



DEPARTMENT OF  
**ECOLOGY**  
State of Washington

## **Response to Comments**

**207-A South Retention Basins Closure Plan  
Permit Modification Request for the  
Hanford Facility Resource Conservation and  
Recovery Act Permit, Dangerous Waste  
Portion, Revision 8c, for the Treatment,  
Storage, and Disposal of Dangerous Waste -  
June 30 through August 28, 2015**

**Draft Hanford Facility Dangerous Waste  
Permit, Revision 9 - May 1 to October 22,  
2012 [Specific to 207-A South Retention  
Basins Closure Unit Group 9 (CUG-9)]**

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*Summary of a public comment period and responses to comments*

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Ecology publishes this document to meet the requirements of [Washington Administrative Code 173-303-840 \(9\)](#).

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# **Response to Comments**

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**207-A South Retention Basins Closure Plan  
Permit Modification Request for the Hanford Facility  
Resource Conservation and Recovery Act Permit,  
Dangerous Waste Portion, Revision 8c,  
for the Treatment, Storage, and Disposal of  
Dangerous Waste - June 30 to August 28, 2015**

**Draft Hanford Facility Dangerous Waste Permit,  
Revision 9 - May 1 to October 22, 2012  
Comments specific to 207-A South Retention Basin  
Closure Unit Group 9**

Department of Ecology  
Nuclear Waste Program  
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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 requested, a public comment period is held 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 responds to comments received during the two comment periods that are described in the next section.

This Response to Comments will:

- Describe and document public involvement actions in support of the two public comment periods.
- List and respond to all significant comments received during the two public comment periods.

### **This Response to Comments is prepared for:**

Comment periods: 207-A South Retention Basins Closure Plan Permit Modification Request for Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion, Revision 8c, for the Treatment, Storage, and Disposal of Dangerous Waste Revision 8c, June 30 – August 28, 2015

Draft *Hanford Facility Dangerous Waste Permit*, Rev. 9 (specific to comments received on 207-A South Retention Basins Closure Unit Group 9), May 1 – October 22, 2012

Permit: *Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion, Revision 8c, for the Treatment, Storage, and Disposal of Dangerous Waste (WA 7980008967)*

Permittees: *United States Department of Energy (USDOE) and CH2M HILL Plateau Remediation Company (CHPRC)*

Original issuance date: *September 27, 1994*

To see more information related to the Hanford Site and nuclear waste in Washington, please visit our website: [www.ecy.wa.gov/programs/nwp](http://www.ecy.wa.gov/programs/nwp).

## REASON FOR MODIFYING THE PERMIT

The 207-A South Retention Basins (207-A SRB) is not currently in the *Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion for the Treatment, Storage, and Disposal of Dangerous Waste, Revision 8c (Permit Rev 8c)*. A permit modification is required to add it to the permit.

## **207-A SOUTH RETENTION BASIN PUBLIC COMMENT PERIOD HISTORY**

### **Public Comment Period for draft *Hanford Facility Dangerous Waste Permit, Rev. 9***

From May 1 through October 22, 2012, Ecology's NWP held a public comment period on the renewal of the draft *Hanford Facility Dangerous Waste Permit, Rev. 9 (Draft Permit, Rev 9)*. The draft permit included all Hanford Facility unit groups. The 207-A South Retention Basin was originally anticipated to be added in the Draft Rev 9 permit as Closure Unit Group 9.

During that comment period, Ecology received more than 5,000 comments from the public, the U.S. Environmental Protection Agency (EPA), and the Permittee. Some of those comments were specific to the 207-A South Retention Basins.

Since 2012, NWP has been working with the EPA and Ecology's Hazardous Waste and Toxics Reduction program to respond to public comments and develop guidance for reviewing and revising the draft permit. We expect this effort to result in a renewed permit that is equivalent with the dangerous waste regulations, consistent with the state-wide dangerous waste program, enforceable, and implementable. However, the efforts to revise the draft permit have taken longer than anticipated.

Because the *Draft Permit, Rev 9* has not been finalized, *Permit Rev 8c*, remains in effect. The 207-A SRB will be added to *Rev 8c instead of Draft Rev 9*.

### **Public Comment Period for Class 3 Permit Modification Request to Permit, Rev 8c**

On June 25, 2015, the U.S. Department of Energy, Richland Operations Office (USDOE-RL) submitted a Class 3 permit modification request to add the 207-A SRB as a closure unit to the *Hanford Facility Resource Conservation and Recovery Act Permit, Dangerous Waste Portion, Revision 8c, for the Treatment, Storage, and Disposal of Dangerous Waste (Permit, Rev 8c)*.

The complete submittal contained the Class 3 permit modification request that included a draft closure plan, a Temporary Authorization (TA) request, and a State Environmental Policy Act (SEPA) checklist.

On July 24, 2015, Ecology granted the Permittees a TA to begin closure activities.

On January 21, 2016, Ecology granted a one-time 180 day extension of the TA, which expires July 22, 2016.

### **Scope of this Response to Comments**

This Response to Comments addresses comments received during both public comment periods:

- The Class 3 permit modification request to add 207-A-SRB to the Permit, Rev 8c. This public comment period ran June 30, 2015 through August 28, 2015.
- The renewal of the draft *Hanford Facility Dangerous Waste Permit, Rev. 9*. This public comment period ran May 1 through October 22, 2012. Only comments specific to 207-A SRB are addressed in this Response to Comments.

## **PUBLIC INVOLVEMENT ACTIONS**

### Class 3 Permit Modification Request – Public Comment Period

NWP and the Permittees encouraged public comment on the 207-A SRB closure plan Class 3 permit modification request, during a 60-day public comment period held from June 30, 2015 through August 28, 2015.

Under [WAC 173-303-830\(4\)\(c\)](#), the Permittee(s) is/are responsible to hold a comment period and a public meeting for Class 3 permit changes. To meet the requirements, the Permittee:

- Emailed advance notice of the comment period to the Hanford-Info email list (the email portion of the Hanford Facility mail list), which had 1,454 subscribers at the time.
- Featured the comment period on its website.
- Mailed a notice announcing the comment period to the 1,953 interested members of the public on the Hanford facility postal mail list.
- Announced the comment period on the online Hanford Events Calendar on June 30, 2015.
- Sent a notice announcing the start of the comment period to the Hanford-Info email list on June 1, 2015.
- Placed an advertisement in the Tri-City Herald on June 30, 2015.
- Held a public meeting on August 5, 2015, at the City of Richland Public Library. One member of the public attended, and comments from the meeting were submitted in writing on August 27, 2015.

NWP hosted the comment period announcements and review materials on our website.

