half of our tax dollar goes every year to military spending, the Department of Energy should get on with solar and renewable energy and not be part of the military. I don't know if they get their money that way, but I don't want any of the watershed to be caught in the desire to be imperialists and take over other countries and bomb them. I don't see why our country is making more nuclear bombs, but it is my understanding that the nuclear power industry that the Department of Energy's promoting is in cahoots with the nuclear bomb making industry and that they are the same thing. I don't know because it's all --

Moderator: That's okay.

Louisa Hamacheck: This is a picture of a Cayuse Indian chief. In 1855 there was a treaty made with your governor Stevens of Washington with the Indian tribes that were around here. Land that was given to them in an agreement to have the pioneers come in and share it and have some of it was taken as soon as more pioneers said that they wanted some of the good stuff, it was reduced. And every one of the reservations were reduced that surround Hanford. That would be Yakima, Colville, Nez Perce, Spokane, Umatilla, and Warm Springs, if you want to think that it could jump over the Columbia River Gorge.

They have been abused by a breaking of treaty. You all are holding onto this Tri-Party Agreement, that's a treaty made with the people of this area and that are downwind and downriver of Hanford. It's also an international offense of murder to allow any waste to go down the Columbia River and out the ocean. It goes to the fish. The fish go up to become those Alaska wild salmon. I talked to the Washington Department of biology Fish and Wildlife, rather, and was described that our McKenzie River fish from Eugene hang out with the Hanford downriver water and ethos for a year at the mouth of the Columbia River before they go out in strength. So, they have been absorbing and eating all the pollution.

I understand that already, right now, there is plutonium in the goo that is toxic tar that is going out into the Columbia River into the fish reds. And that means that it's going down the river. That means it's coming back up, and I'm opening a can of worms here, because it is coming up into Eugene. The entire Columbia River Basin is at stake if any more of this pollution keeps going down the river, it's going to be carried back up by the salmon to all of our what would have been innocently or safely away from that. And what goes out to the ocean?

I was going to go collecting seaweed this week for part of my income is wildcrafting, and there was nobody who wanted to collect seaweed with me for fear that at this point in March, the Fukushima waste has made its way across the ocean and has hit the Oregon shores, that means that Washington and Oregon shores probably, which means our fish of our income and our food,

and something that I like to bring and have my children eat for the iodine that would protect them from the radioactive Iodine-131 that would be released from a nuclear accident in our area, or what has come across the ocean from Fukushima, that they wouldn't absorb it. But now I can't even get it. But, of course, I don't want to buy it from Japan, and how much is this being researched of the fish and the biological lively things that are in our terrain that we would like to be able to eat? How bad is it going to kill us from that?

So, I would like to see that the treaty of 1855 is honored for the tribes that surround Hanford, and join with them the Cattlemen's Associations of the cowboys and the Indians here, because we are all at stake, and an international concern about releasing radiation from Hanford.

Helen Caldicott also said plutonium is an alpha emitter, and alpha breaks down glass, and that the vitrification plant, and that's Dr. Helen Caldicott of the PSRN, Physicians for Social Responsibility, Australian doctor of radiation-related sicknesses of cancer and birth defects. So, I don't know how we could've gotten this far with the vit plant with that being the case, but I wanted to bring that bit of information that she brought.

Moderator: Holly Huffman? Oh boy, Thastin, or Thastin, maybe Thurston Bericklen?

Thastin Bericklen: Thastin Bericklen.

Moderator: Fasten, okay. Thank you.

Thastin Bericklen: [Inaudible 1:49:27]. Thank you three for showing up, thank you for testimonies everyone, I appreciate. I come from the Marshall Islands; I am here to share three testimonies from 1984 of survivors warning on nuclear contamination from the Marshall Islands. This is Leon [inaudible 1:49:48], I'm sorry I'm not pronouncing her name right, wants the nuclear arms race to cease and the world to learn from their legacy of terrible health problems which have afflicted her and her generations of her people since the nuclear bomb experiments inflicted on the Marshall Islands by the USA from 1946 to 1958.

Now we have this problem we call jellyfish babies. These babies are born like jellyfish, they have no eyes, they have no heads, they have no arms, no legs, and they do not have the shape of human beings at all. That is a testimony from Darlene [inaudible 1:50:20] the Marshall Islands 1984.

This is another testimony, we are only beginning to see the affects of the atmosphere test, only the tip of the iceberg. When will we begin to suffer from the underground test, 10 years, 20? The government says everything is safe for thousands of years. Even if that were true, which it isn't, what legacy do we have for our future generations?

This is another testimony, Marie Thesis Danielleson from French Polynesia in 1987, I have one more. I have come to share my experience with you because I want you to see your future, what it is going to be through me. I am living in contaminated land with contaminated water, but what is your future going to be if this city will fill with nuclear waste and everything? Where are your children going to live and work? How can you live in this future?

This is another testimony from Leon [inaudible 1:51:13] from [inaudible] in 1984.

I am here, my name is Thastin Bericklen, I am here to share my testimony because I've been down to Hanford, I've been out in those dumpsites. It's contaminated death out there, I don't know why you would involve yourself in trying to prevent that from contaminating other spaces in this globe that we are on right now. It doesn't make sense. This is obviously a problem. Obviously a problem since the '40s, and it's taken this long to come up with these litigation methods, to come up with this idea so we can contaminate more people, more generations down the road? Makes no sense. This is the difference, you three are the different, please. Please.

Thank you.

Moderator: Thank you. Jen Struckholds? Judy Mikalson?

Julie Mikalson: Hi. Hi, my name is Julie Mikalson, M-i-k-a-l-s-o-n, resident of Portland and a homeowner. I came into awareness of the deep crisis with the Hanford Nuclear Reservation in 1983, and I immediately as a member of the Fellowship of Reconciliation. And I was fortunate to be able to meet with people who for years had been acquiring evidence and testimony from whistleblowers, former employees and current employees at Hanford about the unsafe and unconscionable lack of accountability, procedures there. And I was able to deliver to Senator Ron Wyden who also didn't know before all this body of evidence was amassed by the good volunteers here in Cascadian region.

Senator Wyden at first was resistant to hear anything because I might sound like some kind of a hippy. But I would like to share some credentials just so you help understand the diversity of the Hell No that you're hearing from people in Oregon and Washington. I was a Clinton/Gore delegate to the Democratic National Convention. The police's job was to make sure I get in there to carry Oregon's vote for the president. I was on Governor Ted Kulongoski's task force to come up with our new laws, including renewable portfolio standards, which was our prime outcome, to the implementation activities for the renewal energy action plan.

And I would like it on record that the mission of the Oregon Department of Energy is not to be a handmaiden to certain federal officials who think it's about safety reports and planning the routes for these trucks to come through our cities, and along our national wildlife areas. The mission of the Oregon Department of Energy is to safeguard forever the people of Oregon from the dangers of nuclear energy and its sludge. It's in its written mission, and they serve at the pleasure of the people of Oregon.

I speak for the otters and the truck drivers whose risks are probably pretty well understood here. A nine year study that scientists are doing on the Columbia River otters years ago was concluded early because the high, very, very high incidents of deformation for reproductive systems in the otters of the Columbia River this is long ago and it's one of the direct results of the leeching into the Columbia River that was happening in the 1980s before I even spoke with Senator Ron Wyden.

They haven't stopped. I agree with everyone here. Hanford must be cleaned up and no more sludge coming to that area. We must have extreme oversight in this process and not just trust the contractors, especially the big bosses who will try to crush the whistleblowers. I want to blow the whistle now for those truck drivers who you might consign to their death if you cooperate with this crazy plan. I'm Julie Mikalson and I have a lot more to say, but I think everyone else has done a great job.

Moderator: Ms. Mikalson was the last person who indicated she would like to provide testimony tonight. We're probably going to be kicked out pretty quickly, but I'll ask, is there anyone else who wants something to say to go on the record, or if not, I can close out? Have you

Unidentified Speaker: I have already.

Moderator: Oh, you already have. I'm going to go ahead and close it out. If somebody new wanted to testify, I would surely bring them up.

Unidentified Speaker: I will.

Moderator: Okay.

Unidentified Speaker: Sorry.

Moderator: That's okay. State your name for the record please.

F: It's Crystal Elinski, E-l-i-n-s-k-i. I will submit with three of my friends and three of their friends something for the written record, but I just want to reflect the mood that I feel tonight and in this room. Mostly I feel like life is very surreal, but lately, I feel like everything's pretty much at the end. There's a reason why it's okay from them to send LNG in to have drones, and the coal been here for 20 years and it wasn't so long ago that I was an undergrad and we were trying to protect the last of the old growth forest. And every time I go anywhere around the state or around the country, back to Arizona my friends, people suffering from uranium mining and whatnot.

I lived in Hungary for some time, people suffering from Chernobyl. I moved there. And I just feel like the reason why we're digging up we're doing the Keystone XL Pipeline and the tar sands is because everything is destroyed. And all we can do now is speak the truth. I think the best thing you could do as the Department of Ecology, Christine Gregoire and the history that we have as activists and protecting Cascadia is to get the information out there to people that don't know, because people do not know. We are such a small minority of people. The average person does not know how polluted our world is. I think we know about Global Warming and how people deny it, in this country anyway, and I think that's just part of this surreal cap that we've enclosed ourselves in. And at this point, I'd say Department of Ecology could be a representative of the people by getting the information out as much as you can, disseminate that. If you're monitoring it, could you please get it out there in a format that's, like one guy suggested, on billboards. I would really like that. Thank you.

Moderator: Thank you. Have you already provided comment?

Unidentified Speaker: Could I just ask a really brief question?

Moderator: Can we finish off the testimony, close out the hearing first?

Unidentified Speaker: It's pertinent.

Moderator: Okay. Well, hold on just a second. Does anybody else want to provide testimony? No? Okay. Go ahead and ask your question.

Unidentified Speaker: I just wondered if you could tell us or see that it's published on your website how much our testimony weighs your decision, and tell us how the decision is planning on being made about this permit?

Moderator: That's in the public record now, okay? It's in the record. I'm going to go ahead and close out the hearing then.

Unidentified Speaker: One more comment.

Moderator: Have you already provided testimony or?

Unidentified Speaker: I have [inaudible 1:59:59], but I'd like to make one more comment.

Moderator: Okay. Can you come up here so that I can get a and this is it. I'm going to close it because stuff is starting to shut down on us.

Unidentified Speaker: I would just like to say, I'm Joyce Follingstad, I would just like to say that my understanding is that there are places that are being taken off the list in the permit as sites that, because they've already had some remediation, are considered not necessary to be watched any more. And yet, there is contamination in the soil. I would like them all to remain in the permit because once you take it out of the permit, it's out of sight, out of mind, and it's still contaminated and still going to be hurting the generations ahead. Thank you.

Moderator: If you would like to email or send written comments, they must be received by September 30th, 2012. Please mail your comments, if they are sent email to Hanford@ecy.wa.gov. If you would like to submit comments via the fax, the fax number is (509) 372-[3971]. If you would like to send them via

Unidentified Speaker: 7971?

Moderator: 3971, (509) 372-[3971].

Unidentified Speaker: 7971.

Moderator: Oh, 7971. Oh, I apologize. They're right. I'm wrong. I wrote it down wrong. I apologize, this was my error. Thank you.

If you would like to send them via the post office, you can send them to Andrea Prignano, Department of Ecology, 3100 Port of Benton Boulevard, Richland, Washington, 99354.

All the testimony received at any of the public hearings along with any written comments received by the end of the comment period, which is September 30th, will be part of the official record for this proposal. Whether a comment is presented orally or in writing, they will receive equal weight in the decision making process. After the comment period ends, Ecology staff will review all the comments submitted and prepare a document called the Response to Comments Summary. People who gave testimony or submit comments will be notified when the responsiveness summary is available. Ecology is hoping to have this document completed sometime in December 2012. At this time, Ecology is expecting to possibly issue the permit sometime in January 2013.

On behalf of the Department of Ecology and the State of Washington we want to thank you so much for coming tonight. I appreciate your cooperation, it's been a very long evening, and I appreciate your courtesy and your enthusiasm.

Let the record show this hearing was adjourned at 10:25 pm. Thank you.

[END OF AUDIO 2:03:05]

MOD: Let the record show that it is 8:15 PM on Thursday, September 13th, 2012, and this hearing is being held in the Ambridge Center located at 1333 Northeast Martin Luther King Jr. Blvd, Portland, Oregon, 97232. This hearing is about the proposed draft reissuance of the Hanford Facility Dangerous Waste Permit Site-Wide Permit, Revision 9. Information about the draft permit workshops and public hearings was posted on Ecology's Nuclear Waste Program webpage. Notice was also posted in *The Willamette Weekly* newspaper and sent to about 950 list serve recipients.

Remember, limit comments to about five minutes or less and no extra noise. Okay? When your time is up, then we'll call the next person to comment. My little timer will help me to keep track of everything. So, when I call your name, come on up to the front and we'll begin with Laura Feldman. Thank you.

Laura Feldman: The first point I want to make is that there should be a Plan B. If double-shell tanks start to leak, as they have recently, the permit needs a contingency plan. I think some of the alternatives might be, as Heart of America Northwest has suggested, building new and larger shells at the vitrification plant site rather than extracting the waste from the drums, putting them in these tanks, then emptying these tanks into other tanks that will then be vitrified. It seems a little inefficient, and dangerous, actually, in the long run. And I want to suggest to people, I've taken great heart recently in discovering the Nuclear Guardianship Project. Part of what they suggest is that this waste should not be buried at all, so that we tend to forget about it, forget what's in it, which is part of the problem we're dealing with now.

They suggest that the wastes should be secured above ground and that we pass it on generationally in 50-year increments to the next generation to the next generation until we begin to figure out what to do with it rather than burying it. It's just, I think, not very useful in the end.

And then finally, I want to say, of course no more offsite waste to Hanford ever. In perpetuity, no more waste. Simply no new waste at Hanford. Let the land heal. We're done with that site and somehow, maybe in thousands of years to come, it will be place that becomes alive again.

MOD: Thank you very much. Yes, give us your name.

Laura Feldman: Sorry. Laura Feldman, 6920 North Charleston, Portland 97203.

MOD: Organization?

Laura Feldman: No. Just Hanford activist.

MOD: Thank you. Thank you.

Our next commenter will be Ross Tewksbury.

Ross Tewksbury: My name is Ross Tewksbury and my address is post office box 25594 Portland, Oregon, 97298. I just have a few various comments. I think the permit needs to be as

stringent as possible and err on the side of being more strict because if it errors on the other side of being too lenient, then it really opens it up to many huge problems.

I'm against more wastes coming in to Hanford because we already can't deal with the waste that's already been there and as the Columbia River's being contaminated already, and I think the permit must cover the whole of the groundwater situation and not just be kind of -- and cover the whole ecology of the whole area there and not just one area at a time or one landfill or one tank at a time because it all has a cumulative effect. And if there's one place where that's evident, it's definitely at Hanford, you know? Because the waste there is already on overload there and there's certainly not any room for more.

I think that the 40 miles of trenches need to be monitored and need to be investigated to find out exactly what is there. As far as transporting this radioactive waste around goes, on the way over here, just tonight, I was sitting in traffic and how -- these people that keep promoting this transporting waste, how would they feel if their family was sitting next to one of those radioactive trucks for half an hour or an hour sitting in traffic? They don't think of things like that. They always think it's somebody else's problem or something. I mean, I've seen those trucks before when I've been driving around different states and sometimes you see them parked at restaurants. Well, what if you were parked next to the one at the restaurant?

So, there's a lot of these things that just people don't seem to deal with and with a lot of these proposals coming up from different things at the same time, I was just thinking that in this transpiration area, the perfect storm would be an accident with a coal train coming from Montana or Wyoming with a truck carrying radioactive waste to Hanford, and that would just combine all the stuff into one horrible thing. And that's what kind of thing I'm here to try to avoid.

MOD: Thank you.

Ellen [?Lethem]?

Ellen [?Lethem]: I'd rather put mine in writing.

MOD: Okay. Put yours into writing. [?Devisia Burch]?

[?Devisia Burch]: I'm so used to waiting hours. Thank you.

Swallowing a candy here. Thank you for the candy. I'm [?Devisia Burdish] with the Rosemere Neighborhood Association.