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

- Public notice
- Transmittal letter
- U.S. Department of Energy Richland Operations Office Fact Sheet for the proposed 207-A South Retention Basins Permit Modification Request
- Draft 207-A South Retention Basins Permit Modification Request, which included the Draft 207-A SRB closure plan

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

1. U.S. Department of Energy Richland Operations Office Fact Sheet Public notice (focus sheet)
2. Classified advertisement in the *Tri-City Herald*
3. Notice sent to the Hanford-Info email list
4. Event posted on Ecology website

### Draft Hanford Facility Dangerous Waste Permit, Rev. 9 Public Comment Period

NWP encouraged public comment on the Hanford Facility Dangerous Waste Permit, Rev. 9 during a comment period held May 1 through October 22, 2012. We took the following actions to inform the public:

- Mailed a public notice announcing the comment period to 1,680 interested members of the public on the Hanford facility postal mail list.
- Distributed copies of the public notice to members of the public at Hanford Advisory Board meetings.
- Placed a public announcement display advertisement in the *Tri-City Herald* and *Willamette Week* on May 1, 2012.
- Sent a notice announcing the start of the comment period to the 1,496 subscribers on [Hanford-Info email list](#).

Ecology held seven 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 in Spokane
- June 6, 2012, 6:30 pm at the Richland Public Library in Richland
- August 7, 2012, 5:30 pm at the Richland Public Library in Richland, and via webinar to anywhere.
- September 13, 2012, 7:00 pm at Ambridge Event Center in Portland
- September 19, 2012, 7:00 pm at Seattle Center in Seattle

More than 5,000 comments were collected during 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 draft Hanford Facility Dangerous Waste Permit, Rev. 9
- Draft Permit

**LIST OF COMMENTERS**

**Commenter Identification:**

The table below lists the names of organizations or individuals who submitted a comment on the 207-A South Retention Basin Permit modification and where you can find Ecology’s response to the comment(s).

<b>Revision 8c Public Comment Period - June 30 to August 28, 2015</b>			
<b>Commenter</b>	<b>Organization</b>	<b>Comment Number</b>	<b>Page Number</b>
<i>Conlan, Mike</i>	<i>Citizen</i>	<i>1</i>	<i>6</i>
<i>Divine, James R, PhD, PE, FNACE</i>	<i>Citizen</i>	<i>2</i>	<i>7</i>
<i>Jim, Russell</i>	<i>ERWM Program Manager for Yakama Nation</i>	<i>3-71</i>	<i>7-34</i>
<i>Kroening, Nancy</i>	<i>Citizen</i>	<i>72</i>	<i>34</i>

<b>Revision 9 Public Comment Period - May 1 to October 22, 2012</b>			
<b>Commenter</b>	<b>Organization</b>	<b>Comment Number</b>	<b>Page Number</b>
<i>Jim, Russell</i>	<i>ERWM Program Manager for Yakama Nation</i>	<i>74-102</i>	<i>34-49</i>
<i>Permittee/Operator</i>	<i>United States Department of Energy</i>	<i>103-114</i>	<i>49-56</i>

## RESPONSE TO COMMENTS

### Description of Comments:

Comments are listed by commenter. When possible, one response has been written for multiple comments with similar questions.

Comments in this document are divided into two sections. The first section contains comments received by NWP on the 207-A SRB closure plan from June 30 through August 28, 2015. The second section contains comments received on 207-A SRB, Closing Unit Group 9, during the public comment period on draft *Hanford Facility Dangerous Waste Permit*, Revision 9 from May 1 through October 22, 2012.

Both sections provide summaries of comments NWP received during the two public comment periods and our responses, as required by [RCW 34.05.325\(6\)\(a\)\(iii\)](#). Each comment is addressed separately. The NWP's responses directly follow each comment in italic font. Verbatim copies of all written comments are attached in [Appendix B](#).

### Section 1 - Comments From Public Comment Period (June 30 To August 28, 2015)

#### Comment # 1 from Mr. Mike Conlan, Citizen, dated July 15, 2015:

- “1) Remove all nuclear waste,
- 2) Do not allow anymore nuclear waste into the facility,
- 3) Replace all the single storage tanks,
- 4) Stop all the nuclear leakage entering the Columbia River.”

**Ecology Response:** *Thank you for your comment.*

1. *Ecology is working to ensure that long-term storage, treatment, and disposal of the waste is protective of human health and the environment.*
2. *The proposed permit changes are not to allow new waste, but to better manage the waste already at Hanford.*
3. *Single-shell tanks are not in the scope of this comment period. Ecology does agree the tanks pose a threat. We believe a better approach to addressing it is to remove the waste from the single-shell tanks and put it in the compliant double-shell tanks to prepare for eventual treatment in the Waste Treatment and Immobilization Plant now being built.*
4. *Stopping any potential nuclear waste from impacting the Columbia River is not within the scope of the closure plan for 207-A SRB. Prevention of surface water impacts is addressed via operations associated with other units.*

**Comment # 2 from Dr. James R. Divine, Citizen, dated July 5, 2015:**

“Just curious.

In the Background, 3rd sentence you say: “Each of the three cells had a 70,000-gallon design capacity and was 55 feet long and 10 feet wide at the bottom and 7 feet deep.”

Assuming a rectangular cell, each was only 28,800 gallons. I assume therefore that the cells are trapezoidal with the top nearly 40 feet wide or the 70,000 gallons refers to total capacity.

Any comments?”

***Ecology Response:** Thank you for your comment. The physical description of the storage cells has been clarified in the closure plan. The design-capacity of each storage cell was 70,000 gallons, for a total capacity of 210,000 gallons. The storage cells are generally trapezoidal in shape.*

**Comment # 3 from Russell Jim, Yakama Nation, dated August 27, 2015:**

[Factsheet]: “YN suggest inclusion of the required WAC 173-303-830(4)(c)(ii)(F) statement: “The permittee’s compliance history during the life of the permit being modified is available from the department of ecology contact person.”

With Ecology’s publication of draft document, YN suggests Ecology ensure all hyperlinks to referenced documents are active; the Part A form is available; and links to the 242-A Evaporator provided; explanation given to process of sending RCRA wastes to ERDF; explanation of why this is considered a DOE time critical removal action.”

***Ecology Response:** Thank you for your comment. Regarding inclusion of [WAC 173-303-830\(4\)\(c\)\(ii\)\(F\)](#), comment is noted. Added hyperlinks where technically feasible.*

**Comment # 4 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“**General concerns:** To meet the requirements to propose a Class 3 modification to the Hanford Facility RCRA permit, per WAC 173-303-830(4)(c)(i)(D) the permittee should have provided the applicable information required by WAC 173-303-806 for the 207-A-SRBs. WAC 173-303-806 states the requirements for final facility permit applications including Part A & Part B information. All this information was and remains vitally important for proper operations and/or closure of any treatment, storage, or disposal (TSD) unit, and protection of human health and the environment. Unfortunately, none of which have been approved through the Dangerous Waste Permitting process.