One of the fellows from Ecology -- I'm bad with names, sorry -- stated that the sole mission of the vitrification plant was to treat Hanford waste only. I have asked about this in public meetings over the past five years, I think, and nobody's ever said that before. So, I'm glad to hear that. And I would really like that succinct statement to be added to the permit. That this is only for Hanford waste from the tanks, period. Nothing else goes in there. It's never been stated that clearly before. So, that's missing.

Also, over the past several years, I've attended various meetings and over and over and over again, it comes up from various parties that they feel that the permit is vague and that this year 2022 opens it up for all this waste to come flooding into Hanford and we've heard over and over again Ecology say that that's not true. So, there's obviously a misperception from one side or the other, and I think that that would make everybody really happy so that we could quit discussing this once and for all is just to say it in the permit that, "It's banned. We don't want it here," rather than relying on outside documents, put it all in one and say very clearly and succinctly that we don't want any outside waste at Hanford.

We've heard tonight testimony from Ecology that says there are funding issues, that it's going to take 30 years to treat all of the tank waste alone. We've got stuff in unlined trenches that's there far beyond what's actually legal and permitted and it's not even being addressed because there are no funds for it. It's a safety hazard. So, the whole point of this conversation that keeps repeating because there is an apparent public loophole here is that just cut it off and say no more. I agree with all of the comments that were posted at the beginning of the meeting, the themes of the comments from other people, and one of them was about this.

I think it's a really poor choice to wait until 2022 to even bring up the issue of what to do about the tanks, single or double. We can't afford to wait that long. This stuff has been leaking for decades already. We need to address it now. I personally don't believe, and I'm a skeptic on this issue and apparently so are other technicians who've looked at some of the problems coming up with the vit plant, there was just a big report that came out that says there's a lot of concern over potential hazards there if and when it ever goes active. And so, I think it's kind of a fool's errand to think that we should wait on the single or double-shell tank problem until this thing gets up and running. The stuff is in the groundwater. It's already moving and I think that we can't afford to just put all of our eggs in one basket and say the vit plant is going to be the saving grace, because I don't think it's going to work. In fact, it may blow up. So, that being the case, we need to address the problem with the tanks and their leaking, and figure out a way to stop that, if it requires building additional tanks now -- we can't wait 2022 to even make a decision on that. It needs to happen now. And I think that the permit needs to state that, that we can't wait until then.

A thought came up when we were discussing the vit plant just tonight, these are glass logs, and I know we've discussed in open meetings about Hanford before, that it's a high earthquake risk area, higher than even the nuclear plants that are in California on an earthquake zone, for whatever reasons, geo-hazard or whatever. And we've got glass logs and they crack. So, what kind of hazard risk assessment has been done about earthquake shifting with stored glass logs? I have never thought of that until tonight. They probably would be in some sort of container, but when you think about inside the vit plant itself, there's going to be this deep, dark, cold box that no one will ever be able to open, like Pandora's Box for millennia and it will have horrible things in it, well, what happens if that thing cracks? So, there are a lot of -- this is an impossible situation and it's horrible to try to think about all of the possible things that could go wrong, but those are two that stand out in my mind: earthquake risk and long-term storage with this thing that may never work.

So, if we've got already a long-term storage problem and we've got it in trenches and we've got burial mounds and things that are unlined and all of that, we need to really focus on what's already in front of us rather than thinking we've got some safety mechanism at 40 years down the future. I think the governor even came out and said that they were -- she was unhappy -- the governor and the attorney general recently wrote a letter saying that DOE was renegeing on its deadlines and this is another reason why we can't continue to wait for the vit plant.

I think that the permit needs to show some good faith and commitment that we need to transfer and drain what's there now and have a Plan B, as other people have mentioned this evening.

I think the guy from Riverkeeper mentioned that the purpose of this permit is to make sure that DOE doesn't drop the ball, not Ecology, but the Department of Energy. And I think it's too late for that. The ball has been dropped so many times that there's a lack of trust there. So, we can't wait until the next permit cycle to address the tank closure plans and that needs to be incorporated in this permit.

I agree with the lady who said that we need to up the penalties, \$10,000 a day is not enough to elicit change.

I think those are all the notes that I had for this time around. Thank you.

MOD: Thank you.

[?Madia Pampheilo 14:14]. Did I pronounce that correctly? All right. Give us your name and address, and affiliation.

[?Madia Pampheilo]: Madia Pampheilo, P.O. Box 6427, Vancouver, WA, 98668. This morning, I woke up and realized that I have come to Hanford cleanup meetings for 23 years. Now, give me a break. When are we going to get it cleaned up? Here I am again asking that the tanks be reliable in holding radioactive waste. Pouring this material into 40 miles of unlined ditches and covering it over is just a tragedy for all of us, and especially for our coming generations. To even think of 30,000 trucks moving along our highways with these extremely dangerous toxins is actually criminal. With the horrific climate changes taking place, mother earth is telling us and the world we are not cleaning up our planet as quickly as we need to be. And what will it take for the government and DOE to understand the urgency of reissuing a dangerous waste permit and adding no more waste? We really need to think about the geological things that could happen there, and it's so much more dangerous really than we would like to think that it is. So, we really need to take extra care and clean it up as quickly as possible.

MOD: Thank you very much. Gerry Pollet? And after Gerry, Dorothy Lamb.

Gerry Pollet: [Inaudible 16:32] audience this demonstration. If you would hold this towel and this [inaudible]. I think you'll to want to stand and hold this towel under it.

MOD: Gerry, if you could introduce yourself.

Gerry Pollet: You can hold that down, and hold that, and you'll just have to capture this. So, I'm Gerry Pollet representing Heart of America Northwest. And this is my assistant. We're not going to make the [?model 17:11] disappear.

Tonight we've had a lot of discussion about why not have a general condition barring offsite waste in this permit? Instead of we've heard let's rely on a promise by the Energy Department not to start shipping waste until the year 2022. The Energy Department has a record, in fact is on the list of most egregious environmental law violators in the country issued by EPA. They have a record of breaking their commitments. So, relying on a promise from the Energy Department is pretty foolhardy.

So, the Department of Ecology, though, has said and we applaud the fact that the Department of Ecology has put into the permit for an individual landfill represented by this bottle, that no offsite waste can come in if this landfill, this bottle, has so much waste in it from onsite that it will leak into the groundwater representing by the bigger bottle in such a manner that the risk budget is exceeded and the groundwater here is contaminated where it may be used by the public over the next 10,000 years.

The Energy Department has issued a draft environmental impact statement, called the TCWMEIS, which says over the next 10,000 years, the existing wastes from multiple landfills at Hanford, 40 miles of unlined trenches, high level nuclear waste tank leaks, will contaminate the groundwater, the big bottle, over and over and over again above standards throughout 10,000 years. So, if we have a condition that says this is all the waste that can go into the groundwater from this landfill and adding offsite waste to it will exceed the standard -- trying not to spill it. Oh, it just meets the risk budget from one landfill. But what happens when we have 40 miles of unlined trenches, high level nuclear waste tank leaks, and another landfill that the Energy Department says it will open up in the year 2022, which is not in this permit yet, but it will apply for because they will say, "We have an agreement with the State of Washington that allows us to send waste to Hanford in the year 2022"? And the next Energy Secretary and the next administration, desperate for a place to send waste from more nuclear weapons production will be saying, "Hanford's available, the permit allows it, it never barred it as a general condition. It only barred it for this landfill, and therefore, we can add a new landfill and pour more waste into -- oh, we're exceeding our risk budget." Let's carefully put that down.

You get the picture. We need a general condition that says because of the existing wastes that have already been released to the soil and will be contaminating the groundwater, because the Energy Department has no firm plans to be able to prevent that contamination from repeatedly contaminating groundwater above standards over and over again for the next 10,000 years, therefore we bar offsite waste from all existing landfills, and all new landfill applications, and it's that simple, and then we don't have a trust problem with the Energy Department. We don't have people asking the Department of Ecology, "Why don't you -- if you are barring offsite waste, why isn't in the permit?" It's not okay to just have in the permit for the one landfill, one at a time without considering the cumulative impact of all the landfills, all the releases, and that's what we're asking is for general permit condition to do what the people of the Northwest ask for. Thank you very much, and thank you for holding the additional public hearing in Portland and next week in Seattle.

MOD: Thank you Gerry. Would you give us your address?

Gerry Pollet: You've got my address for Heart of America Northwest. Thank you for bearing with me in this little demonstration. Thank you.

MOD: Next, Dorothy. After Dorothy will be Connie Weiss, and then Lloyd Marbet. And name and address.

Dorothy Lamb: You have it.

MOD: It needs to be on here.

Dorothy Lamb: I don't think so. You have it on there.

MOD: Okay.

Dorothy Lamb: I'm a downwinder. That means I was in Milton-Freewater, Oregon when they first started Hanford back in the early '40s. I was about four years old or something, and it's called the Thyroid Belt because the wind blew in from the ocean along the Columbia Gorge and further on to Milton-Freewater, etc. Even the cows there were having symptoms. And now, I'm worried about Hanford, it leaking into the river and bringing more, and more, and more. Washington is the one that -- Hanford is in Washington, but Portland is the one that really suffers. Perhaps that's why; perhaps Washington doesn't want to make sacrifices when it's not within Washington State. I don't quite understand that, but there's a lot I don't understand.

Last time we had politicians come and testify, but still, they're wanting to do this. I agree that we can't wait. Nuclear waste is dangerous. Please don't put it in unlined trenches. Please don't have any offsite waste there, and don't bring in the leaking tanks. Don't create more nuclear waste, there's lots of other ways to get energy. I keep asking myself why is this happening? Maybe it's politics, maybe it's campaign financing. I don't understand it, I really don't. There's so many better alternatives. Please don't reissue the permit.

MOD: Thank you. Connie Weiss.

Connie Weiss: Thank you. I'm a citizen; I'm representing myself and citizens.

MOD: And name and address?

Connie Weiss: I'm Connie Weiss. 11495 Southwest Clifford Street in Beaverton, Oregon. I agree with the comments that have been made so far, and I fell like the gentleman in the Hawaiinish shirt put things very well in terms of some of the dangers. I think when I just read about this and think about our Columbia River and the paradise that we have here, and how the Northwest has been such a blessed place to live basically and how with this leaking into the Columbia, into the groundwater and into the river, we can destroy what mother earth has given

us. And also the idea of 2022 this permit expiring, it's like why can't we just make something final?

And the other thing is that the idea of transporting waste along the highways which are already overcrowded. My daughter was just saying, "Why is 217 like a parking lot all the time?" Well, we really don't have enough infrastructure and roads and bridges to take care of just what we're doing now, and now we have the threat of having dangerous things on those already inadequate infrastructure things. So, I just wanted to say that just as a person that lives here I feel like we are extremely lucky to have had what we've had. And I would like to not see us destroy it. I would like the permit to be very strong about doing things now, about the leaking situation, and about not allowing outside waste to come in.

MOD: Thank you. And Lloyd, Lloyd Marbet.

Lloyd Marbet: This is somebody else wants to speak.

MOD: All righty.

Lloyd Marbet: Thank you.

MOD: Name and address.

Lloyd Marbet: My name is Lloyd Marbet, I'm the Executive Director of the Oregon Conservancy Foundation. And my address is 191400 SE Bakers Ferry Road, Boring, Oregon 97009. So, I hope that helps the record, and I filled out one of those cards with our address and information on it. I have testified also like other participants here in a number of these proceedings. And I think it's been pretty clear, and I think we've been pretty clear that -- meaning our organization -- that we do not want to see any more waste at Hanford, period.

I'm really concerned about this, this representation being made by the Department of Ecology that somehow or another this legal agreement is really setting the barrier for any more waste to come in. I don't think that's the case at all, and I think it should be directly in the permit, as others have testified too this evening. The offsite ban should be contingent on more than just the start up of the vit facility, the vitrification facility also. That's another thing that just bothers me. I mean, suppose the vitrification facility fails to successfully operate after it starts up, all of a sudden you apparently have the door open for more waste to come in, and even though it's not going to the vitrification facility, that waste presents problems that can arise in the future, which have to be addressed, which are going to, I would believe, act in competition to the cleanup of what is the wastes that are already there.

I don't think you should set any stage for that kind of problem to occur. And at a minimum, I mean at a minimum, the ban should be in the permit, it should be contingent upon the successful operation of the vitrification facility, and the successful cleanup of all of Hanford's waste. That's the kind of language that I would put in to ban, at a minimum, that would send a clear message that nothing is coming in, and I don't think you'll hear from me again at any hearing

about more offsite waste coming in if you take that kind of approach. And I think that'll also take it away from other people as well.

I also like Gerry's idea of show and tell. I think I'm going to have to see if I can come up with some of these things too, because I think we've been speaking English. I had hoped that somehow or another it would be clearly understood what we're confronting here. And it seems to me the concept that he's bringing up of a general condition is an approach that should be taken here. There should be a cumulative look at all the waste disposal operations that are taking place at Hanford, not some way that you can slip in problems that can come from individual waste applications that are somehow examined only on an isolated basis. It's the cumulative impact that we want to look at here, not the clever maneuvers that are made in order to kind of keep business as usual. And I'm been a long-time advocate for doing away with business as usual, especially when it comes to Hanford.

I'd like to go to another issue too, and I'm not being original on this. This is the Plan B issue that Gerry's talked about as well as it relates to the double-wall tanks and the single-wall tanks failing. I really do believe that it shouldn't be a hard thing to comprehend that it really is a good idea to have contingency planning if in fact we've already got failure of the double-wall tanks. When you look at this issue you need contingency planning as part of the permit if the double-wall tanks are failing, which they apparently seem to be, some indication that they are and the failure of the single-wall tanks could overwhelm the double-wall tanks. I mean you could have a combination, one of those perfect storms and we seem to be getting more and more into perfect storms when it comes to problems in this country. I think we want to avoid perfect storms. And so, I'd like to see contingency planning made a part of the permit that addresses what happens if the double-wall tanks are failing, what happens if the single-wall tanks fail and they overwhelm the double-wall tanks, and I like the idea -- this is again, I'm not trying to take away anybody's thunder, this is Gerry's idea that I heard this evening about more tanks that sit in front of the vitrification facility that can take waste from the single-wall tanks directly before it goes into the vitrification facility. That's a wonderful idea, except if the vitrification facility itself doesn't work, then you've got the huge problem of what do you do? I'd like to see all this clearly addressed, and I would hope that you would do that.

I appreciate the opportunity to be here this evening. I'm diabetic, I didn't take any of the candy, but it's nice that you at least provided something. Take care, y'all.

MOD: Thank you.

And Sherry Lambert? Do you want me to bring this over there, would that be easier? Okay.

Sherry Lambert: Hi, Sherry Lambert Holstein, 6141 SE Steele Street Portland, Oregon. Native Portlander. As always, my comments are: do not allow any more waste, what a euphemism for such a disaster that Hanford is. No more. That's a period not a comma, not a semi-colon, no more waste.

And number two, clean up what's there. It appears that the permit plan must need a lot of revision. It also appears that there are no contingency plan, no schedule B, no backup plan. I

would bet that the providers of the permit plan when driving an automobile, I bet they have a backup plan, a schedule B, maybe just simply a spare tire or AAA. And I would think that Hanford deserves at least that much consideration for a plan B.

I'm tired. Twenty-two years of this is a long time. I'm missing another granddaughter's game tonight. I don't know if they really understand their grandma, she's kind of driven. I've been at city council a lot this week. In Portland, they just past another disaster, going to add fluoride to our water. I have a referendum here if anybody lives in Portland and wants to sign it so we can put it on the ballot, at least put it to a vote.

I'm saddened, a couple of friends, Max and Maxine Wilkins, that have been to a lot of these hearings, I just learned today that their sending him to hospice, so you know what that means. He's not responding, just a couple words about him, please. He was our County Chair, Mount Noma, Clackamas, tri-county chair and Washington County for our wonderful Measure 23 in 2002, universal, everybody in Oregon got healthcare, single payer, no insurance company got a penny of profit, and it even provided dental care.