WAC 173-303-806(4)(d) lists the required information specific to surface impoundments. Regulations of importance to the proposed modification are found in 173-303-806(4)(d)(vi)&-(vii). These directly reference the -806(4)(a) requirements which state the requirements for a description of how dangerous waste residues and contaminated materials will be removed and the requirement for a contingency plan (see WAC 173-303-650(5) & -(6) and WAC 173-303-610 for more clarification). The unit was not designed/constructed in compliance with WAC 173-303-650 requirements. The statement that “during construction of the basin, a Hypalon® liner was installed first’ does not meet the requirements for a liner system. No leak detection systems were in place and there has never been RCRA compliant groundwater monitoring plan for the facility.

Upon review, the simplistic approach in DOE/RL-2005-89, Rev 1 falls short of providing the required information necessary for Ecology to establish permit conditions in compliance with the Hazardous Waste Management Act and WAC 173-303. Each permit issued under this chapter must contain terms and conditions as the director determines necessary to protect human health and the environment.

As currently written, there is approximately one page (pg. 13) to describe in detail Personnel Training Preparedness, Inspection and Sampling procedures. One cannot credibly determine compliance with WAC 173-303-610 requirements to have a detailed, complete closure plan (which should and does not, include a specifically detailed closure activity with complete removal of wastes in 180 days) given the limited details presented in this Closure Plan.”

***Ecology Response:*** Thank you for your comment. Section 6.3 of the Hanford Federal Facility Agreement and Consent Order (89-10, Rev. 8) describes the closure process for TSD units that are closing. The first paragraph states “The DOE will follow applicable Federal and State statutes, regulations and guidance documents, and written policy determinations that pertain to the closure process for TSD groups/units.”

The liner system was installed in 1977 during construction of the 207-A SRB, and appears consistent with requirements under [WAC 173-303-650](#) for surface impoundments installed before October 31, 1984.

Training, Preparedness, Inspection and Security are addressed in the closure plan and not as separate addenda. The revised closure plan contains additional details regarding closure activities. The Permittees transmitted a revised Part A to Ecology on January 28, 2016.

**Comment # 5 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Introduction:

1. The introduction does not mention that there is environmental information related to this unit contained DOE/RL-2004-25, Remedial Investigation Report for the 200-PW2-Uranium-Rich Process Waste Group and the 200-PW-4 General Process Condensate Group Operable Units; DOE/RL-200-60, Uranium-Rich/General Process Condensate and Process Waste Group Operable Unit REFS Work Plan and groundwater data contained in the Hanford Environmental Information System (HEIS). Discussion (and those in subsequent Sections) does not include the following source sites or associated contaminants (which the 200 Area RI/FS implementation Plan indicates the possibility of this type of steam waste reaching the associates crib(s) [216-A-37-1]): U and T plants; the Reduction Oxidation (REDOX) Facility; the Plutonium-Uranium Extraction (PUREX) Plant; the Hot Semiworks Facility (C Plant); other tank farm related facilities’ (S and A Tank Farm) condensates. YN requests inclusion of this information (and radionuclide contaminants of concern) in the Introduction for document continuity and comprehensive public understanding of the entire system processes. YN also requests updates to Figure #2 to include these source sites.”

***Ecology Response:*** Thank you for your comment. 207-A SRB received process condensate only from the 242-A Evaporator. The data contained in DOE/RL-2004-25 was used in part for

*determining the contaminants of potential concern (COPCs) for closure verification sampling in soil. However, the closure plan submitted by the Permittees is limited in scope to addressing dangerous waste (non-radiological) COPCs.*

*Neither the Resource Conservation and Recovery Act of 1976 (RCRA) nor the Dangerous Waste Regulations grant Ecology the authority to regulate radioactive materials, and Ecology cannot require the Permittees to address radiological COPCs in this closure plan. The Permittees have the option of addressing the radiological components under their authority granted by the Atomic Energy Act of 1954, as amended, or under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA).*

**Comment # 6 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Introduction:

2. It does not discuss how non-TSD unit constituents will be addressed through the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) past practice processes identified in the Tri-Party Agreement (Section 7.0). YN requests inclusion of this information (and radionuclide contaminants of concern) in the Introduction for document continuity and comprehensive public understanding of the entire system processes.”

**Ecology Response:** *Thank you for your comment. 207-A SRB is anticipated to clean close under [WAC 173-303](#). The revised draft closure plan does not propose alternative requirements to close the 207-A SRB. The closure plan submitted by the Permittees is limited in scope to addressing dangerous waste (non-radiological) COPCs.*

*Neither RCRA nor the Dangerous Waste Regulations grant Ecology the authority to regulate radioactive materials, and Ecology cannot require the Permittees to address radiological COPCs in this closure plan. The Permittees have the option of addressing the radiological components under their authority granted by the Atomic Energy Act of 1954, as amended, or under CERCLA.*

**Comment # 7 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Introduction:

3. YN requests deletion or edit of lines #s21 thru 31 to clarify the final status permitting requirements for the 242-A Evaporator and to include the following text from the 242-A Evaporator Part A form; *The waste fed to the 242-A Evaporator is regulated as a mixed waste with the same waste constituents as the waste in the DST system.*”

**Ecology Response:** *Thank you for your comment. The draft Part A and the draft closure plan indicate that the process condensate was mixed waste. The draft closure plan has been revised to identify the source of the 242-A Evaporator process condensate as the double-shell tanks. Components of the process condensate are listed in the closure plan.*

**Comment # 8 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Introduction:

4. YN suggest inclusion of the following clarifying text to simplify lines #26-31: Where information regarding treatment, management, and disposal of the radioactive source, byproduct material, and/or special nuclear components of mixed waste (as defined by the Atomic Energy Act of 1954, as amended) has been incorporated into this permit, it is not incorporated for the purpose of regulating the radiation hazards of such components under the authority of this permit and chapter 70.115 RCW. However, it is anticipated remedial actions for radioactive constituents shall be consistent with the closure activities required under WAC 173-303.”

**Ecology Response:** *Thank you for your comment.*

*The closure plan submitted by the Permittees is limited in scope to addressing dangerous waste (non-radiological) COPCs.*

*Neither RCRA nor the Dangerous Waste Regulations grant Ecology the authority to regulate radioactive materials, and Ecology cannot require the Permittees to address radiological COPCs in this closure plan. The Permittees have the option of addressing the radiological components under their authority granted by the Atomic Energy Act of 1954, as amended, or under CERCLA.*

**Comment # 9 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Introduction:

5. YN requests deletion of portion of line #7; ‘and represents the baseline for closure and the enforceable compliance requirements for conducting closure.’ Closure plans must comply with the WAC 173-303-610 requirements; closure plans do not ‘simply represent a baseline for closure’ as stated. WAC 173-303-610(3)(iv thru vi) requires more information and details which are not included in this document.”

**Ecology Response:** *Thank you for your comment.*

*Regarding “baseline for closure,” the phrase has been deleted from the draft closure plan.*

*[WAC 173-303-610](#) is referenced in multiple locations in the draft closure plan. Additional detail has been added to the draft closure plan.*

**Comment # 10 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 1.1:

1. YN requests more details as to the design of the facility. References should be provided along with a more accurate diagram than what is provided in Figure #3. The statement is made that no leaks have been reported from the basin during inspections, etc., yet there is nothing substantively presented to be able conclude the construction, as described, would preclude this from occurring.”

**Ecology Response:** Thank you for your comment. Details have been added, and drawing H-2-90783 provides additional 207-A SRB construction information.

**Comment # 11 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 1.1:

2. YN requests additional information regarding installation of a Hypalon® liner. Previously submitted information does not include this detail.”

**Ecology Response:** Thank you for your comment. Additional 207-A SRB construction details are included in drawing H-2-90783.

**Comment # 12 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 1.1:

3. YN requests updates to Figure #1 to include information regarding TPA change request C-07-02.”

**Ecology Response:** Thank you for your comment. The TPA change request C-07-02 is out of scope for this closure plan. However, the 207-A SRB is being added to the Site-wide Permit, Revision 8c.

**Comment # 13 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 1.2:

1. YN requests more detailed description of operations of the facility (e.g., details regarding the pumps and pumping station, waste transfers, spill history, etc.).”

**Ecology Response:** Thank you for your comment. The closure plan has been revised to include additional details regarding the pump pit and piping. Historical soil data suggests that no release has occurred. Preliminary closure soil sampling results suggest that no release has occurred.

**Comment # 14 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 1.2:

2. YN requests inclusion of the 207-A central pump pit and associated piping (supporting the south basin system) to the Closure Plan and included in the facility description on the Part A Form Section XI (see WAC 173-303-650(2)(d)).”

**Ecology Response:** Thank you for your comment. The pump pit is not part of the 207-A SRB. However, the piping between the pump pit and the storage cells was included with the 207-A SRB and has been removed.

**Comment # 15 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 1.2:

3. YN requests inclusion of a simplified explanation of the closure path of the 207-A North Retention Basin for and public understanding of the entire system processes.”

**Ecology Response:** *Thank you for your comment. Process condensate went from the 242-A Evaporator to the 207-A SRB, and 242-A Evaporator steam condensate went to the 207-A NRB. The 207-A NRB is not a dangerous waste management unit (e.g., surface impoundment), and is out of scope for the 207-A SRB draft closure plan.*

**Comment # 16 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 1.3:

In addition to the contaminants listed, DOE documents DOE/RL-2004-25 DRAFT A (i.e., RI) and DOE/RL-2004-85 DRAFT A (i.e., FS), identify the following chemicals as threats or potential threats to human health through the pathway of soil to groundwater: Arsenic, Nitrate/nitrite, 2-(2,4,5-trichlorophenoxy) propionic acid, 2,4-dichlorophenoxyacetic acid. The permittee also identified the following contaminants threatening ecological receptors through the soil pathway: 2-(2, 4, 5-trichlorophenoxy) propionic acid, 2,4-dichlorophenoxyacetic acid, Arsenic, Butyl benzyl phthalate, Silver. In the feasibility study (DOE/RL-2004-DOE proposed to exclude the following from the list of contaminants of concern (there are either human health or ecological contaminants of concern): 2-(2, 4, 5-trichlorophenoxy) propionic acid, 2, 4-dichlorophenoxyacetic acid, Arsenic, Butylbenzylphthalate, Nitrate/nitrate, Silver. The permittee also identified the site having the following radiological inventory threatening ecological receptors through the soil pathway: Actinium-228, Bismuth-212/214, Lead-212/214, Niobium-94, Thallium-208, Thorium-230/234. The 207-A SRB is not listed as associated with a CERCLA operable unit (OU) to remediate radiological hazards (However, it is anticipated remedial actions for radioactive constituents shall be consistent with the closure activities required under WAC 173-303). YN requests all these analytes as well as Methyl Ethyl Ketone, Methyl Isobutyl Ketone, Tributyl phosphate, Trichloroethane, be included in the Table 1-Target Analytes. YN also requests carbon tetrachloride and chloroform be listed in Table 1 as a precaution due to use of a Hypalon® liner. YN also requests these contaminants also be captured on the 207-A SRB Part A form Section XIV.”

**Ecology Response:** *Thank you for your comment. The draft closure plan has been revised to identify carbon tetrachloride and chloroform as possible COPCs in soil in case the Hypalon® liner is degraded at the time of removal. If the liner is not degraded and in good condition at removal, these analyses will not be required.*

*The other non-radiological constituents listed in the comment were sampled in 2003, and concentrations were less than the MTCA Method B cleanup levels for unrestricted land use, except for arsenic. The maximum arsenic concentration was less than the 20 milligram per kilogram (mg/kg) background/cleanup level.*

*The radiological constituents are out of the scope of this closure plan. Neither RCRA nor the Dangerous Waste Regulations grant Ecology the authority to regulate radioactive materials. Additionally, Ecology cannot require the Permittees to address radiological constituents in this closure plan.*

*The Permittees have the option of addressing the radiological components under their authority granted by the Atomic Energy Act of 1954, as amended, or under CERCLA.*

**Comment # 17 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 1.4:

- YN requests more detailed description of how WAC 173-303-310 requirements are to be met.”

***Ecology Response:** Thank you for your comment. Warning signage is present at the 207-A SRB. The 207-A SRB area was chained and now is roped off to prevent unauthorized entry. Additionally, the Hanford Site is patrolled by uniform patrol officers. The Hanford Site is fenced. Security badges are required for all personnel accessing the Hanford Site.*

**Comment # 18 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 1.4:

- YN requests clarification of why security changes are expected and what measures are anticipated to be taken.”

***Ecology Response:** Thank you for your comment. The draft closure plan has been revised to include additional security details.*

**Comment # 19 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 1.4:

- YN suggest inclusion of the following text in addition to edits to Section 1.4: Signs will be posted at public access points to Closure Unit 12 protected area stating, *NO TRESPASSING. SECURITY BADGES REQUIRED BEYOND THIS POINT. AUTHORIZED VEHICLES ONLY. PUBLIC ACCESS PROHIBITED*, or an equivalent legend. In addition, warning signs stating *DANGER– UNAUTHORIZED PERSONNEL KEEP OUT*, or an equivalent legend will be posted at all entrances to the unit. These signs are, or will be, written in English, legible from a distance of 7.6 meters, and visible from all angles of approach.”