When I was testifying at the city council last week, there were dozens of professional doctors and lawyers and dentists, and they were showing great concern about the poor children that had all these carries. And one man testified about how a half-hour before I did and he thanked the City Council for that wonderful opportunity to give fluoride. And it was the first time he said the City Council had ever had that wonderful opportunity. So like I got up there, and Lloyd you'll appreciate this. Wake up Lloyd. I had a can of pop, I borrowed it from a neighbor, 12 ounce can, and I put 10 teaspoons into a clear glass jar. So, I set that up there and that's 10 spoons of sugar in every 12-ounce can of pop and that's America's leading beverage, and we wonder why our children have carries and they don't need fluoride in the water.

Anyway, I ended by telling the city council that we had a wonderful opportunity in 2002 to give the universal single payer health and include a dental, and the nursing association, the medical association, and the -- what am I leaving out, the nursing association all opposed that plan. And I told them I was real glad to see they showed some concern for the poor now.

Gerry, I'm tired, I will take your marvelous thing as usual and I'll type in comments, and I'll take all your suggestions to heart and put them down because I trust everything you tell me. And I'll put that in there for what the permit plan does.

And thank you for listening to me and being patient.

MOD: Thank you.

Sherry Lambert: And I have the referendum folks.

MOD: Is there anybody else who would like to speak tonight?

Dan Sears: Thank you.

MOD: Give us your name and address.

Dan Sears: Dan Sears. 15207 S Forsythe Road, Oregon City, Oregon.

Just a couple things I want to add, and thank you again to the Department of Ecology for coming back to Portland and for following up on what you heard the first time around, which I know was a lot about offsite waste, a lot of new information has come out since then, and I think that what you're hearing from this group is a real desire to see some of those issues resolved. And I don't have a lot to add to what [Devisia 38:56] and Gerry, and everyone else has said. But one thing I do want to throw in there is this idea that Department of Ecology has a responsibility under RCRA to uphold the line, and to set standard for how these waste facilities will be operated. And there's a difference between RCRA and [SRCLA 39:21], and there's a difference between how DOE might deal with things later down the road and how Ecology would deal with these things up front. And so, I guess what we're asking from Riverkeeper is that Ecology not defer to DOE and get as much in the permit as you possibly can to hold the line. Thank you.

Not used to be applauded while I talk. Usually people are throwing things at me.

The second big thing I want to throw out there and I just didn't get a chance to say it in my opening comments was to regulate emissions from any of these facilities at the stack. I know that worker safety is a huge concern for ecology and for DOE; I think it's up to Ecology to hold, again, to hold the line there and to say we're not going to count on whatever comes out in terms of the vapor emissions from all these really dangerous waste sites. We're not going to count on the atmosphere, the wind to disperse that; to look at it right at the point of emission and to make sure that when it's coming out of the stack from any one of these facilities, including the [TPA 40:28] or any of the tank farms, that that air emission is not dangerous to workers and to anyone else who might be in the area in the future.

So, that's it, and thank you very much. Have a good day.

MOD: Thank you. Is there anybody else who would like to talk tonight? Yes.

George Gates: Thank you.

MOD: There you go. And make sure this is still running. It is.

George Gates: I'm George Gates. I live in Portland Oregon on Southeast 49th Avenue North Hawthorne. If anyone may be wondering, and I doubt there's anyone here who isn't aware of the very serious effects of radiation that is casually treated around large areas of population, I would recommend a book published a few years ago called *Voices from Chernobyl* put together by a journalist named Svetlana Alexievich. It's published by Picador Press. Copies are available from the publisher now for about \$16. It contains about 100 different monologs by different people in all walks of life describing the terrible, terrible things that happened to their loved ones, to themselves, that they saw happen to the environment, and the comments are so powerful, it is extremely disturbing and anyone, if you find people -- I'm sure you'll run into people who say, "Oh, we can deal with this. We have the technology." Yes, the Soviets thought

they had the technology. Tens of thousands died, and in fact, one of the speakers says we had over 300,000 people in there trying to clean that plant up and we really don't know how many of them are dead now because the government covered up so much.

And does that sound familiar? Anyway. I just wanted to say this. The book is called *Voices from Chernobyl*. Thank you.

MOD: Thank you. Is there anybody else who would like to speak today?

If you would like to email or send written comments, they are...

Unidentified Speaker: There's two more.

MOD: Yes? Oh, I'm sorry. Somebody else?

Unidentified Speaker: He wants to speak. I have a question.

Unidentified Speaker: [Inaudible 42:59] writing stuff down [inaudible].

MOD: Do you want to come up and make a statement? Okay.

Jay [?Sprunkle]: My name is Jay [?Sprunkle]. I'm in Portland, Oregon. I'm a citizen.

I am concerned that the treatment plant from the get-go has all been smoke and mirrors, simply a way for whatever larger than in-the-know experienced contractors -- how many have there been? And I think a few of them were fired. They're able to get a huge payout on the promise that the panacea is being designed as it's being built [?will 43:50] really do the trick, huh? "Trust us." Track records [inaudible] those corporations that are making this thing work is -- well, work, I don't know -- is kind of mixed as to their integrity as in overbuilding in other venues and such. Basically, been hardly keeping track, but that does seem to pop up regularly, doesn't it?

If this technology is not tested to be true, what is the resultant of the projects that were spoken about here? The French project, the Savanna River, and some apparent micro projects. Does that technology work? I don't know. Well -- okay, say that it does work. We get to the point that the vit plant works. Where will be the repository for -- will it stay on site in a less volatile form? Are we back to being a national sacrifice zone? Again, after all the black cell issues of the vit plant get addressed or dismissed as not expedient and the plant is turned on, presto, then all the new materials start to be flowing in there and accepted. I'm assuming not to be treated as the vit plant as the vit plant is for Hanford cleanup only. I guess the new wastes are just to be stockpiled since it's already such a polluted site. Maybe we [inaudible 45:16] like that, huh? I may be off track here, but -- yeah. My sense is that's unacceptable. That's my conclusion. To please accept no wastes.

MOD: Did you give us your full address so we can send you...

Jay Sprunkle: Yeah. I'm at 4267 Northeast Ainsworth St in Portland, 97218.

MOD: Great. Thank you very much. And as far as the question is concerned, we can't answer a question, but you could give us a question as part of a testimony. Did you want to do that?

Ellen [?Lethem]: Sure.

MOD: We can answer the question later on during the Responsiveness Summary.

Ellen [?Lethem]: Okay.

MOD: Okay?

Ellen [?Lethem]: Sure.

MOD: And name and address.

Ellen [?Lethem]: My name is Ellen [?Lethem], I live at 4122 SE Pine St, 97214 in Portland, and I'm here as a parent, mother, a grandparent, and I'm also here as the sister-in-law of a boy who was born in the Los Angeles Basin in 1959. He's one of almost 50% of males born in the spring of '59 who are sterile as a result of the aboveground nuclear testing that was done in Utah. Check it out.

My question, the one that it raised my hand to ask about this is I'm really happy with the information that you've tried to provide. I appreciate your effort. But I heard that you had a notice in *Willamette Week* and you sent things out to 900 people who were on your mailing list, but why wasn't there a notice in *The Oregonian* about this meeting or in the papers in Vancouver? There are neighborhood papers all over this area. Everybody should know. Everybody should know these plans. And we should know who to write to. Why are you only getting money in Washington State that has to do with the economic distress to deal with Hanford? You had notes; you said \$2 billion, \$2 million? \$2 million -- \$2 billion a year. Who's on the committee? Who sets that funding? Hanford should be cleaned up. There should be nothing held back. It affects the whole northwest. And I entirely agree that we need to have a ban on new waste as part of this, not a request.

And it sounds rhetorical, it's just because the mic. Anyway. Thank you.

MOD: Thank you. And thank you. Anybody else? Last chance?

Okay. Now if you do decide to add a comment later, you can send it by email or send written comments. They must be postmarked or emailed no later than October 22nd, 2012. And you can mail your comments by email to Hanford@ecy.wa.gov, by fax, and the fax number is 509-372-3971. You may also -- oh, it's right up there. I'm sorry. 509-372-7971. Or you can do it by mail and send your comments to Ron Skinnarland, Washington Department of Ecology, 3100 Port of Benton Blvd, Richland, Washington, 99352. All testimony received at any of the public hearings along with any written comments received by the end of the comment period, which is

October 22nd, 2012, will be part of the official record. Whether a comment is presented orally or in writing, it will receive equal weight in the decision-making process.

After the comment period ends, Ecology staff will be reviewing all comments submitted and will prepare a document called The Response to Comments Summary, and people who gave testimony or who submit comments will be notified when the responsiveness summary is available. If you gave a comment tonight but don't have your name on the list out there and your address, then we won't be able to contact you, so make sure you sign up as you leave.

Ecology is hoping to have this document, The Response to Comments Summary completed sometime during early 2013. At this time, Ecology is expecting to issue this permit in early spring 2013.

On behalf of the Department of Ecology, we thank you for coming tonight. I appreciate your cooperation and courtesy. And let the record show that this hearing was adjourned at 9:05 PM. Thank you.

[END OF HEARING 51:14]

Moderator: Let the record show it's 7:27 on June 6th and this hearing on the dangerous waste permit for the Hanford site is being held at the Richland Public Library. Any testimony received at this hearing along with the written comments received will be part of the official hearing record for this permit. We'll begin with John Howieson. Please state your name and your address, and speak...

John Howieson: So I can speak to people.

Moderator: Okay.

John Howieson: My name is John Howieson. I'm affiliated with Physicians for Social Responsibility in both Washington and Oregon, and I'm an alternate member of the Hanford Advisory Board. The concern that I want to express has to do with the single shell tanks. There are 149 of these tanks and probably about 67, I think, are known or suspected leakers. There's about a million gallons of leakage from those tanks, so they're way over age. They were built in such a way that they would not conform to current standards, so they're a real problem.

The problem that I want to express is the rate of emptying of the tanks. According to the Tri-Party Agreement, those tanks are supposed to be emptied and closed in 31 years. But the rate at which they have been emptied until now, they started emptying the first one 20 years ago and they have emptied eight of the tanks until now. So, that's not doing very well. Recently, they have been emptying them, I understand, at the rate of about 1 per year. So, there's 141 yet to go, that would mean 141 years before they get them empty, which obviously is not acceptable. So, I would like the permit to have a schedule that requires the Department of Energy to empty those tanks at a rate which is going to achieve emptying of all of them within the 31 year landmark or deadline, that way, after a year or two of them defaulting, they can have a judge decide what the Department of Energy must do about the problem. To allow them to go along for a number of years now emptying one per year when they're supposed to be having them all emptied in 31 years is simply not a good idea, not acceptable, and the permit would, I think, be a good vehicle for trying to establish a more satisfactory schedule for that task.

Moderator: Mr. Howieson, would you please state your name and address for the record?

John Howieson: Yes. John Howieson, my street address?

Moderator: Yes.

John Howieson: 11322 Southwest Riverwood Road, Portland, 97219.

Moderator: Thank you.

Vince Penesco? Again, please give your name, any affiliation, and your street address for the record.

Vince Penesco: Okay. I'm Vince Penesco. I'm speaking for myself today. I live at 2132 Harris Avenue in Richland, Washington. I have a comment about the oversight that Ecology provides

on some of their requirements. I'll give you an example. 242-A Evaporator takes waste from 102-AW tank and evaporates it and the concentrated feed goes eventually into the waste treatment plant and then the over -- the condensate, the water goes to another treatment plant that can't take organics. So, the question, the permit says, okay, the feed you take in 102-AW, send that to the analytic lab and it can't be high organics, a certain level of organics will cause an exothermic reaction in the evaporator. So, it has to be low amount of organics. They found here recently, it's my understanding that they discovered that the off-gas system had been corroded because of years of high ammonia, of ammonia in the waste tanks being sent to the evaporator higher than the specifications, which my understanding was the Department of Energy was not paying attention to specifications. They were putting waste into the evaporator with ammonia out of spec, and as a result, it ate through and damaged some of their off-gas equipment. So, if that happens, in other words, the Department of Energy not paying of specs and this permit has these waste specifications, say, hey, you've got to meet these specs before you give them to the 242-A Evaporator.

My question is this, how does Ecology -- and I'd like to see this in the permit -- how does Ecology ensure that Department of Energy is paying attention to these specifications? An example is the waste going into 242-A Evaporator, be sure that the organic level's down, be sure the ammonia level's down, and I didn't see that in the permit. It may be there, but I would like to see more understanding of how the Ecology ensures that these permit requirements are actually implemented.

Thank you.

Moderator: Anyone else offering testimony for the record tonight? All testimony received at this hearing along with all written or video comments received will be part of the official hearing record for this permit. The next step is for Ecology staff to review all written and oral comments, and to complete the Response to Comments. On behalf of the Department of Ecology, thank you for coming tonight. I appreciate your cooperation and courtesy. This hearing is adjourned at 7:36 P.M.

[END OF AUDIO 6:54]

Mod: Let the record show it's 10 minutes after 6:00 on Tuesday, August 7th, 2012. This hearing is being held at the Richland Public Library in Richland, Washington, also in cyberspace via GoToMeeting. This hearing is about the proposed draft Hanford Facility Dangerous Waste Permit. Information about the draft permit, our workshops, and hearings have been posted on Ecology's main webpage under the Public Involvement Calendar, and all over the Ecology Nuclear Waste Program page. To announce this hearing, we ran an advertisement in Sunday, August fifth's *Tri-City Herald* and we've been on the radio. And, Ecology did also send messages to the approximately 960 stakeholders on the Hanford email list.

Please remember to limit your comments to five minutes and no extra noise. Phone people, I will give you a warning when your time is nearly up and I'll give you the -- what do you call it? I will -- we're not ready yet, people. When your time is truly up, I'll make sure you know it and then I'll call up the next person.

I will take the comments from the online people first. So, I have a guy and a gal. Let's put the lady first. Woman online, please give your name and who you represent and let's go.

Brittaney Harris: Hello. My name is Brittaney Harris. I am a student at the University of Washington and a legal intern with Heart of America Northwest. I have a [inaudible 1:44] comment, which is [suggest]

Secondly, I am concerned at the SEPA determination of non-significance for the entire Hanford permit did not include consideration of the single-shell tanks themselves, which should be included in the cumulative impact analysis in the SEPA determination. And you shouldn't be able to avoid a determination of significance by breaking an action into small component parts. So, I believe there needs to be comprehensive, site-wide environmental impact statement that includes analysis of the single-shell tanks.

Third, I'm concerned that the agencies are relying on an outdated environmental impact statement whereas a NEPA analysis -- I'm sorry, [inaudible]? I'm sorry. [It's a little unclear, so 3:18] I'll keep talking. They seem to be relying on the [inaudible] analysis created in the 1990s, which was prior to the discovery that a million gallons at least, possibly six million, have leaked and that was back in 2000. I believe this is significant new information that requires a determination of significance and a new environmental impact statement. I understand there's a supplemental statement on the way, but that's not yet complete and the agency is not relying on it.

Finally, just a few things. I don't see any requirements in the permit to undergo leak detection or removal of any leaks or spills during the waste retrieval activities in the single-shell tank units. I believe that should be included. I believe there should be something in the permit that says contents from the tanks should be removed on a priority basis. Known leaking tanks should be the first priority, they should be emptied first.

And finally, it seems like this is taking a really long time to clean up and I'm wondering if the schedule is actually enforceable. I believe there should be some things put into the permit that says, "They will be cleaned up by this date or..." and then there should be consequences. I

believe there needs to be an enforceable document and I think that's required by state and federal law.

Those are all my comments. I hope they were clear. Thank you.

Mod: Thank you. The next online person? There's someone else online who'd like to give comment?

Jay [Otterson]: Yes. My name is Jay [Otterson]. I'm in Seattle, Washington. And want to express my concern about the U.S. Department of Energy's plan to send more radioactive waste to Hanford and I don't know how this can be seriously considered when we have 40 miles of unlined ditches that are leaking and that the Energy Department proposes to just cover those with dirt rather than clean up. And I'm also concerned about all the liquid waste that has leaked from the high-level liquid waste storage tanks and the fact that the DOE wants to leave the waste remaining in these tanks. This waste needs to be removed from the site. You know, wishful thinking won't make it go away and we can't allow more waste to be dumped at a site that such massive amounts of waste that is currently leaking at. The hazardous waste permit needs to reflect the principle of cleanup first and Washington State needs to insist on a hazardous waste permit that protects our state from additional waste and that requires cleaning up of the waste that's currently at Hanford. Those are my comments. Thank you very much.