***Ecology Response:** Thank you for your comment. Warning signage is present at the 207-A SRB and at the Hanford Site. Additionally, both the unit vicinity and the Hanford Site are patrolled by uniform patrol officers, and these officers guard the gates which provide access to the Hanford Site. The Hanford Site is fenced. Security badges are required for all personnel accessing the Hanford Site. The 207-A SRB is roped off to prevent unauthorized access.*

**Comment # 20 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Chapter 2:

1. YN has repeatedly searched the Administrative Record and failed to obtain a copy of the certified waiver of groundwater monitoring requirements for the 207-A- SRB as well as the cited document *PNNL, 2005, Basis for Waiver of Groundwater Monitoring Requirements for 207-A South Retention Basin*. YN is unable to verify that groundwater has not been adversely impacted. YN requests an active reference link to all documents.”

*Ecology Response: Thank you for your comment. The reference to the cited document and associated language in the closure plan have been deleted.*

**Comment # 21 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Chapter 2:

2. The 207-A SRB was not designed/constructed in compliance with WAC 173-303-650 requirements. YN requests the Closure Plan be updated to include contingent post-closure care and maintenance per WAC 173-303-650(6)(c)(i) and WAC 173-303-610(8).”

*Ecology Response: Thank you for your comment. The construction of 207-A SRB appears consistent with [WAC 173-303-650\(2\)](#), for surface impoundments constructed before October 31, 1984. If the 207-A SRB cannot be clean closed, a post-closure and groundwater monitoring plan would be required per permit condition V.5.B.5.*

**Comment # 22 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Chapter 3:

- Section 6.3.1 is the more important Section to reference as the 207-A SRB must close under requirements of WAC 173-303-10. YN suggests you delete reference to Section 5.3 and descriptive text regarding ‘interim status TSD unit closure’. The site is a final status permitted facility and this language only muddles public understanding.”

*Ecology Response: Thank you for your comment. Applicable sections of the Tri-Party Agreement (TPA) are already referenced in the closure plan. The term “interim status” has been deleted from the draft closure plan.*

**Comment # 23 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Chapter 3:

- YN requests correction to pg. 6, lines #s 3 & 4 text to state: “clean closure must demonstrate (*and include documentation*) that unit operations did not adversely affect soils *and that groundwater has not been adversely impacted, as described in WAC 173-303-645.*”

**Ecology Response:** Thank you for your comment. The anticipated outcome for the 207-A SRB closure is clean closure. If found, analytical concentrations in soil exceeding the applicable MTCA Method B cleanup levels would confirm a release. If clean closure cannot be achieved, Ecology would require a post-closure and groundwater monitoring plan.

**Comment # 24 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Chapter 3:

- YN requests edits to pg. 6, line 7-29 to reflect the direct language as cited in WAC 173-303-610(2)(a)(i)-(iii) (e.g., #3>Returns the land to the appearance and use of surrounding land areas to the degree possible given the nature of the previous dangerous waste activity.) YN disagrees with statements in lines #s 25-27 that appearance of the land should be consistent with future land-use determinations for adjacent portions of the 200 Areas as an industrial-exclusive portion of the Hanford Site.”

**Ecology Response:** Thank you for your comment. The closure plan was revised to provide the exact regulatory language. At this time, the 200 East Area, in which the 207-A SRB is located, is and will likely continue to be categorized as industrial.

**Comment # 25 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Chapter 3:

- YN request edits to pg.6, line #13. Delete the quotation marks, as this is not a direct quote of the regulations of WAC 173-303-610(2)(b)(i). Additionally, define the model being used under WAC 173-340-747. See comments on Table 4.

**Ecology Response:** Thank you for your comment. The closure plan has been revised to delete the quotation marks. The Permittees followed the requirements established in MTCA under [WAC 173-340](#), and used direct comparison of analytical results to cleanup values.

**Comment # 26 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Chapter 4:

YN requests edits to pg 7, line 2-4 read as follows: The objective of the sampling described in this document is to determine if MTCA unrestricted used standards for soil-direct contact and soils protective of groundwater have be met after removal of the 207-A SRBs. It is a run-on sentence, and authority to determine if clean closure has been met resides with Ecology.

**Ecology Response:** Thank you for your comment. The objective of the soil sampling is to determine if a release from the 207-A SRB has occurred. Permittees propose comparison of analytical values to the MTCA Method B unrestricted land use cleanup levels to determine if a release has occurred. Ecology agrees that the authority to determine if a unit can be clean closed rests with the department, as described under [WAC 173-303-610](#).

**Comment # 27 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 4.2:

1. Use of MTCA Method B unrestricted use standards is appropriate but Ecology should not backslide from any earlier, more stringent cleanup levels listed in earlier versions of CLARC or under the various interim records of decision for the Hanford site. YN ERWM PROGRAM and public stakeholder response has consistently requested Ecology to ensure this does not happen.”

**Ecology Response:** Thank you for your comment. Ecology may impose more stringent cleanup levels by Ecology’s determination. Under [WAC 173-340-702\(12\)\(a\)](#), Ecology is directed to use the cleanup levels that apply to a release based on the rules in effect at the time the department issues a final cleanup action plan for a given release. The MTCA Method B cleanup values for unrestricted land use (CLARC values) being compared to soil sampling results are based on current science and available data.

**Comment # 28 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 4.2:

2. Table 4: Table 4 appears to identify as closure performance standards soil direct contact values from the CLARC table listed on WA State Department of Ecology website. Clarification of how values were derived is requested. Furthermore values for soils protective of groundwater vadose are provided in the CLARC table and have not been considered. The lowest value identified should be the Closure Performance Standard (i.e., the cleanup level). YN ERWM PROGRAM requests the following edits to Table 4 (ref; CLARC: Soil Protective Groundwater Vadose @ 25/13 degrees C).
  - a. m-cresol = 2.33 mg/kg
  - b. o-cresol = 2.33 mg/kg
  - c. p-cresol = 2.33 mg/kg
  - d. Methylene chloride = 0.022 mg/kg
  - e. Acetone = 28.9 mg/kg

YN additionally requests Table 4 be updated to include contaminants listed in Section 1.3 comment.

YN additionally requests Table 1, Chapter 6 be updated to include contaminants listed in Section 1.3 comment.

**Ecology Response:** Thank you for your comment. DOE-RL sampled soils at the 207-A SRB in 2003, and submitted these data in DOE/RL 2004-25, Draft A. Analytical concentrations were less than the MTCA Method B unrestricted land use cleanup levels for soil, except for arsenic. The maximum arsenic concentration was less than the 20 milligram per kilogram (mg/kg) background/cleanup level at the Hanford Site.