Mod: Thank you.

[Cell phone rings]

Mod: He received a fine dirty look and didn't see it. All right.

Male Speaker: Let's see if there's anybody else on the phones.

Mod: Is there anyone else online who would like to give testimony?

Kevin Carlson: I'd like to give testimony.

Mod: Go ahead, sir. Start with your name please.

Kevin Carlson: My name's Kevin Carlson from Seattle, Washington. And my comment concerns the concrete boxes that are stored-- my testimony concerns the concrete boxes that are stored at the Central Waste Complex. Last March, we learned that a concrete box of mystery waste at the Central Waste Complex was dripping numerous hazardous wastes into the ground. Department of Energy officials claimed that the waste was just rain water. These wastes had been characterized as debris, which means solid material, and they'd been stored for 18 years without a permit. The law prohibits storing such waste for over one year before retrieval for treatment. And the Washington State Department of Ecology issued an Immediate Action letter and told DOE to maintain the box's cover and evaluate its structural integrity. But what needs to be done to protect the public from all such mystery waste at Hanford is to characterize the waste and determine whether it contains waste that can cause leaks, fires, or explosions. The hazardous

waste permit for Hanford needs enforceable terms to ensure that the waste will be characterized so that they could be removed and treated on a reasonable schedule.

I hope you could understand that. Thanks a lot.

Mod: Thank you very much, sir. Is there anyone else online who would like to give public comment?

Anisa Khaleel: I'd like to make a comment, please.

Mod: Please go ahead. What's your name?

Anisa Khaleel: Anisa Khaleel and I'm also from Seattle, Washington, but I grew up in the Tri-Cities. I'm concerned about the 40 miles of unlined ditches that contain radioactive and chemical waste at Hanford. Currently, there are no records that exist that tell us what was disposed where. The Department of Energy proposes to just leave all these wastes in the ground covered with dirt. Some of the waste is in barrels, some of it is in wooden and cardboard boxes which has long since deteriorated. We know that the waste is leaking hazardous chemicals and chemical vapors. So, what we need is a hazardous waste permit that requires that the waste in the ditches be characterized and cleaned up. This means we need monitoring wells that cover the full extent of the waste that has been dumped, not just select areas. The hazardous waste permit needs to require monitoring of the soils and groundwater for the whole 40 miles. Thank you.

Mod: Thank you. Can you spell your name for me, please?

Anisa Khaleel: Sure. It's A-n-i-s-a, and Khaleel is K-h-a-l-e-e-l.

Mod: K-h-a-l?

Anisa Khaleel: e-e-l.

Mod: Okay. Thank you very much. Is there anyone else online who would like to give public comment?

All right. Folks online, we'll come back to you later. But now, we'll give the people who are in the room their turn. And first up will be John Howieson.

John Howieson: My name is John Howieson, and I'm a retired physician and I live in Portland, Oregon. The Washington Department of Ecology is well aware that additional failures of single-shell tanks can be expected because the tanks are well past -- 40 to 60 years past their design life and 67 of the tanks are either known or suspected leakers at this time. I ask, therefore, that the Department of Ecology use whatever tools it has available to ensure that the single-shell tanks that are not currently being emptied at a rate that will achieve closure at the time required by the milestone specified in the Consent Decree, that the Department of Ecology use its tools to achieve that objective.

The Department of Energy plans to retrieve the contents of three tanks in the C farm this year and three tanks next year. Clearly, that rate of emptying the tanks will not achieve the requirement of the milestone. So, the Department of Energy needs to provide the Department of Ecology with a schedule that demonstrates how they will achieve the milestone, and also, it needs to include some accounting of how they will provide equipment and personnel in order to achieve this task. Obviously, that will require a budget also. Thank you.

Mod: Next up is Dirk Dunning followed by Tom Carpenter.

Dirk Dunning (aka Sam Thomas): And actually it's Sam Thomas, a completely transparent pseudonym, just to make clear that I'm making comment entirely as a private citizen. In the fact sheet, one of the things that you notice, there is no practical alternative to the continued storage of waste in these tanks for the next several decades. That actually isn't true; there are at least two alternatives to that. One of which was raised earlier in the question and answer.

In the 35 years that I've worked in industry as a chemical and nuclear engineer, particularly on the Hanford site, I have seen a lot of problems over the years that have gone unaddressed. In the case of the single-shelled tanks, they began leaking within the first two years of tanks being placed in the ground in 1942. So, they've been leaking upwards of seven decades now in some cases.

The law requires, which became effective as of the Federal Facility Compliance Act, that those tanks be emptied within 180 days, which, as Ecology noted, is not something they can practically do. However, there are alternatives to that. And I would suggest that the State of Washington should encourage through permit conditions that the tanks either be emptied as expeditiously as possible into new double-shell tanks, or that as was demonstrated over 15 years ago, that freeze barriers be placed underneath all of the leaking tank farms and the ground frozen solid pending the exhumation of the tank farms in their entirety, and that the exhumation of the tank farms following the retrieval of the waste is technically practical, as well as all of their interconnected RCRA-regulated piping, all of which should be 100% removed from the ground, as well as exhumation of the vast majority of the contaminated soil into the tanks, which in the terms of the Resource Conservation Recovery Act and the Washington equivalent thereof, is a facility which extends to wherever the dangerous waste comes to reside. That includes all the way to ground water and beyond. Today there are ground water plumes of radioactive materials covering upwards of 80 or 90 square miles of the site. There are dangerous waste plumes that extend over a smaller portion of the site, particularly carbon tetrachloride, but also chromium and other things. All of these should be addressed as part of the permit as noncompliant facilities that should not be permitted to continue in noncompliance. Thank you.

Mod: Tom Carpenter is next.

Tom Carpenter: That was well said, Dirk. My name's Tom Carpenter and I'm with Hanford Challenge. I wanted to make a few comments about worker protection. As we talk about the process of emptying these tanks or mediating the tanks, digging up the infrastructure, hopefully going after the waste underneath the tanks, the population of people most at risk is going to be the workers. Already, just maintaining the tanks, there have been numerous injuries due to

inhalations of chemical vapors that have resulted from the tanks either emitting gases or vapors into the air because of disturbance of the tanks, pressure changes in the air, or some other disturbance of the waste. And these chemical vapors are known to contain many, many dangerous constituents that are harmful to human health. Unfortunately, our science is not at a stage where we're able to detect all of the different kind of constituents in real time that might be coming out of these tanks and that workers are breathing in. So, actually, we have no idea what kind of health impact is happening from workers who are around the tanks. This problem will only increase as you start messing with the waste more and removing the waste from the tanks.

Under the Resource Conservation Recovery Act, RCRA, under which this permit is about, the State of Washington has a golden opportunity to further regulate and require more procedures to better protect Hanford workers. Right now, you've got the Department of Energy which is balancing the budget and the schedule against the safety. That should not be a concern, the safety should come first and if it's a permit condition and the state has to comply, then that will be become a mandatory consideration. Therefore, we urge the state of Washington to take this opportunity in this permit to require state of the art protections for workers, up to and including supplied air when necessary, better monitoring, better analysis, a better response system to worker complaints about potential exposures including better medical followup, and all of this is available to the state under regulatory authority, again, in RCRA, the Resource Conservation Recovery Act, which is the most human health friendly environmental statute out there. So far, the state has not chosen to exercise its authority there and we're hoping that you do so at this point.

I'd also like to echo what I heard earlier, which is that you need to go after the waste that has leaked from the tanks, arguably that's even more dangerous than the waste in the tanks and there needs to be a plan for going after that waste. Consider putting in new tanks. We're reading almost weekly about problems with the waste treatment plant, the design, the safety issues, delays. Nobody knows at this point what the schedule is going to be or what it will cost. And because that schedule slippage is there, then we need to really consider what is plan B. And plan B, at least for the time being, might be an installation of some new tanks to be able to transfer waste from leaking tanks, from tanks that are suspect etc., you need to have a place to put that waste.

How much time do I have, any?

Mod: 1:15.

Tom Carpenter: I think you also need to have rigorous contingency plans for when there is a leak. You ought not to just take Department of Energy's word for it. You need to have your own capabilities as the State of Washington to go out and determine whether or not there is a leak. You need to be able to pounce on that and get on it so that we prevent new waste from leaking into the soils, and therefore, into the ground water, especially since there is no interception plan right now for the waste that has leaked from the tanks. Those pretty much cover my comments. Thank you very much for your attention.

Mod: Does anybody else wish to comment? Does anybody online wish to comment? Does anybody on the phone wish to comment?

Okay. I'm going to wrap this up then. If you would like to send or email your comments, we have to get them -- if you want to give us comments, any way you want to give us comments, it must be no later than Sunday, September 30th. You can mail them, and if you do, there's the address, and it's on probably every piece of paper you've collected. You can comment online, you can comment via fax, you can comment via email, and if you want to hand-deliver it, it had better be by Friday afternoon September 28th, because we will not be in the office on Sunday the 30th.

All testimony received at the public hearing, at this one or any of the others, along with any written comments received by the end of the comment period will be part of the official record for the proposed permit release. Whether a comment is presented orally or in writing they get equal weight. After the comment period ends, Ecology will consider every comment it has received, every single comment it has received. We will prepare a document called a Response to Comments, and that will be people who give testimony or submit comments will be notified when the responsiveness summary is available. We're hoping to have that completed sometime in January of 2013. And we're expecting to issue the permit in February 2013.

On behalf of the Department of Ecology, I thank you for coming, I thank you phone people and online people, I thank you here people for everything. And thank you for coming, appreciate your courtesy. Let the record show this hearing was adjourned at 6:32 PM.

[END OF AUDIO 21:10]

Moderator: Okay. Yes.

Unidentified Speaker: Instead of our Hanford Advisory Board meetings, we've been talking about the possibility of having another hearing in September at the end of the public comment period. So, I just wanted to put that out there and see if you could reference that for people who can't stay, because this is the beginning of the public comment period. Most people haven't had a chance to actually read the permit and find out what's in it.

Moderator: So, if you want to make a part of the testimony, feel free, or send something in writing to the program manager. And that's something that they will decide.

Unidentified Speaker: It's just something that we've talked about as a [inaudible 0:40].

Moderator: Okay. So, I'm going to go ahead and get started. Let the record show it is 8:20 P.M. on Tuesday May 15th, 2012 and this hearing is being held at the University Heights Community Center located at 5031 University Way NE in Seattle, Washington. This hearing is to receive comments on the draft permit for regulating dangerous and mixed waste at the Department of Energy's Hanford site. Information about the draft permit, workshops, and public hearings was posted on Ecology's main webpage under the Public Involvement Calendar, as well as the Ecology Nuclear Waste Program webpage.

Remember to limit comments to two minutes. Please no extra noise, and when I state your name, if you could please come up, have a seat, and you can begin your testimony. The first person who signed up is Liz Mattson. And again, I apologize if I mispronounce names.

Liz Mattson: And where are we [inaudible 1:44]?

Moderator: Oh, right here. I'm sorry.

Liz Mattson: Sitting in the chair?

Moderator: Sitting in the chair please. You're giving your comments to me. I need to make sure that I get a clear recording.

Liz Mattson: Okay. My name is Liz Mattson. I am the program coordinator for Hanford Challenge. And I have a few questions more than comments at this point because we're still early in the comment period for the Hanford Site Dangerous Waste Permit. The first comment is to request that we do have a hearing in Seattle in September so that we can have another opportunity to comment on this document.

One big concern for Hanford Challenge is the waste treatment plant and ensuring that the permit looks at the design of the waste treatment plant to ensure that it will work, and to ensure that ensure that it addresses the numerous safety and design issues that have recently been the focus of so much investigative activity and media attention.

We are also concerned about the vitrification of the waste treatment plant's low activity waste stream, which I know the Department of Ecology is also concerned about. One question is, how does the Department of Ecology plan to regulate the risk budget tool to ensure that the integrated disposal facility will only accept vitrified waste, and also assure that no high level nuclear waste or other long lived radioactive products end up as disposed of in a non-compliant repository such as IDF?

As far as tank closure is concerned, we'd like the state to be willing to modify the Tri-Party Agreement to both reflect delays due to the slow retrieval process in the tank farms, and also to enable a decision for closure of the tank farms that's protective of ground water, the Columbia River, and future generations. And also in terms of for chemical vapor monitoring --

Moderator: I'm sorry.

Liz Mattson: That's fine.

Moderator: Yeah, I wish we had more time. I apologize. Okay, Rebecca, oh gosh, Treficanta. I apologize if this is wrong, I'm sorry.

Rebecca Treficanta: That's okay.

Unidentified Speaker: [Inaudible 4:16] people to come up and sit up here get ready, because otherwise it's [inaudible].

Moderator: The next person will be Jim Kelly, followed by Louisa McDonald, followed K. A. Rosebald. How's that?

Unidentified Speaker: Thank you.

Moderator: Okay. Yes, ma'am. You may start.

Rebecca Treficanta: My question is why is the Department of Energy kind of hiding the types of safeguards that they are providing for the vitrification plant, and how is that going to be made more to the public in regards to the safety of not only the people in Washington, but those directly affected by the Hanford site? So, that's it.

Moderator: Okay, thank you. Okay, Mr. Kelly, sir.

Jim Kelly: I'd just leave it as it is.

Moderator: Okay, that's fine. Yeah.

Jim Kelly: I'm Jim Kelly, resident of Washington State, Seattle.

Unidentified Speaker: We can't hear.

Moderator: There we go, I'm sorry.

Jim Kelly: I'm Jim Kelly, I'm a resident of Seattle. I have two points. One is that it seems to me that this is certainly a situation, an action that requires an environmental impact statement under SEPA. It really concerns me that a declaration of non-significance would be issued on an action that is this truly significant. So, I think it's really asking, begging for a lawsuit, and I'd like to see you go back and do a full EIS on this.

The other thing is that opportunities like this don't come along often for this state, and we have, as a state, a great opportunity here to follow the will of the people as expressed in 2004 when Initiative 297 was passed, and to put in place an enforceable ban on offsite waste until the site is in compliance with all laws. I mean, the people spoke very clearly, 70% of the voters in Washington State said that that is the policy they would like you to follow. Now, the fact is that that was overturned by a Federal Court. That does not change in any way the position of the people that this is something, when we have an opportunity, we should grasp. Thanks.

Moderator: Okay, thank you sir.

Louisa McDonald.

Unidentified Speaker: Is that thing on?

Moderator: It's on. It's just --

Louisa McDonald: Louisa McDonald, a 21-year resident of Seattle. Last June, I went on the public bus tour of Hanford, and while I was favorably impressed by some of the cleanup efforts that I saw, I was alarmed by others. While stopped at the site where truckload after truckload of hazardous waste was being dumped into large earthen pits, the tour guide passed around a sample of the material that will be used to line and cover the waste. I was appalled. The material was so thin and flimsy that I did not see how it could safely contain any radioactive or chemical materials even for a short while, let alone for the thousands of years necessary for the safety of our air, soil, water, and the food chain on which this depends.

You see, I worked in hospitals for over 16 years, and some of that time in radiology departments, where I had to wear a film badge to detect my exposure to radiation. I was very aware that the walls and doors were reinforced with lead to help contain the radiation. That experience leads me to seriously question the safety and effectiveness of this plan for the Hanford cleanup. Ten members of my extended family live in the Tri-Cities, as well as many friends. I'm concerned about the long-term effects on their health, and that of all those living downwind and downstream from Hanford.

Please give the same priority and urgency to the total cleanup of Hanford that was given to its construction, startup, and operation. And do not allow any more waste to be sent there until this is done.

Moderator: Okay, thank you. Great job. Marissa Mitchell.

Louisa McDonald: Thank you.

Moderator: Marissa Mitchell, no? K. A. Rosebald.

K. A. Rosebald: I'll pass.

Moderator: Okay. Richard Moss, or Mass, I apologize if that's wrong. No? Okay, Tom Buchanan, followed by David Bailus, followed by Lisa Decker, followed by Megan Morgan.

Tom Buchanan: My name's Tom Buchanan, I am a Vice President of Washington PSR, and I definitely like the comments so far in terms of what people have said. My interest is, one of the unspoken things in this room that we haven't even talked about and why a lot of people are here is Fukushima and the interest that has been generated around what's been happening to the Japanese and to the rest of the world.

And congratulations to some people even in DOE sponsored and spurred on by Robert Alvarez move spent fuel at the K basins at Hanford into dry cask storage, and the last one was just done recently by CH2M, and has stabilized a huge problem at the site. And we haven't talked about that, the regulations because we don't even look at that over the long run. And the same problem with spent fuel is that Columbia River station, it's not part of this permit process, but it's a huge problem to the Columbia and to other affected people, like the people in the Tri-Cities especially.

I'm glad that the Department of Ecology is committed to the groundwater, to the Columbia, and to the health of the citizens of Washington, and I assume Oregon as well. As far as I'm concerned, it's an inadequate job. The groundwater is still flowing into the Columbia, and if you want, they've identified -- the Columbia Riverkeepers out Oregon, out of Portland have identified six radioactive [nucleis 11:37] and another six toxics that are in the Columbia, and they do get dispersed, but then they recollect by aqua, by salmon, by birds eggs, by the sturgeon behind the dams, etc. So, re-concentrating and measuring that is one of our priorities at PSR. We want to take a look at community and health in the Northwest and let's not, let's stop polluting the Columbia. Let's clean up the groundwater right now. There's been attempts at stopping some of this, like the chromium around the old reactor sites, the stuff impacts salmon, especially the spring run of Chinook salmon. Very important. So, that's the minor thing that we need to talk about. Thank you very much.

Moderator: Thank you, sir. David Bailus. David Bailus, no? Lisa Decker. No?

Unidentified Speaker: What was that last names?

Moderator: David Bailus, B-a-i-l-u-s.

Unidentified Speaker: I just couldn't hear you.

Moderator: Oh, I'm sorry. Okay, Lisa Decker? Megan Morgan? Leah Boehm?

Leah Boehm: Hi, I'm particularly concerned about what the permit does regarding transportation to the site of any additional waste. Hearing everything, that there's so many concerns, it's so huge, and the pollution is so great. I don't think that our state should allow any more waste of any kind to come there until the situation has been stabilized. But I particularly have a concern about what this gentleman said that quote "low-level" waste is travelling our highways without proper military escorts. I think that terrorists could find out about it and take it and make dirty bombs, and I think our government needs to be really cognizant of this danger, not to mention accidents. Accidents of things crossing our highways. I mean accidents aren't even part of this.

To hear also that there's an expectation that over 800 cancers will be caused because you'll get a dose of radiation by the things being transported, I think the stuff can't be transported until they can safely transport it and not expose people in the process of moving it. But I just would love it if they stopped anything from being imported until the situation is stabilized. That's what I'd like to say. Thank you.

Moderator: Thank you. Virginia Bice. Brian Epple was a maybe. Doris Fulton was next, Eddy Griffith, followed by Shawna Wright. Hi.

Brian Epple: Hi. So, I recently saw an interview on TVW with the director of the Department of Ecology, and he spoke about a lot of issues, but in regards to Hanford, mentioned just a small line that it was the largest environmental cleanup project in the world. And that struck home with me in regards to offsite waste issues, and I know that this permit isn't dealing with that, but my concern is if this is the largest project in the world now, I would like to see it dealt with as is before we increase the size of that project. And I think that this is an opportunity where the state can assert its power through this permitting process and deal with that now. And I would encourage you to do that. Thank you.

Moderator: Thank you. Doris Fulton? Eddy Griffith, followed by Shawna Wright. Hi.

Eddy Griffith: My name's Eddy Griffith, I'm a member of PSR and a long time supporter of Heart of America. I think it's appalling that Hanford still has 40 miles of unlined trenches 50 feet deep filled with unidentified mixed radioactive and toxic hazardous waste. As we speak, they're actively leaching into the groundwater of the Columbia. They've been doing so without regulation or identification since the inception of Hanford over 50 years ago. Downstream is horrifically contaminated water is used without analysis for irrigation of food crops, and wine. As it makes its way to the Pacific, it decimates our prize salmon runs.

Tidal currents eventually make it back to Puget Sound, that would be us. It's ludicrous and morally bankrupt for the DOE to propose mitigating this ongoing hazard by mounding more dirt on top of these trenches. It's imperative that the DOE have a continuous grid of installed monitoring which can identify the waste on regular close intervals. To cover up without cleanup is an ongoing tragedy, and it's in contradiction to the existing state laws.

Until such times as Hanford is brought into compliance with its long-standing cleanup commitments, it would be intolerable to consider DOE's proposal for an additional 30,000

truckloads. To do so would cause unbearable risks of overloading an already jeopardized system. It is not the role of a single state to assume the burden of being a national sacrifice area for lack of foresight of the private nuclear industry. Washington State repudiates the risk of becoming uninhabitable for the next 20 generations. We the people insist on a permanent viable cleanup of wastes for which there's no safe [inaudible 18:38]. Thank you.

Moderator: Thank you. Shawna Wright. Holly Berger --

Unidentified Speaker: Barger.

Moderator: Barger, I'm sorry. Boy, I messed that one up big time, didn't I? Followed by David Ortman, and then Karen Stacker, followed by Warren Jones. Hi.

Holly Barger: Hi there. Okay, I'll move from a maybe to a definite.

Moderator: Okay, that's great.

Holly Barger: My names Holly Barger, University of Washington, hello and thank you for taking the public comments. I didn't prepare anything formal, but I guess I just have a couple of value -- I guess the values that I have as a citizen that I'd like people to consider as they do the permit process. A couple of those are that we're really at a juncture of an important decision here. We make these decisions not just for ourselves and our own generation, but because of the longevity of the plutonium and other contaminants here, we really have an inter-generational responsibility here. So, being as careful as possible and cleaning up to the most stringent levels possible I think is important.

Also, thinking about who owns that land and thinking about tribal perspectives. I am not a tribal member, and so, I would like to see the values for cleanup and land of the tribes reflected in whatever cleanup process is in place. For me, I guess the issue is the stabilization. I worry quite a bit about not fully characterizing what's below the soil, and I worry about any just cover up with either dirt or some kind of capping system. My preference would be to fully understand what is below the surface and to stabilize that so we don't have to worry about it moving through the environment at all. And I think that's about it. Thank you for your time.

Moderator: Thank you. Okay, state your name for the record please.

David Ortman: My name is David Ortman, 7043 22nd Ave. NW here in Seattle, Washington. I have three short comments. One, if you're going to have a 7:00 o'clock public hearing start the public hearing at 7:00 o'clock, not the agency talking.

Secondly, Ecology's Public Involvement Calendar website did list the public hearing, but when you clicked on Draft Hanford Site Dangerous Waste Permit, you get the famous Error 404 Sorry Page Not Found on their website. Not helpful for public involvement.

Third, the governor is fond of telling people to step up to the plate. The governor must not be familiar with baseball or softball, you don't get to hit by standing at the plate, you don't hit a

homerun by standing at the plate, and you surely are not going to get on base if you left your bat in the dugout. For the last eight years, when it comes to Hanford cleanup, the governor has stepped up to the plate without a bat. The current Hanford Site Dangerous Waste permit expired in 2004 before the governor took office, it will not be reissued until 2013, maybe, well after the governor leaves office, and leaves office with a sad and sorry Hanford record of no hits, no runs, and lots of errors.

Ecology says [inaudible 22:15] controls hazardous waste from cradle to grave, which is about what we have here. There's not enough time to make comments, but I'll support Heart of America Northwest concerns and Hanford Challenges expressed here tonight. I did notice, however, that there was a comment earlier about earthquakes at [Yucca 22:32] Mountain, and that does raise the question of what impacts would a major Eastern Washington earthquake have on the 300 area process trenches that are close to the Columbia River. Thank you.

Moderator: Thank you. Okay, Karen Stacker. Warren Jones. Oh gosh, Jordan L-i-s-a-c-a, Lisaca. Leanne Freeman. Roxie Gittings.

Roxie Gittings: I'm Roxie Gittings. I grew up in Pasco, nine years, 4th grade through high school, downwinder. Of course, I've not read that entire to me of the proposed permit. We keep asking our collective selves how can we best control radioactivity, hazardous waste, and the mixture of the two? We still create more and more of these wastes all over the country, and we still keep saying it's okay to make more and more. As a state, we passed a law that asked ourselves not to add waste to the pile, no pun intended. We must clean up our mess before we add more.

So, I say no permission should be granted to bring any more waste to the Hanford site of any type, ever. Just moving the waste around on the site is trying to get as under control seems to have eluded us for over 60 years that I can remember so far. It's still escaping us into the soil, in our underground water, and into our Columbia River. Even if we should create a concrete cap over the entire 586 miles of Hanford, square miles, the site problems would not go away. So, we should not have any caps on this waste until -- whether in tanks or in the ground that has not been properly characterized, treated, and secured then prepared to monitor it for 100,000 years, at which point living things might be able to safely get near it.

So, I didn't talk about the things that I really have on my mind; one is, who to vote for for governor. About 30 miles of natural gas line that's going to be buried out there on that Hanford reservation. Monstrous sewage sites. Promises made to foreign nations using experimental reactors using our presented fuel. Buried radioactive trains, and I could go on and on. But I'm done.

Moderator: That's okay, thank you.

Roxie Gittings: Thank you.

Moderator: Andrea Rough. No? Okay. Victor Oblivek?

Victor Oblivek: Yes.

Moderator: I said it right?

Victor Oblivek: Yes, you did.

Moderator: Oh, my gosh. I'm impressed. I did one thing right tonight.

Victor Oblivek: Yes. I want to thank you very much for having this hearing tonight. I just want to say, I'm just repeating what everybody else said, we need to stop all nuclear reactors at Hanford, on the Columbia River, and everywhere. We want no new waste, not one gram of radioactive dirty waste from anywhere coming into that site. We need to clean up the 40 miles on the trenches, the 56 million gallons of liquid waste. Those tanks are good maybe 20 years, it's now been over 60 years. This stuff started over 73 years ago and it's just too long. Fukushima could happen here. This is the third most polluted radioactive site in the entire world. What if we have a volcano on Mt. Rainer?

Thank you.

Moderator: Thank you.

[Applause]

Moderator: Deven Murti, followed by Charles Muklee.

Deven Murti: My name is D-e-v-e-n, last name M-u-r-t-i. Resident of Seattle. I'm also a member, 10 years, of Heart of America Northwest. I just wanted to say that the incremental approach, slow and cautious, to the cleanup is not enough. This Hanford nuclear reservation was the site of a Manhattan project and many more resources were put to make a quick, solvent -- create a nuclear bomb. And with the same gravity now, we need to do cleanup considering the gravity of the situation and the key opportunity we have now to prevent the incredible spreading of risk that will occur if it goes beyond the Hanford nuclear reservation -- the polluted reservation and goes out into the river and beyond.

So, that's a summary, just to say we need to -- okay, yeah, the idea is make Hanford, considering that it's the biggest site for pollution in the U.S. and what, make it the key resource that other radioactive waste sites around the nation can take our technology, can take the energy for their cleanups instead of us just taking all the pollution and incrementally storing it with the idea of a 40-year timeline for a cleanup. So, that's a clarity about our priorities and how we need to shift to solving this problem.

Moderator: Okay. Thank you, sir. Charles Muklee? No?

Megan Styles?

Megan Styles: Pass.

Moderator: You'll pass? Okay. Oh, my gosh. I think this is Z-o-s-s-e, C-o-u-l-t? Zosse? Or maybe that's a J. I apologize. I can't read this very well. But the last name is C-o-u-l-t. And they weren't sure. Not familiar? Okay.

Sarah Sanborn, followed by Shelly Arroggin.

Sarah Sanborn: Hi. My name is Sarah Sanborn. I'm a student at the University of Washington and former service learning intern for Heart of America Northwest. I don't have a formal statement, but I have a couple of comments that I want to say. This Hanford site is a very complicated issue and I think cleanup needs to be a high priority for Washington State.

As a student and as a young person of Washington State, I am going to be dealing with this and my fellow students are going to be dealing with this for the rest of our lives. For me, I don't want to leave this same amount of waste for the next generation. I want to make sure that the waste that's there is cleaned up as much as it can be. I know this is difficult to clean up and there's a lot of complexity to it, but we need to take this as a priority for not only the people now, but for the next generation.

That means that we need to do more than covering waste with dirt and I think there should be maybe some educational efforts out, put out there, so that people my age or younger are aware of these issues. I feel like there are a lot of students that are really unaware and need to be educated. And that's all I have say. Thanks.

Moderator: Okay. Thank you. Just a second. I'm writing down what she's saying. Okay. Shelly Arroggin? No? Okay. Mark Brady? Okay. Rick Barrette? Ted Gannon? John Rogers? And we have a winner.

John Rogers: Hello. My name is John Rogers. I'm a resident of Seattle. Here we are trying to clean up the mess for making the terror weapon. This was the project of the new world order after they had pushed the Japanese into war by cutting off their oil, which was done by cutting off the Royal Dutch Shell oil, which was an Illuminati Organization. The terror weapon was built to threaten the whole planet and now, we are having to clean up the mess from this terror weapon. Not only that, but now we are using nuclear power which is another form of threat to our planet when really, all we needed to have done was to use the Tesla cosmic energy. That would have solved the problem. There never would have been a war. Now we would not have this deadly mess that threatens to destroy what little future we may have. We've made mistake after mistake. We've been led into this seeming endless routine of mistakes, incompetence, and destruction. Thank you so much, our wonderful leaders. You have done a wonderful job leading us to the doom that only you people could prepare for us.

Moderator: Thank you, sir. Rebecca Campbell? Patrick Burns? Oh, wait. Do we have Rebecca coming up? Oh, I'm sorry. Okay. After Rebecca, Patrick Burns.

Rebecca Campbell: Last year, in Portland, Oregon, I attended the hearing there concerning the Hanford site and I also was attempting to attend one [inaudible 35:13] called away for an

emergency last July. I'm not certain why we have to keep coming back to tell the state and the federal governments that we do not want any more waste put in this plant and we want it shut down.

At this hearing, 75 people spoke. Other than one person, every single one of them said they wanted it shut down. The majority of them used the word "genocide." A physicist who spoke, spoke about Onkalo, where Finland is actually using state of the art best practices to manage the waste and there's not one word of Onkalo or best practices uttered by the state, as far as I've heard tonight, by the state of Washington or the federal government. When I got up to speak, I spoke about technologies that had been deliberately suppressed by the government, the Department of Energy actually had them and I presented evidence concerning this. I didn't hear any mention of this tonight. However, all of this is a moot point because very soon, there are going to be televised mass arrests of government officials within the federal government. The State of Washington -- and this will go down to the governor's level -- the state of Washington will be once more free, that will include you, to assert its sovereignty and begin to clean this up without the shackles of the federal government anymore threatening it or bringing more waste into this state to threaten the people.

I wanted to inform everybody in this room of this and you can regard me as crazy, but I wanted to plant some seeds so when it does happen, you are not going to be utterly shocked. But this does not have to exist. This is a completely unnecessary situation which is about to end. Thank you.

Moderator: Thank you. Patrick Burns? Ruth Garrow? Okay.

If you'd care to sit down, we can tip that down for you. Would that make it easier for you? Oh, stand up. Okay.

Ruth Garrow: I would like to see the hazardous waste permit demand that the tanks and the soil around them and under them be thoroughly cleaned up and that the 40 miles of trenches be adequately monitored and cleaned. And I'd like to add that there are dangers that we haven't addressed tonight and one of them is secrecy. This whole project was born in secrecy; the workers on August 19th, 1945 didn't know what they were making plutonium for until it came out in the headlines.

In '49, there was the insidious Green Run, an experiment on our own citizens to see how far Iodine-131 could be detected. In 1986, people demanded through the FOIA process to find out what had been happening in the '40s and '50s and discovered some of what had been going on at Hanford, which is why we now have our Tri-Party Agreement and these citizen hearings.