As the 2003 soil sampling occurred after the last receipt of dangerous waste in 1989, impacts to soil are unlikely, and direct contact cleanup levels are protective of the pathway of greatest risk to

workers. Preliminary closure soil sampling analytical data appears to meet the MTCA Method B direct contact as well as the protection of groundwater cleanup levels.

**Comment # 29 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 4.2:

3. Footnote ‘a’: There are other pathways which must be considered; these are identified in WAC 173-340-740(3). Values for ecological (biota and plants) were not considered. YN ERWM PROGRAM suggests the protection of ecological receptors could be achieved through one of the following methods:
  - a. Excavation of contaminated soil to a minimum of 15 feet below ground surface, or
  - b. Excavation of contaminated soil such that residual soil concentrations do not exceed ecological screening levels listed in WAC 173-340-900 (Table 749-3).”

*Ecology Response: Thank you for your comment. No release has been confirmed at this time, and ecological receptors are not at risk if there is no release. Excavation of contaminated soils is addressed in the closure plan.*

**Comment # 30 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 4.2:

4. The 207-A SRB was not designed/constructed in compliance with WAC 173-303-650 requirements. YN requests there be no delay in the submittal of a post-closure plan and requests the Closure Plan be updated to include contingent post-closure care and maintenance requirements per WAC 173-303-650(6)(c)(i) and WAC 173-303-610(8). YN requested edits to pg. 7, lines 35-40 to reflect inclusion of this information.

*Ecology Response: Thank you for your comment. As 207-A SRB was constructed in 1977, it complies with [WAC 173-303-650](#) for those requirements for surface impoundments installed prior to October 31, 1984.*

*If the 207-A SRB cannot be clean closed, a post-closure plan and groundwater monitoring plan will be required by permit condition V.5.B.5.*

**Comment # 31 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Chapter 5:

1. YN recognizes some details are presented, however, there is a lot of uncertainty in how the work will actually be performed and request additional information is provided overall. YN suggest the Permittee revisit Ecology’s Publications #s 05-04-008 & 94-111 to assist in updated this closure plan.

*Ecology Response: Thank you for your comment. Ecology Publication 94-111 is referenced in Section 4. Dictating detailed and specific demolition and excavation procedures which the Permittees might use to achieve clean closure is outside Ecology’s authority.*

**Comment # 32 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 5.1-5.1.5:

1. YN requests a detailed excavation design, and excavation work plan be attached as an Addendum to the Closure Plan. The excavation work plan shall also include a schedule for excavation work activities, as well as a treatment plan (to include a waste analyses plan, types of equipment that will be used for treatment, how the treatment process will be conducted, how success or completion of treatment will be verified, what sort of safety equipment or procedures will be used, etc.) for excavated soils in accordance with WAC 173-303-610(3)(a) as necessary to meet Waste Acceptance Criteria at the Environmental Restoration Disposal Facility or other RCRA permitted facility.

*Ecology Response: Thank you for your comment. No treatment is anticipated to occur for wastes during the 207-A SRB demolition and excavation. Waste receipt at the Environmental Restoration and Disposal Facility (ERDF) has been approved. However, dictating the specific excavation procedures which the Permittees might use to achieve clean closure are outside Ecology’s authority.*

**Comment # 33 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 5.1-5.1.5:

2. YN notes the proposed total footprint for clean closure activities does not seem consistent with all the activities described. There is no discussion of an Area of Contamination (AOC) within this closure plan. YN requests that there be no soils placed outside the cells but directly into ERDF containers. YN request that no bulk containers or 55 gallon drums (see Sections 5.2.3.1 & 5.2.3.2) be stored/staged adjacent to the basin. If there is to be an AOC, YN requests information be included in the Closure Plan as to how WAC 173-303-395 requirements will be met as well as WAC 173-303-630 requirements.”

*Ecology Response: Thank you for your comment. The use of a temporary loading stockpile and associated sampling requirements are identified in the draft closure plan and draft permit conditions.*

**Comment # 34 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 5.1-5.1.5:

3. YN requests additional information in Section 5.2.4 as to how treatment to meet WAC 173-303-140 (LDRs) will be performed (see comments regarding footprint size). YN requests also request additional information in Section 5.2.4 regarding application of debris standards, etc.”

*Ecology Response: Thank you for your comment. No treatment is anticipated to be used at the 207-A SRB. No debris are anticipated to remain in place.*

*Preliminary soil data suggests that all contaminated soils have been removed and, thus, landfill disposal restrictions are not applicable. Analytical samples may leave the Hanford Site, but all*

*other waste is anticipated to stay at the Hanford Site. Residuals from analysis of samples will conform to the receiving facility's acceptance criteria.*

**Comment # 35 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 5.1-5.1.5:

4. YN suggest edit to run-on sentence pg. 12, line #s 1-4.”

*Ecology Response: Thank you for your comment. The sentence has been revised.*

**Comment # 36 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 5.1-5.1.5:

5. YN requested the 207-A central pump pit and associated piping (supporting the south basin system) be included in the clean closure of the 207-A SBR. Edit text to reflect these will be removed (Sec 5.1.2.1).”

*Ecology Response: Thank you for your comment. The pump pit is not part of the 207-A SRB, as it processed two waste streams from the 242-A Evaporator. The piping between the pump pit and the storage cells is included as part of the 207-A SRB.*

**Comment # 37 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 5.1-5.1.5:

6. YN requests edits to pg. 9, line #s 11 and 21 and reflect final excavation footprint depth will be 15ft and additional soil removal maybe performed to meet clean closure performance standards.”

*Ecology Response: Thank you for your comment. Analytical results for soil indicate contamination is present, additional excavation is the primary option. Excavation is proposed to a depth sufficient to confirm clean closure. However, analytical concentrations in soil sampled exceeding MTCA Method B cleanup levels for unrestricted land use will need to be identified in order to warrant additional excavation.*

**Comment # 38 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 5.1-5.1.5:

7. YN requests clarification as to what is the intention of Section 5.1.5 and how this correlates to the statements that “the basin will be backfilled and revegetated.”

*Ecology Response: Thank you for your comment. Backfilling of the excavation is anticipated to be completed once the 207-A SRB is certified clean closed.*

**Comment # 39 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 5.1-5.1.5:

8. YN requests additional details as to how storm water run-on and run-off controls will be implemented; the sampling of any liquids present in the basins; procedures for cleaning/decontamination of equipment.”

***Ecology Response:** Thank you for your comment. Ecology believes sufficient detail is provided in sections 4.5.1, 4.5.1.2, and 4.5.1.4 of the closure plan to address this comment. Additionally, the Temporary Authorization (TA) issued by Ecology on July 24, 2015, states that any liquid wastes generated during the closure process are required to “be containerized and sampled for laboratory analysis in order to characterize liquid waste prior to disposal.”*

**Comment # 40 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 5.1-5.1.5:

9. YN clarification as to use of the word containers throughout Chapter 5; in some instances the word is understood to mean a 55-gallon drum and other cases, an ERDF roll-off box.”