When I first started working for Physicians for Social Responsibility on these issues in the spring of '97, the headlines said that the radioactivity would never reach the ground water. In the fall of that year, there were big headlines saying it had. I'm sure there are things that we don't know here tonight and I think the solution is what we've seen here tonight, which is citizens and whistleblowers who will continue to put pressure on. They will always say there's not enough

money. I'd just like to add that taxpayers in this state have spent, so far, \$27.5 billion on the wars in Afghanistan and Iraq, the money is there. Thank you.

Moderator: Daniel Hassler? Cat Ceribus? Okay. Rodwan Farage?

Rodwan Farage: I'll pass.

Moderator: Okay. Okay, well, we have some time left. So, I'm going to ask if -- first off, if there's somebody who hasn't testified, if they would like to?

Barbra Zapeda: I would. You didn't call me, I had something [inaudible 40:42].

Moderator: Okay. Oh, I'm sorry. Then we definitely messed up a card, so would you care to come up? We have time to get, I think, everybody else who wants to testify in. So, ma'am, if you could come up and please state your name for the record? Can we scoot this down and make it more comfortable for folks?

Barbra Zapeda: Oh, that's okay. I can stand up.

Moderator: I just want to make sure that I get you in the recorder. That's why I wanted folks --

Barbra Zapeda: Oh, you want me there or here?

Moderator: I just want -- I'm paranoid. I want to make sure I get your comments.

Barbra Zapeda: Okay.

Moderator: That's more important than anything to me right now.

Barbra Zapeda: Okay. I'm Barbra Zapeda and I'm a bomber. I graduated from Richland High School in '53. My mother worked in Hanford in the lowest form of cleanup at the job, and there was only one person that actually carried out the real safety processes in the '50s that she would tell, and it was Russell Knight. He was never prompted.

In fact, he was kept back because he didn't do the speedup. He tried to follow the rules. But it is the problem of secrecy. In fact, I just heard a Japanese girl talk about Fukushima on C-SPAN 3 just yesterday. And she was saying there is no way the Japanese people will ever trust their government. They have decided to cut off all nuclear plants and even though [Jasco 42:21] is the one member of the NRC that said we should find out what happened in Fukushima, the people in Japan that are concerned say they can't because government lies, the utility companies lie, and the only way they can trust the nuclear industry is to shut it down because it has proved that after 50 years -- actually, it's more than 50 years, it's more like 60 or 70 -- they don't give a damn. We have bankrupted this country by being the military armaments industry and we are killing ourselves. It's the worst form of suicide because it is a slow death for everybody. There is a shortage of water. We need the agricultural lands here in the north because of global warming, but they're not going to be available because we've poisoned it. And everybody here knows

well that people are lying and our government is lying. And until that stops, until we can believe anybody -- this is almost a useless process because the only way to solve a problem is to get at the truth.

Moderator: Thank you. Go ahead. Please state your name for the record, sir, and go ahead and begin.

Tom Carpenter: Okay. My name is Tom Carpenter and I'm Director of Hanford Challenge, which is based here in Seattle. And among other things, I represent Nuclear Whistleblowers at Hanford. I'm also on the Hanford Advisory Board and various other committees. One thing I'd like to point out is that the government, our government has spent about \$5.5 trillion to make nuclear weapons, according to the Brookings Institution, and we're looking at a price tag for Hanford cleanup currently estimated to about \$120 billion, which is a lot of money, but it certainly pales in comparison to what we have spent.

The materials, we've heard the vast majority of materials at Hanford are characterized as low-level waste and Ron, you said that they were low dose, but that's not necessarily the case. Some of this waste is very deadly and very high waste. But, it's the way they characterize waste in the government, from high level and low level, and really, what low-level waste is simply not high-level waste. And so, I would urge people not to -- especially the state -- not to assume that because it's called low-level that it's safe, and it's not. Especially when you look at around places like Chernobyl where we now have some experience with the affect on wildlife, you see a lot of mutations in animals, especially in barn swallows. The brains are smaller, the skulls are more fragile, there's less reproduction. The genetic damage that can occur from the radiation exposure and from chemical exposure from these sites can happen at extremely low levels of exposure. So, the state needs to keep that in mind when it's regulating waste, keep this in mind for the future. The permit should take into account the protectiveness of the cleanup into the future and the safety issues. Thank you.

Moderator: Thank you. Okay.

Shannon Crown: My name's Shannon Crown. I'm a graduate student studying the Hanford cleanup. One thing I just want to make sure is included in the permit is a larger emphasis on sampling. I think one thing that makes me uncomfortable as a member of the public is having to trust a model to tell me where the waste is and at what concentration when there's so much uncertainty on the site. So, I would like there to be a stronger pairing between requirements for sampling and the models to prove that the models actually -- that are saying where the contaminates are actually can say that with more certainty.

And so, if we're to clean up underneath the tanks, I'd like to see sampling that shows that we actually have done that effectively.

Moderator: Thank you. No, I'm just --

Pamela Wilcox: Now, am I supposed to give my name or my address?

Moderator: Yes, please. Give your name and -- we've got -- you signed in so we should have the address information.

Pamela Wilcox: I did sign in, but I didn't sign in to make a comment. So, you --

Moderator: Well, that's okay. Just your name is fine.

Pamela Wilcox: Just my name?

Moderator: Yes, ma'am.

Pamela Wilcox: Okay. My name's Pamela Wilcox. I'm from Seattle. I want to start with saying that considering no insurance companies on the entire planet will insure anything to do with nuclear energy or weapons, I wish they would just quit -- get rid of them all. Stop everything to do with this. I am very strongly opposed to them burying them in the ground. If they leak, we won't know until way too much damage is done. They should be put in warehouses or something to where we can monitor them at all times. I don't -- to cover them up and not clean it up, that is of a concern.

The old school attitude -- I was born in '49 and I can remember when people started talking out against polluting the planet period. Lorne Greene comes to my mind, the act from *Bonanza*. He showed things that were being poured into the rivers and the effects of them and things, and I can remember people retaliating against him and saying, "Oh, the planet will be able to just take care of it. We don't have to worry about it," and hopefully, we've come to the point where we understand we do have to worry about this. We have sun, wind, geothermal, and biomass energies that we could be using. We don't need to use this toxic stuff that's killing everything.

I am a downwinder. I spent the first 28 years of my life in Lewiston, Idaho and I have paid for that. I had to have a breast removed. Secrecy does beget abuse. Everyone knows this. I advice everyone to buy Geiger counters and I will end by quoting George Carlin, and I will clean it up. I won't use his words.

Mother Nature has nothing to worry about from man, he'll just mess up his atmosphere so much he won't be able to exist anymore. Give her 10,000 years and she'll be better than ever.

Moderator: Thank you.

Pamela Wilcox: Thank you.

Moderator: Okay. And -- okay. Please state your name for the record.

Vivian Tam: My name is Vivian Tam. I'm a student at the University of Washington and a current service learner through Heart of America Northwest. My main concern lies with the burial grounds that are in unlined trenches. So far, I've gotten the idea that you guys aren't going to exhume those tanks, so then my question lies in how are they monitored? Will they be monitored? How many monitors will there be? Like how many are proposed so far? What kind

of monitors are there? Will they include like soil column monitors, ground water monitors? What the current design is? How do they compare to other monitors and what are the current conditions at the burial grounds and what the conditions will have to be before we actually start monitoring them, or cleaning any leaks up?

And then, when it comes to these questions, I already spent a lot of time on you website trying to discover the answers, but I actually couldn't find any information about these monitors and I feel that this kind of information should be readily available to citizens so we have an idea of what kind of technology you're using to try to ensure the best protection for us citizens against this radiation or contamination. Thank you.

Moderator: Thank you.

Is there anyone else? No? Okay.

If you would like to mail or -- I should say, if you'd like to email or send written comments, they need to be received by September 30th, 2012. Please mail your comments, and Ecology would prefer email to keep the use of paper down. If you could email your comments to Hanford@ecy.wa.gov, or you can fax your comments. The fax number is (509) 372-3971. Sometimes, it's not always possible to email or you may not have a computer. I don't have one. So, you can email it via postal mail to Andrea L. Prignano and the first name is spelled A-n-d-r-e-a. The last name is P-r-i-g-n-a-n-o, Department of Ecology, 3100 Port of Benton Boulevard, Richland, Washington, 99354.

All the testimony received at any of the public hearings, along with any written comments received by the end of the comment period, September 30th, will be part of the official record for this proposed permit renewal. Whether a comment is presented orally or in writing, as I said, earlier, they all receive equal weight in the decision-making process. After the comment period ends, Ecology staff will review those comments submitted and prepare a document that's called a Response to Comments Summary. People who gave testimony or submit comments will be notified when the Response Summary is available.

Is that going to be automatically sent to them or will it be posted on the website?

Moderator: It will be both, if they've provided their email.

Moderator: If you've provided email address, then we'll send it to you automatically. We definitely will be putting it on the website.

Ecology is hoping to have this document completed sometime in December [2013 53:52]. At this time, Ecology is expecting to issue the permit sometime in January 2013, which would make it effective 31 days later. On behalf of the Department of Ecology, thank you so much for coming tonight. I appreciate your cooperation, your courteousness to everyone. Let the record show that it is 9:15 and this hearing is adjourned. Thank you.

[END OF AUDIO 54:26]

MOD: Let the record show that it is 8:19 PM on Wednesday, September 19th, 2012, and this hearing is being held at the Seattle Center Olympic Room, 305 Harrison Street, Seattle, WA 98109. This hearing is about the proposed draft reissuance of the Hanford Facility Dangerous Waste Permit Site-Wide Permit, Revision 9. Information about the draft permit workshops and public hearings was posted on Ecology's Nuclear Waste Program webpage and notice was also posted in *The Stranger* newspaper and sent to about 950 list serve recipients. A 30-day notice was also sent to the list-serve, as well as a reminder notice on September 17th. Remember, no more than about five minutes and no extra noise, okay?

When I call your name, please come to the front of the room and remember, name, company or organization you represent, if any, and your address. We will begin with Dr. Edward Siegel, followed by Nancy Morris.

Edward Siegel: My name's Dr. Edward Siegel. I live at 5234 [inaudible 1:42] Place Northeast, Seattle, 92105. Hang on a second. PhD, Michigan State, metallurgy, 1970; Masters Nuclear Physics, Michigan, 1969; PhD, nuclear physics, 1968; Masters of Mathematical Physics, New York University [inaudible 2:05] 1967; Bachelors Degree CCNY 1965; attended Colorado School of Mines, and I have a law degree from [?Penn and 2:13] Princeton.

This is a standard book called the *Structural and Properties of Metals and Alloys* by Brick Gordon Philips, it's an undergraduate textbook. There's a chapter on stainless steels. I've said some of that before. Let me read some letters from General Electric and Westinghouse. General Electric Company, 175 [?Crickner] Avenue, San Jose, California. I think it's December 31st, 1977. To Edward Siegel, International Atomic Energy Agency, 11 [inaudible] Vienna, Austria.

Dear Dr. Siegel, and it's partially cut off, but the seven international [inaudible 2:46] third international conference [inaudible] held in Vienna, Austria, September [inaudible], one of our associates, Howard [?Stolens 2:52] had a brief discussion with you. One of the topics discussed with [inaudible] 182 Welds. Mr. Stolen's -- it's hard to read, it's cut off -- forwarded the information that stressed corrosion and cracking had been observed in [inaudible] -- it's in code, [inaudible] 182 Welds, which was attributed to embrittlement by carbide precipitates.

Sidebar, that's called -- these are synonyms. Sensitization it doesn't mean sitting around a campfire signing Kumbayah. It's a synonym for S-H-I-T. The alloys break, just like Ridges potato chips. It's also called -- physicists call it spino [inaudible 3:27] decomposition, John Cahn, University of Washington, just won the Kyoto Prize for his theoretical work in it in the '60s, just came back with a million dollars from Japan last November. They're real interested in Japan because that's why the reactors failed. They break easily. There's no reason to have anything brittle in a nuclear reactor or a jet engine or anything else. [Inaudible] machining with it.

To continue. End of sidebar.

Mr. Stolen's -- [inaudible 3:52] cover for this [inaudible], in welds between stainless and carbon steel, that's called a transition weld, could you please provide me with a copy of your report on the subject [inaudible] report, please provide [inaudible] materials [inaudible] product formed,

fabrication histories forming, heat treatment, operating histories, time to failure, temperature environment, applied stress [inaudible 4:09] crack locations.

Signed by Michael E Sauby, Supervisor Component Behavior Analysis.

The second letter's more exciting. May 3rd, 1983 to me at 415 Seventh Avenue, San Francisco, from Theodor Stern, Executive Vice President, Westinghouse Nuclear nonmilitary. Westinghouse -- a lot of this is just boilerplate. Westinghouse recognizes that weld metal deposited with [inaudible 4:38] welding electrodes may undergo magnetic transformation from paramagnetic to [?paramagnetic 4:43] at high temperature [inaudible]. I'll get to a paper I wrote about this which is kind of infamous. Within the corporation, we have the [inaudible], blah, blah, blah, blah. However, the data cited above indicates that there is no appreciable deregulation degradation of mechanical properties after 40 hours at 1150 Fahrenheit.

I label this a moron because if you build a reactor once a week, I guess 40 hours doesn't matter. He probably met 40 years. This is the executive vice president of Westinghouse Nuclear for 30 years, he's still alive, I just spoke to him a week ago, signed this. This is like signing the fact that you're a soviet agent.

All right. Now, the metallurgy, which is very simple. This is a paper I wrote. I'll give you the reference. It's *Journal of Magnetism and Magnetic Materials*, Volume 7, pg 312, 1978. There's an article about [inaudible 5:36] in the *Village Voice*, page 38, 8-12-78, called *If Leaks Could Kill*. In this paper, which is a bit technical, but the first page, you can find it online, go to Flickr.com, no E in it, and put in giant hyphen, M-a-g-n-e-t-o-r-e-s-i-s-t-a-n-c-e. Look for page 312 and you'll see some schmuck, I used to think [inaudible 5:58] titanium to it. That's what screws it up. It's like adding the wrong amount of oregano to lasagna recipe. That's probably soviet sabotage. This alloy replaced [NCOA 6:08], which was just fine for transition welds since 1912. Putting this stuff in NCOA to make it NCO182, which is in every weld in the world since about the 1950s is like your boyfriend putting sand in the gas tank of some guy's car who's taking you out for the evening. You're not going to get too far. It won't be an evening of romance. You'll be stuck on a road freezing to death because the engine will seize. It's sabotage.

[?Aziese Ak Bahani 6:34], former CEO of [inaudible] International, PhDs from NYT, about [inaudible] which is worse than this, jet engine, says it's almost as if they wanted them to fail.

Last year, there are definitive articles about these alloys failing in the aviation [inaudible] space technology, September 1981 in the *New York Times*, the second week in September 1981, about jet engine explosions in Milwaukee, Manchester, and [inaudible] in Japan.

So, to conclude, it was purposeful fraud by Westinghouse and General Electric. DOE knows all about this. I've been arrested many times. I was fired by Westinghouse in '74, PSE Energy in '76, the IAA in '77, and ABB in the '80s. I rest my case because this is in the scientific literature. These are refereed papers, and in fact, the director of the National Science Foundation, Suresh, is a metallurgist. He was the referee on this. Thank you for your time.

MOD: Nancy Morris?

Nancy Morris: I'm Nancy Morris. My mailing address is P.O. Box 60096, Seattle, Washington, 98160. I'd like to say first that I will be submitting more detailed comments in the mail. First of all, I would like to point out that after seeing the presentation and seeing [inaudible 8:12] even by the Department to Ecology, I would begin to lose sleep if I was in your department. And on the way that this whole process is going on, the delays, the billions of dollars of spending that has been wasted, and the fact that the DOE has been responsible for at least four failures in trying to make a plan to classify the waste. At least four times now it has failed the public.

And I also would like to say that if we took the Department of Energy out of this entire process, we'd be a lot better off. It's very hard on anyone who comes up and speaks out about the mistakes or scientific -- excuse me, not scientific, but this, the technical failures that are going on at Hanford, the DOE is very hard on its whistleblowers, and I think we should all commend these scientists and engineers who are will willing to speak up.