***Ecology Response:** Thank you for your comment. The closure plan has been revised to identify the containers anticipated to be used.*

**Comment # 41 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 5.1-5.1.5:

10. YN request identification of WAC 173-303 and DOT citations throughout Chapter 5, where appropriate.”

***Ecology Response:** Thank you for your comment. The closure plan has been revised to provide additional citations. The Permittees and ERDF maintain tracking documentation for wastes generated, shipped, and disposed.*

**Comment # 42 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 5.2 & 5.3:

1. YN requests additional details in Sections 5.2.2.-5.2.3 as to how compliance with WAC 173-303 will be met. Include more detail with regard to characterization and management as well. YN requests anticipated storage area/facilities to be used be identified by name.”

***Ecology Response:** Thank you for your comment. After submission of the closure plan and termination completion of the Permittees public comment period, the Permittees received approval to dispose of 207-A SRB related wastes at the ERDF. The closure plan has been revised to identify options for disposal of wastes.*

**Comment # 43 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 5.2 & 5.3:

2. YN requests edits to pg. 11, line #11 to delete text: ‘If a container is in poor conditions, etc.’ No containers in poor condition should be used.

*Ecology Response: Thank you for your comment. The closure plan has been revised to specify the anticipated container types to be used and their respective condition.*

**Comment # 44 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 5.2 & 5.3:

3. YN request additional details regarding how DOE will determine potential sources of airborne emissions. Will air monitoring be conducted during excavation activities? Where will air-monitoring stations be located? Provide references to documents governing *DOE radiation control and substantive air pollution control standards*.

*Ecology Response: Thank you for your comment. Radiological monitoring is anticipated to be used at the perimeter of the 207-A SRB during demolition and excavation. Dust and other air emissions are to be managed per Section 4.5 of the closure plan.*

**Comment # 45 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 5.4:

There are portions of the requirements for operating units that are valuable to tailor to, and incorporate details into the closure of the 207-A SRBs. As currently written, there is approximately one page (Section 5.4, pg. 13) to describe in detail Personnel Training, Preparedness and Prevention, Inspection Plans. These plans should be directed towards the ongoing cleanup closure/post-closure actions (e.g., inspections should be on a weekly basis at a minimum.) Any beliefs that *applying all interim status requirements to TSD units not operating and awaiting approval of closure plans is challenging due to funding* does not relieve the Permittee of his obligations under the Dangerous Waste Regulations. YN requests the Closure Plan for the 207-A SRB facility incorporate the required WAC 173-303 information in detail:

- Personnel Training Plan (In accordance with WAC 173-303-330.): Please ensure the following trainings/requirements are included as well:
  - Training related to equipment type [e.g., sampling equipment, operational procedures and equipment maintenance] relevant to task performed.
  - For Samples: Additional training in collecting, packaging & shipping of samples to field & off-site labs (including special requirements for collecting and packaging samples containing volatile organic materials that require acid preservatives or special filtering) and chain of custody procedures.
- Preparedness and Prevention Plan (in accordance with WAC 173-303-340.).
- Inspection Plan (In accordance with WAC 173-303-320.): Please ensure the following information/requirements are included as well:

- Inspections of erosion damage & vegetative cover; to include looking for evidence of animal/pest intrusion such as anthills, termite nests, animal burrows, bird nests, water erosion, etc., that might spread contamination.
- Replacement procedures for emergency & monitoring equipment; to include checking to proper location of these (e.g., air monitoring equipment).
- Surface inspections/security inspections; to include looking for damages to security postings; incorrect barriers, unidentified containers or hazardous wastes, site is free of obvious safety hazards, an evidence of spills or releases, etc. YN has requested no temporary placement of containers, however, should this be allowed, YN requests the information regarding container management to be included in the Inspection Plan.
- Contingency Plan/Contingent Post Closure Plan (to include a groundwater monitoring plan) (In accordance with WAC 173-303-650(6)(c)(i).)

**Ecology Response:** *Thank you for your comment. A release has not been identified associated with 207-A SRB. If the unit is clean closed, any contingency plan and contingent post closure plans would not be necessary.*

*Ecology has determined that the submittal of separate Training, Preparedness, Inspection, and Security addenda are not required for this closure activity. Information pertaining to these four items will be included in, and specific to, the draft closure plan.*

*Various procedures for sampling, decontamination, removal of equipment, and other items will be described or referenced in the closure plan. However, if the 207-A SRB cannot be clean closed, then post-closure requirements apply, as detailed in the draft closure plan and draft permit conditions.*

**Comment # 46 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Section 5.5:

YN requests future consultation regarding this portion of the Closure Plan. Clearly, the Closure Plan does not adequately explain how cleanup will meet the National Historic Preservation Act consultation process, including for example, the specific and concrete steps for how cleanup in the cultural areas will proceed in a manner that prevents disturbances (e.g., specific soil sampling designs to protect artifacts).”

**Ecology Response:** *Thank you for your comment. This comment is out of scope for this closure plan. Cultural Resources were reviewed by USDOE and no impacts to cultural resources were identified.*

**Comment # 47 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Chapter 6:

- YN requests Ecology review and comparison of the parameters from the 200-MG-1 and the 200-PW-2/4 OU waste sites SAPs as input parameters for the soil to determine if these are still appropriate. The 207-A SRB unit was previously in the 200-PW-2/4 OU.”

**Ecology Response:** *Thank you for your comment. Soil sampling data collected as part of a 200-PW 2/4 Operable Unit investigation was considered during the closure plan review process.*

**Comment # 48 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Chapter 6:

- YN requests clarification as to the location and number of sample sites and samples taken. Discussions during the public meeting (August 5, 2015) indicated more than three locations for each basin. Provide a figure of basins (ex. Figure 3) with overlay of the sample sites. Three locations with multiple sampling are unclear to reader.”

**Ecology Response:** *Thank you for your comment. Grid sampling locations are identified in Appendix A of the closure plan.*

**Comment # 49 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Chapter 6:

- YN requests samples are taken to a minimum depth of 6” and at a depth of 15ft. This will help to eliminate ecological concerns.”