[Applause]

And I also feel that the dynamic that's going on with the Department of Energy and other agencies is almost like an abusive relationship, that we put up with the abuse by a perpetrator and we find ways to make excuses for them to continue the forms of abuse. I'm speaking on -- just looking historical had how much failure the Department of Energy has been responsible for, and this goes back 28 years, at least, that we can look back on. And the fact that we're looking at how 2040, I will probably be -- you know, I will be extremely elderly by then. We could have had a lot of this problem solved over a decade ago and I know that many of you in this department feel the same way, and it's difficult to be able to speak up and voice these concerns. We really do want to be of help as far as the citizenry out here.

So, let's see. Those points said, I will make other comments later that are more detailed. But, I just really feel that we need an agency that is strictly focused on cleanup, that has nothing to do with the Department of Energy, or has a military contingency or background connected with it. Otherwise, I don't see how you're going to make any headway. It's like we're continually stuck in this circle of trying to work with DOE. It doesn't work. It hasn't worked. And billions of dollars have been wasted.

Thank you.

MOD: Thank you. Chuck Johnson, followed by Richard Elson.

Chuck Johnson: I'm Chuck Johnson. I live in Portland, Oregon. I'm here representing Oregon and Washington Physicians for Social Responsibility's taskforce on nuclear power. More extensive comments have already been submitted by email by John Howieson from the Oregon PSR and I'm not going to comment specifically about those.

Just want to highlight a couple of things. One is that really seems clear that there needs to be a Plan B for the vit plant and for the failing tanks that we're discovering. And this length of time

in which even under the best case scenario that we empty the tanks by 2040, the single shell tanks by 2040, just does not seem realistic in terms of keeping the wastes from further leaking and causing contamination problems.

One of the things that didn't come up in the question and answer period, but I hope you do explore, I don't know more about it because this is the first time I heard about it tonight was Gerry was talking about possibly treating 12 of the tanks at the Perma-Fix Facility, treating waste from them and freeing up space in tanks for -- emptying some tanks and freeing up some space in the tanks. And I don't know whether that's a valid way to proceed, but it seems to me...

MOD: That's okay. Four minutes.

Chuck Johnson: That's all right. ...that all sorts of different options are going to need to be considered in order to develop some sort of a Plan B, because seems quite likely that the vit plant isn't going to work. And finally, of course, if you do need to build additional tanks, I would hope -- and it does seem obvious, if these double-shelled tanks are already starting to fail, hopefully you'll be involved in making certain that additional -- that the new tanks are built more structurally sound than these current ones have been.

Finally, from John's comments, I just want to draw your attention to one specific thing, which you said under the SEPA Determinations, his third recommendation there was that you withdraw its determination of non-significance regarding the current phase until it is known what all the Hanford site mitigation plans will be. I think that's a very prudent thing for you to consider doing. I don't think you should -- I know you're trying to separate these tracks in different ways, but it seems to me that you should be consistent in the way that you're approaching this, and obviously, it's hard to say that there's a determination non-significance if you don't know what the mitigation plans will be. And so, I totally agree with what John had to say in that with his comments.

Thank you for your time.

MOD: Thank you. Richard Elson.

Richard Elson: Hello, my name is Richard Ellison. I live at 8003 28th Avenue NE, Seattle Washington. I have a Masters in Plant Ecology, and in 1986, I had the honor of going to the Hanford reservation with a congressional aid of Congressman Bunker at the time. One of the thing that came out of that meeting in spite of my sending my resume to them in advance and letting them know that I had -- I was just a graduate student, they kept referring to me, all literature that was presented to me was, "Oh, Dr. Ellison," and I was not a doctor. I was on a professor Ellison at the -- I was a graduate student.

The impression from all the pretensions that have been given to me and everything that I've seen from then is basically, it's a lot of wishful thinking. Hanford has been based upon just great hopes and great wishful thinking, and I believe this idea of the vitrification plant is going to be open and operational in 28 years is very similar to the fact that 26 years ago, I was on the Hanford Reservation and they were saying -- they were talking about the double-wall tanks and

how they're going to be draining all the single wall tanks and how wonderful it was going to be, and how much it was going to cost. And their biggest concern was could we give them more money? That was what they were kind of talking to my friend who was the congressional aide, it was like, "How much more money can we get for our operations here at Hanford?" and that's what their big concerns was.

My concern right now is that over the decade that I've been coming to these kinds of hearings is that there's so much wishful thinking and so much hope and there's so much hard work being put into it, but the reality is that there's only seven double-wall tanks, these are leaking, they were built with the carbon steel which is a [cheaper 16:42] product. The single-wall tanks are leaking.

When I was at Hanford, I had direct conversation with the head of the environmental program there, and he said, "No, none of the leaks have ever reached the groundwater at Hanford." And so, now there's this admission about, oh, yes, we have had some of these leaks reach the groundwater at Hanford. There are all these calculations that were done for the original EIS, that was in the '80s, and I took a class that directly addressed examining the Hanford Environmental Impact Statement in the 1980s and the professor who was teaching the class basically was a statistician and him and his colleagues basically tore all the calculations apart that were saying, well, gee, how long is it going to take for any of these nucleotides to get into the groundwater, then eventually get to the Columbia River or somewhere else? And everything was based upon these wishful thinking calculations.

And so, again the point is, here we are, we're not building any more double-wall tanks is what you're telling me, we have the single-wall tanks leaking, we have the double-wall tanks leaking, we have a situation where everything is banked up on these vitrification plans, it's a lot of wishful thinking because there's all this discussion about various problems and why are there problems? The knowledge that we know is that these tanks wastes that are included in them are such a mixed and hodgepodge of nitric acids and different kinds of acids, as well as all the wastes that were put in there. They're the high-level wastes that we're dealing with -- we don't really know, we are only guessing what's going to happen when the vitrification plant is done, will it really work?

So, the idea that having some alternative contingency plans and having an environmental impact statement that says, yes, there are going to significant impacts, what will happen if the climate changes? What will happen if the vitrification plant is not built and the tanks are still leaking and we don't know what we're going to do with the wastes? There seems to me that it's -- what we're doing is keep passing it on to the next generation of employees and citizens, "Here is your hot potato, we've done what we can, good luck," and to me, this is a failure because for one, we do not know what the political climate's going to be like in the future in the United States. We don't know what's going to happen to the history of many other nations and the future of the United States. We don't know what's happening with the climate and how that's going to change in the future of the United States.

We're talking about radio nucleotides are going to last for 10,000 years, 100,000 years. And it's all based on essentially, "Oh, yes. We're going to have it all cleaned up in 20 years and it's

going to be all put away and everything's going to be fine." And if, in fact, it isn't going to be that way because of the long history of delays and denials and hopes and failures of technology, sure, we're making some progress, but it's not fast enough, and there's no guarantees, and if this vitrification plan doesn't work, what are we going to do? Is there an earthquake? Is there a climate change? Is there going to be increased rainfall? It's unfortunate and I'm sure we'll all be here again trying to do the right thing and I'm sure you're all trying to do the right thing, but what we have right now is an inadequate plan if we do not have major contingency plans if the vitrification plant does not work.

Thank you.

MOD: Thank you.

Dorothy [?Werdenberger 20:03], am I right on that? And...

Unidentified speaker: Dorothy had to leave.

MOD: She had to leave. Okay. Jim Kelly?

Jim Kelly: I said maybe.

MOD: Maybe? Well, you can no if you want, but...

Jim Kelly: I'll make it.

MOD: All right. All righty. Get this thing set here.

Jim Kelly: And I meant maybe.

MOD: Okay.

Jim Kelly: Jim Kelly, 505 Northwest 70th Street, #908, Seattle, 98115.

The main thing I wanted to testify to is that I think it's critically important that this permit, given that this is the one time when state regulators have the authority and the leverage to be able to address a question that has been addressed very clearly by the citizenry of the state of Washington, that you put in place a truly enforceable ban on offsite waste and do so for a time period that takes us to the point where the site is really in compliance with law. That is not, in my mind, the time when the vitrification plant may be beginning to operate, because I think if anything goes wrong with the vitrification plant, it may not be evident that it will go wrong at the time it begins to operate. It may be 10, 15, 20 years down the road. And so, why compound the potential risk that we have when we're dealing with such an enormous problem? I just -- you know. I can't see any reason to do that and I see every reason for the state, and particularly the regulatory body responsible here to take a real strong position on this. Thanks.

MOD: Thank you. Donald Lowell? And Karen [?Angstrom 22:20]. Donald?

Karen Angstrom?

Karen Angstrom: Good evening. I'm Karen Angstrom. I'm a concerned citizen. I live at 6911 34th Avenue SW in Seattle, 98126.

I have a Masters in Whole Systems Design and I think in those terms about consequences and relationships. And that is what a SEPA is all about and that's why I'm asking you to revisit and keep open your study of what the consequences are for all these different plans. I'm on the mailing list for DOE and for you, and there are constant new proposals and studies and this kind of thing, it goes on and on without having this overview that this -- this area of land is just a part of a whole large piece of the northwest and the Cascadas, and all of the things that happened under the earth that we may have another -- a volcano erupt, one of them, earthquakes, all kinds, and then climate change and the rains. So, this has to almost be an open document to deal with what is going on at Hanford and how you're cleaning it up.

I've spent the summer reading the history of Hanford and going over there and talking with people who work there and [you 24:26] have you take that into consideration that people made their living and felt devoted, as you do, about your job and what you are doing. But, the scientists knew, they knew what the consequences were and here we are, years and years later, still trying to figure out how to clean it all up. So, I ask that you reopen the SEPA and continue to do that study as an open document and you need to do that.

Now, my real concern is if you look through the room, I mean, I'm probably one of the older people here at 71, but -- which I would have never believed I was ever going to get old. [Laughter] It's weird. But, I don't see any young people here except our law student, and so, I really feel that you need to partner with other departments in the state, particularly OSPI, to make this a part of the educational system for our young people to know they are inheriting this and they've got to know the history, they've got to know what the feel of that land is.

I know that they offer visits to the Hanford B reactor, which I saw this summer, but there needs to be more emphasis on this throughout the state. This isn't just Richland. This is us in Seattle. It's people over in Port Angeles. It's everywhere, that this particular activity has affected the whole state and -- or the state of Oregon, health-wise and everything else. So, I ask that you do -- you initiate or do something with the -- educate our young people and get them engaged in this because -- I'm going to tell you, I work with young people, they have better answers that we will ever have, and ideas, and bright -- and the universities as well. So, please do that.

MOD: Thank you. Frank Zucker, and then after Frank will be Mary Hanson.

Let me get this thing [inaudible 27:08] out here. Okay.

Frank Zucker: My name is Frank Zucker, 1612 North 39th Street, Seattle, 98103. I have a PhD in biochemistry and spend most of my time programming computers. I and I think several other people have been coming to these hearings for about 30 years now, I believe, and we've been facing the same thing every time. The wishful thinking is a good description of it. We're trying

to do something that is not working. We've got to do it a different way, we've got to do something that's going to work because what they're trying to do now is failing and it's going to keep failing and we need a contingency plan, we need some way to deal with this stuff, double-wall tanks made out of the proper kind of steel makes sense, and unless we put that into writing, unless we tell the DOE, "Look, it is what you've got to do," we're going to have trouble. We already have trouble. We're going to have more trouble and it's going to get worse and worse and worse. And I don't want my kid to come here in 30 years and have to go through the same thing and his kids and his kids. There are going to be many, many generations trying to fight this if we keep banging our heads against this same wall. We need some better walls around this waste.

Thank you

MOD: Thank you. Mary Hanson?

Mary Hanson: I'm Mary Hanson and I am co-chair of the Western Washington Fellowship of Reconciliation Seattle Chapter, and I also work with the PSR committee on these issues.

I just want to thank everybody who has come and all of you for listening. I'm amazed at the quality and thoughtfulness of most of the questions. I mean, I really want you to take them all very, very seriously. I can't believe -- when I got my education in high school, my best teachers were my physics and chemistry teachers, and it was the area where I have the lowest ability. I'm not a chemist. I'm not a physicist. But they taught me how to think. What you're hearing tonight is people thinking really well.

I am concerned, as the comment was just made, that some of the younger people coming along today may not be getting the level of education they're going to need to face these issues as they inherit them, and that is of great concern to me. So, I think it's on us, our generation. I'm in my 60's. I think we've got to solve this stuff. I think we cannot kick the ball down the road. I think that would be hideous and immoral to do that.

So, I agree that there's got to be a Plan B, there's got to be, and that it may be relatively simple, that maybe they're making things too complicated, but the idea of double-wall tanks made out of the appropriate steel makes a lot of sense. So, the idea that we be much, much more proactive and less reactive in general makes tons of sense. I was so saddened when I saw all the things on PBS about the people that were pointing out the problems at Fukushima. I mean, all the issues that caused the problem at Fukushima had been pointed out. We are lucky to be here at a time when we have the luxury of knowing many of the problems and many of the positive possible solutions. This is amazing. But we don't have all the time in the world and the issue of earthquakes, the issue of global warming, all these issues that have been brought up tonight tell us that. We don't have all the time in the world, we have to be more proactive.

But, we do have the advantage of all this incredible knowledge and so my feeling is, if we could get making money on it out of the picture, if we could take having to somehow appear to be right and not being able to admit when we're wrong and change course out of it, if we could take ego out of it, if you will, and really focus on cleanup, just focus on cleanup, I think we can do this. I

think we can avoid a catastrophe. But if we aren't that proactive, I think that we are really courting a disaster that doesn't need to happen.

So, I forgot, I gave you my name and my organization, and the organization's name is so ridiculously long, we haven't gotten around to changing it, hoping we get that done in the next year, but in any case, my address is 4701 38th Avenue NE in Seattle, 98105. Thank you.

MOD: Thank you. Is there anyone else who would like to testify tonight? Get this silly thing turned off. Okay. Come on up.

And if you could state your name, address, and organization, if there is one.

Richard Saunders: And what?

MOD: Organization if there is one.

Richard Saunders: Oh, yeah. Okay. My name is Richard T. Saunders, 13716 Lake City Way NE, Seattle, 98125. I represent -- or I should say I'm a member of HOANW. And my question deals with whether or not any past or present DOE EIS has dealt with a scenario envisioning Grand Coulee Dam's ability to withstand up to a 9.0 Richter scale earthquake, and whether there has been an analysis of any resulting flooding at Hanford Waste Storage facilities as they exist today. The background factors for raising this question are recent developments that have occurred in three cases, Fukushima 2011, Missouri River floods of 2011 that knocked out the only nuclear plant in Nebraska and it's still inoperative, and the fact there's a dam risk test coming up soon on the -- on an east coast river above a nuclear plant on which I will be happy to provide more detail if requested.

Thank you.

MOD: Thank you. Is there anyone else who'd like to speak?

Unidentified Speaker: I think you missed the...

Unidentified Speaker: Are there more on the table over there?

MOD: Oh. All righty. Okay.

Gerry Pollet: Thank you. Gerry Pollet, representing Heart of America Northwest. Let me start by saying while we've had a very good dialog and I think it really shows the question and answer would astound many people who have commented at meetings in Tri-Cities that those people in Seattle or Portland don't have knowledge and in-depth, I think you've shown that you really do and you care. And yes, the public understands and believes that this permit is the vehicle for ensuring that the State of Washington's belief that more waste should not be added to Hanford is going to be put into place in an enforceable manner.

Let me turn to single-shell tanks and a couple of predicates here -- precursor statements. First, RCRA, the federal law that our state has to implement [inaudible 37:16] this permit says that when you have available treatment, it is required that you must use it. It is not optional. And you may not store wastes for over a year if you have available treatment.

Secondly, RCRA and our state law requires a contingency plan for the storage of wastes. A contingency plan is what happens when there is a leak or release or other event. Now, this draft permit has contingency plans, ironically, for the small things. So, what happens if there's a drum of waste that leaks? But it's kind of like the bank analogy, too big to fail. There is no contingency plan in this permit what happens when double-shell tank leaks? There is no contingency plan for what happens when we have additional single-shell tanks leaking.

Thirdly, SEPA, our State Environmental Policy Act, requires that not only is there analysis if the impacts of actions, but an analysis if the impact of current conditions, and alternatives and mitigation plans. The action for single-shell tanks is not whether or not you close it, which is out in the future and whether or not you clean up the soil. This permit has a very significant action. It is the continued storage of waste in the single-shell tanks and the removal of those wastes. I think that from the question and answer comment period earlier, it seems that the Ecology staff has glossed over this or fails to understand that the action you are taking with this permit is not inaction, it is an action of allowing the wastes to remain in tanks to the year 2040 or longer. And how do you remove those? There is no analysis, however, of the risks of storage of those wastes for that extra period of time, which was extended from 2018 to 2040 by agreement between the Energy Department and the State of Washington.

In the old and out-of-date and inadequate and never was legally adequate waste remediation system EIS from 1996, which the state did not believe was adequate at the time, the wastes from these tanks was all going to be emptied by 2018. Relying on that EIS now is a sad and hopeless, ridiculous joke. It is not adequate. It never was adequate, but now, you cannot say that you're relying on it because it never did consider what would happen to the year 2040, never considered what would happen if double-shell tanks leaked. It denied the reality at that time that tank leaks migrated away from the tanks and would reach groundwater. It actually denied that that was the case. We now know that was a lie.

So, we're entitled to and need to have a new environmental impact statement considering what are the alternatives, what are the mitigation alternative, and those need to include the fact that there is available treatment for a small segment of the tank wastes that is permitted by the State of Washington and adjacent facility operated by Perma-Fix, it is only a small portion of the tank wastes that can be treated there. But secondly, there is no consider and no contingency plan to address the fact that both single-shell and double-shell tanks make leak, whether due to catastrophe or metal failure, or due to pipe failure in the next two to four decades. It is very likely that that will occur. It is not just a potential, it is a likely significant impact, and this permit is designed to allow the single-shell tanks system to continue to operate for that period of time. That's what you are permitting. That's the action. So, where's the mitigation? Where's the contingency plan? We need that contingency plan and the most logical contingency plan are several new double-shell tanks.

In 2006, we knew that the sister tank to the one that's now -- may be leaking in for its inner wall, AY101, its sister tank, 102, had been found to have corrosion reducing the thickness of the wall at about 19%. That was 6 to 10 years ago. We know that these tanks are going to fail. They were only built for a 40-year lifetime and now, 40 years has lapsed. Sixty to 100 years will lapse before some of these tanks are emptied and we need to have a contingency plan in the permit that addresses and puts in place a schedule for removing the wastes.

Thank you.

MOD: Thank you.

MOD: The only other card that was up there was the gentleman who testified prior to Gerry.

MOD: All righty. So, I think we've gone through all the cards. Is there anybody else who would like to testify tonight? All righty. Okay.

If you would like to email or send written comments, they must be postmarked or emailed no later than October 22nd, 2012. Please mail your comments to -- and I think it's mainly up there, it may be hard for some folks to read -- email at Hanford@ecy.wa.gov. Fax number is 509-372-7971. Or if you'd like to mail comments, Ron Skinnerland, Department of Ecology, 3100 Port of Benton Blvd, Richland, Washington, 99354.

All testimony received at any of the public hearings, along with any written comments received by the end of the comment period, which is October 22nd, 2012, will be a part of the official record. Whether a comment is presented orally or in written form, it will receive equal weight in the decision-making process. After the comment period ends, Ecology staff will review all comments submitted and prepare a document called The Response to Comments Summary. People who give testimony or who submit comments will be notified when the responsiveness summary is available. Ecology is hoping to have this document completed sometime in early 2013.

At this time, Ecology is expecting to issue this permit sometime in Spring 2013. So, on behalf of the Department of Ecology, we thank you for coming tonight. I appreciate your cooperation and your courtesy. Let the record show that this hearing was adjourned at 9:04 PM. Thank you.

[END OF HEARING 45:45]

Robert Apple: -- that the fed is able to handle vitrification in the south, it is in other parts of the country, or the world, excuse me. We're not able to get the plant built, up, and running here is a problem.

I also am very concerned about the large amount of volume of waste on the site, very poorly contained, from liquids to solids, much of it needing to be treated through a vitrification plant, and I do not want to see any waste come into our state until that waste is all treated, completely vitrified, and removed from the state within, potentially, at best an equal mass coming in for that which is being removed.

I do not want any permanent onsite storage at a future point, and I want it determined that the vitrification plant, when and if it's build and operating, will actually handle all the waste and take care of it. If it's not going to be built timely, the existing waste on the site needs to be properly maintained. That means new and double-walled containers for the liquids and removal of the old single-shell tanks and replacement or build other [where 1:15] on the site, double-lined tanks, or more, that would actually meet the conditions because presently, we're not meeting Washington State requirements for such hazardous waste.

Landfills, I'm very concerned about liners because they're not going to last the life of this waste and there's a lot to be considered, so I'll leave it at that. Thank you.

Moderator: Mr. Apple?

Robert Apple: Yes?

Moderator: I have a confession. I need you to restate your name and address. We missed that.

Robert Apple: Okay. My name is Robert W. Apple. I live at 2509 North Upriver Court here in Spokane, 99217.

Moderator: Thank you. And then, I'll continue with my confession, I am going to need both Bill Johns and Linda Green to repeat their testimony. I neglected to turn the tape recorder on. But, we will save them until everyone else has testified, so if you'll come back up at the end of the last two or three people, we'll take care of that.

Mr. Foster?

Tim Foster: Hello. My name is Tim Foster. I reside at 3164 West Daisy Avenue, Spokane, Washington, 99205. Boy, well, Bob, that was a hard act to follow, but I think I have something new that I would like to add. I, of course, agree wholeheartedly with what Bob Apple had to say. I think that Washington State Department of Ecology is here to protect the Washingtonians and that's your first and foremost responsibility. I think that in addition to no more new waste, we need to definitely adopt some sort of a route for transporting this stuff in the future or whatnot so that it's safe for residents along the roadside so that you can't drive by one of these trucks and get irradiated, even just a little bit. It's just not acceptable. Thank you.

Moderator: Gerry Pollet followed by Hillary Ohm.

Gerry Pollet: Ready?

Moderator: Yes.

Gerry Pollet: Thank you. Gerry Pollet representing Heart of America Northwest with several hundred members in Spokane and our offices in Seattle. Thank you all for coming tonight and sticking this out, and for a couple of you repeating your testimony. It's great that you didn't leave, so thank you, everyone, for coming and for Ecology coming here to Spokane tonight since we need to have more meetings and more discussions like we have this evening, which was a very healthy discussion to start the meeting.

Heart of America Northwest is greatly concerned that the Department of Energy and Department of Ecology have agreed to allow in offsite wastes in exceptions to this permit for eight types of offsite waste, which were reflected in a legal agreement that is essentially expiring with the release next week of the tank closer waste management environmental impact statement. And we believe it is inappropriate to lock in any of those exceptions without any analysis of the impacts of adding in offsite wastes under those exceptions. The biggest of those exceptions that has not ever been considered in terms of analysis is the exception for Pacific Northwest National Lab waste, as mentioned in the discussion period. PNNL, Pacific Northwest National Lab, has signed formal agreements to begin work on plutonium fuel production at Hanford in its facilities for the Energy Northwest commercial reactor. These operations could result in large amounts of highly dangerous mixed and plutonium wastes at Hanford being added to the waste streams for disposal. And without an EIS, it is entirely inappropriate to lock in an exception that allows an offsite waste in this manner. And there is no EIS.

Secondly for tonight's comments, wanted to talk about that environmental impact statement. The public has been deprived of having environmental impact statement to review and comment on the numerous impacts the potential alternatives, and whether or not the permit will actually protect the groundwater, public health, safety, and the environment in the event of accidents, etc, under the permit conditions. The EIS to be issued by the federal government called The Tank Closure Waste Management EIS is ironically going to be issued next week after these hearings close and all of you will have been deprived of the right to see this. We're gravely concerned and we don't think it's a coincidence that the Energy Department choose to issue that EIS after the hearings end, and of the gravest concern is the tank closer and waste management EIS has two decisions in it that greatly effect this. First, the Energy Department is likely to say, "We readopt the proposal to use Hanford as a disposal site for the equivalent of over 17,000 truckloads of low level and mixed radioactive hazardous wastes," and that would go into landfills at Hanford which are not barred under any permit condition right now if they build a new landfill or if they claim that the individual effects of any one given landfill will not contaminate ground water. We need to look at the cumulative effects. Those cumulative effects are supposed to be discussed in the environmental impact statement, which none of us have been able to see.

Secondly, that EIS is supposed to give a view of what are the impacts of leaving waste in the bottom of tanks, 1% is the draft preferred option, and failing to clean up the leaks from those tank wastes? We need to see that in order to know whether or not it is safe to even have waste spend 5 years or 10 years sitting in single-shell tanks in terms of the additional risk of leakage, risk of catastrophic events causing airborne releases which would put Spokane and all of eastern Washington at great risk.

Moderator: Your five minutes...

Gerry Pollet: We need to see that EIS and then to look at what the permit should be doing. Thank you.

Moderator: Thank you. Hillary Ohm. Followed by David Mac, and then we'll go back and pick up those first two.

Hillary Ohm: Thank you. My name's Hillary Ohm. I live at 795 South Cedar Street in Colville 99114. So, I've come kind of a long way tonight. I took about an hour and a half drive to get here because very concerned about the cleanup at Hanford. First off, I've been a longtime member of Citizens for Clean Columbia and we work on issues of the Upper Columbia River, so I'm very concerned about the Columbia, and I'm also involved with No Nukes Northwest, which is a new group out of Portland, so I've been working with them. I'm a longtime anti-nuke activist, although I haven't been that active in recent years except very recently.

Anyway. My concern is that we protect the river. I mean, Hanford, I just went there for the first time in April and drove around the reservation and got to see how desolate it is out there, and it is very isolated, but -- and the local people there don't seem to have as much concern, so it almost is a good location except for the fact that it's right on the Columbia River and this is a jewel of our state and the Northwest and I think every effort needs to be taken to protect the Columbia. We cannot let radioactive wastes contaminate the river. That would be a national tragedy. So, I just hope that every effort, every -- all the resources can be put to that.

And what, a decade ago, almost a decade ago I voted against allowing any new nuclear waste to be transported to Hanford and I thought we let the state know, Olympia know that we don't want any more waste transported there, but it just seems like why waste money on initiatives if it can be overturned, overridden, the feds can tell us that our votes don't count. I think that the state needs to represent us and prevent any new nuclear waste from being transported to Hanford until all of Hanford is cleaned up and safe.

So, I agree with the double-shell tanks, that's a no-brainer. I think that that is very important. If any of the waste is going to be stored onsite, the double-shelled tanks are essentially. And I'm a taxpayer and I think that our money needs to be spent efficiently and we need to do it right and I don't know, it just seems like there's a lot of experimentation and a lot of failures and -- what are we going to do in the future? I mean, our economy is not getting stronger and I don't think the long-term outlook is real good, so let's just stop producing any more nuke waste, we don't need any more nuke plants, we don't need to permit any more nuclear power and we need to get rid of

all the arms that we have. So, let's take care of the current problems, clean it up, don't add to any future problems, and thank you.

Moderator: David Mac?

David Mac: My name is David Mac and I live at 2021 [Naches 13:59] Heights Road, Yakima, Washington, 98908. So, under SEPA, the Department of Ecology will look and see what Energy is proposing to do and they will look at what they're doing and then make a determination of non-significance, or of significance and say that it needs to be mitigated, or they will say this is a significant adverse impact and EIS is required.

Now, for the current portion, they've decided that this is non-significant, so no EIS is required, and they have look at each unit on its own. I don't understand even if Ecology thinks that they can do that, I don't understand why you wouldn't look at it as one since it's all leaking to the same place anyway. And so there are 37 units, including 2 units which address areas that have already leaked, and 4 units which have received a determination of significance, but that doesn't matter because they won't be touched for the next 10 years.

There is one unit that is in high quality habitat and a plan for that doesn't need to be given until 180 days before they will start working on that, so we don't know what that is and no one else does, either, at this point. Trenches 31 and 34 are both required for mitigation, but there's no clear plan as to what exactly that will look like. And then, the central waste complex also, things are stored improperly, there have been confirmed releases and no plan is required until 30 days after the permit. So, I don't know what that looks like and no one else does, either.

So, the purpose of review here is to help Washington make an informed decision about what action to take, and when things are being listed as mitigated before the plant has actually been seen, it just makes it hard to think that that's actually happening. Thanks.

Moderator: Would you like to leave the slides as a written comment?

David Mac: Sure.

Moderator: Is there a way to get those?

David Mac: Yeah.

Moderator: That was the last of the original speakers. If Mr. Bill Johns is still here and would like to repeat his testimony, I apologize and I appreciate your willingness.

You're good to go.

Bill Johns: Bill Johns, 12608 South Scribner Road Cheney, 99004. Like I said before, I like that it's a living document. That idea's a good one with such a complex project. I believe in the cap and cover is effective, it's been used all over the state, and by the way, in landfills. What you do is you put down like a sand, then a membrane, and then soil on top to protect that membrane.

And in the landfills I've been with, we do not know what's in those landfills. It's not just garbage. It's not just household garbage. They were here from the turn of the century and we haven't found contaminants in the wells around them.

I believe we should take in waste at Hanford, but collect money for it and put that money back against the cleanup since the feds, that money's starting to dry up. I think we should do the most critical first and not just things for show, which it seems sometimes is done there. I'd like it toward the things that are considered critical.

Also, I think that sometimes down there, because it's so complex, it gets caught up in its own process and I've been receiving emails on the sanitary [?sewer lagoon 18:26], which there's hundreds of them all over the state of Washington. And if it took the permitting it's taking down there, I don't know if we'd ever built any at the small cities around this state. And that's it. Thanks.

Moderator: Thank you.

Linda Green?

Linda Green: My name is Linda Green. I live at 15313 East Jacobs Road, Spokane, 99217. As far as cap and cover is concerned, if there is waste that was capped and covered in the early 1900s or the 1950s or the 1970s, it still isn't the same thing as radioactive waste. I mean, the effects from a radioactive waste can be seen thousands of years from now. If somebody buried something in 1900, that's only 112 years ago. I mean, that's nothing as far as radioactivity is concerned.

I have been -- it seems like I've been testifying about this subject for some time. It seems like every year or so we have hearings about what should be done at Hanford? And people always say the same thing, it should be cleaned up, and there's really not a big question about that. It seems like we're spending a lot of money on hearings when we could be actually spending it on cleaning it up.

I ask that we do not make Hanford a waste dump for any more nuclear waste. Hanford already has too much waste. Real progress has not been made on storing the current waste in an environmentally safe manner. Before any waste is brought into Hanford, the huge amount of nuclear residue on this site already should be entirely cleaned up. There is no end in sight as to when this will actually occur. Agreed upon dates and timeline for cleanup have been pushed back time and time again. There should be no delays of the cleanup schedule and no room for the change of the timeline. Now, supposedly, it's going to be 2022 when we get the vitrification plant and I neglected to say the first time around that since the permit says that offsite waste can go into Hanford as soon as the waste treatment plant is operational, it doesn't say that it can't go in the day that it's operational and they haven't cleaned up the stuff that's already there, they're just going to bring in more stuff while the stuff that's there hasn't been treated yet, which doesn't make any sense to me. I think you have to have it all vitrified before any other waste would possibly come there.

Anyway. Hanford is a poor choice for a repository in the first place. Since it currently has nuclear waste, it makes sense for it to be vitrified and stored at that location. However, any new nuclear waste should be kept in the location where it has been produced. If that is not possible, it should be stored in a place far from any ground water used as drinking water for thousands of people. It is immoral to put the repository in a place where people are put at risk.

I understand that much of the waste proposed to go to Hanford has not yet been produced. In that case, I suggest that it not be produced in the first place. Nuclear weapons, obviously, should not be produced in the first place, and nuclear energy is a dangerous, polluting, and expensive source of energy. I ask that you instead turn your energy to clean energy which will end up being much more economical in the long run and does not harm our environment.

Moderator: Thank you. Before we close the formal testimony, I would like to extend the opportunity for anyone else who wants to offer formal comments to the record tonight to do so now.

All testimony received at this hearing along with all other testimony and comments received will be part of the official hearing record for this proposal. Our next step is for Ecology staff to review all written and oral comments and compile the Response to Comments. On behalf of the Department of Ecology, thank you for coming tonight, I appreciate your cooperation and your courtesy. This hearing is formally adjourned at 8:31 PM.

[END OF HEARING 23:27]