**Ecology Response:** *Thank you for your comment. Soil sampling will be completed in accordance with the closure plan. Excavation of any contaminated soils identified by analytical results will be the primary option.*

**Comment # 50 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Chapter 6:

- YN request Sampling and Analysis Plan(s) [per WAC 173-303-610(3)(a)(v)] be consistent with Ecology Publication #09-05-007 [Guidance for Preparing Waste Sampling and Analysis Documents and QA/QC Requirements at Nuclear Waste Sites] and include the following:
- Documentation of the necessary quantity and quality of data for each decision for which sampling and analysis may be required pursuant to conditions of this Chapter. [WAC 173-303-300(1)]
- The parameters for which each environmental media sample will be analyzed and the rationale for selecting these parameters and the frequency with which analysis of a waste will be reviewed, or repeated, to ensure that the analysis is accurate and current. [WAC 173-303-300(5)(a)]
- Procedures for how non-detects, and any tentatively identified compounds which may be reported with laboratory analytical results will be assessed and/or used for decision-making purposes, and to identify any contaminants in addition to those already identified for which establishment of closure performance standards may be warranted. [WAC 173-303-300(5)(a)]

- Analytical methods, including field measurements, which will be used for analysis of environmental media samples. [WAC 173-303-300(5)(b)]
- Methods of obtaining representative samples of soils for all sampling and analysis, which may be, required pursuant to WAC 173-303-110 requirements and consistent with the requirements specified in WAC 173-340-810 and WAC 173-340-820. [WAC 173-303-300(5)(c)]
- A quality assurance/quality control (QA/QC) plan, or equivalent, to document all monitoring procedures to ensure that all information, data, and resulting decisions are technically sound, statistically valid, and properly documented. Each QA/QC plan shall include, or contain a reference to another document, which will be used and includes, the elements as defined. Each QA/QC plan shall contain a Data Quality Assurance Plan which includes the following:
  - Data Collection Strategy section including, but not limited to, the following:
    - A description of the intended uses for the data, and the necessary level of precision and accuracy for those intended uses; and,
    - A description of methods and procedures to be used to assess the precision, accuracy, and completeness of the measurement data;
  - Sampling section, which shall include or describe, and reference or cite:
    - Criteria for selecting appropriate sampling locations, depths, etc. or identification and justification of sample collection;
    - Sampling methods including the identification of sampling equipment and a description of decontamination procedures to be used;
    - Criteria for providing a statistically sufficient number of samples as defined in EPA guidance, or criteria for determining a technically sufficient number of measurements to meet the needs of the project as determined through the Data Quality Objective (DQO) planning process;
    - Methods for, or specification of, measuring all necessary ancillary data;
    - Criteria for establishing, or specification of, which parameters are to be measured at each sample collection point, and the frequency that each parameter is to be measured;
    - Criteria for, or specification of, identifying the type of sampling (e.g., discrete), and a number of samples to be collected;
    - Criteria for, or specification of, measures to be taken to prevent contamination of the sampling equipment and cross contamination between sampling points;
  - Methods and documentation of field sampling operations and procedure descriptions, as appropriate, including:
    - Procedure descriptions and forms for recording the exact location, sampling conditions, sampling equipment, and visual condition of samples;
    - Calibration of field devices (as applicable);
    - Collection of replicate samples;
    - Submission of field-biased blanks, where appropriate;

- Potential interferences present at the facility;
- Field equipment listing and sample containers;
- Sampling order; and,
- Descriptions of decontamination procedures.
- Selection of appropriate sample containers, as applicable;
- Sample preservation methods, as applicable; and,
- Chain-of-custody procedure descriptions as applicable, including:
- Standardized field tracking reporting forms to establish sample custody in the field prior to, and during shipment; and,
- Pre-prepared sample labels containing all information necessary for effective sample tracking, except where such information is generated in the field, in which case, blank spaces shall be provided on the pre-prepared sampling label.
- Certification that all samples obtained for analysis will be delivered to a responsible person, at the recipient laboratory, who is authorized to sign for incoming field samples, obtain documents of shipment, and verify the data entered onto the sample custody records;
- Provision for a laboratory sample custody log; and,
- Specification of chain-of-custody procedures for sample handling, storage, and disbursement for analysis.
- Sample storage procedure descriptions and storage times;
- Sample preparation methods;
- Descriptions of analytical procedures, including:
- Scope and application of the procedure;
- Sample matrix;
- Potential interferences;
- Precision and accuracy of the methodology; and,
- Method detection limits.
- Descriptions of calibration procedures and frequency;
- Data reduction, validation, and reporting;
  - Internal laboratory quality control checks, laboratory performance, and systems audits and frequency, include:
    - Method blank(s);
    - Laboratory control sample(s);
    - Calibration check samples(s);
    - Replicate sample(s);
    - Matrix-spiked samples(s);

- “Blind” quality control;
- Control charts’
- Surrogate samples;
- Each QA/QC plan to include a Data Management Plan, or equivalent, to document and track data and results. [WAC 173-303-380(1)(f)]. This plan should identify and establish data documentation materials and procedures, project or unit file requirements, and project-related progress reporting procedures and documents. The storage location for the raw data should be identified. The plan should also provide the format to be used to record and, for projects, present the validated and invalidated data and conclusions.
- The Data Management Plan should include the following as applicable:
  - A data record including the following:
    - Unique sample or field measurement code;
    - Sampling or field measurement location including surveyed horizontal coordinates and elevation of the sample location, and sample or measurement type;
    - Sampling or field measurement raw data;
    - Laboratory analysis identification (ID) number;
    - Result of analysis (e.g., concentration)
    - Tabular displays, as appropriate, illustrating:
      - Unsorted validated and invalidated data;
      - Results for each medium and each constituent monitored;
      - Data reduction for statistical analysis;
      - Sorting of data by potential stratification factors (e.g., location, soil layer, topography); and,
      - Summary data.
  - Graphical displays (e.g., bar graphs, line graphs, area or plan maps, isopleth plots, cross-sectional plots or transects, three dimensional graphs, etc.), as appropriate, presenting the following:
    - Displays of sampling location and sampling grid;
    - Identification of boundaries of sampling area and areas where more data is required;
    - Displays of concentrations of contamination at each sampling location;
    - Displays of geographical extent of contamination;
    - Aerial and vertical displays of contamination concentrations, concentration averages, and concentration maxima, including isoconcentration maps for contaminants found in environmental media at the Facility;
    - Illustrations of changes in concentration in relation to distance from the source, time, depth, or other parameters;
    - Identification of features affective intramedia transport and identification of potential receptors;

- All data obtained should be made available to Ecology within forty-five (45) days of receipt or after completion of QA/QC activities, if applicable.

**Ecology Response:** Thank you for your comment. Analytical work will be performed in compliance with the guidance set forth in the Hanford Analytical Services Quality Assurance Requirements Document (DOE/RL-96-68, Rev. 4). Analytical methods and procedures will be performed at laboratories that are accredited by the State of Washington.

Section 9.6 of the TPA identifies sampling and analytical requirements. Analytical data delivery schedules are included in section 9.6.6 of the TPA. Soil sample locations and procedures for 207-A SRB closure are discussed in Section 4.6.2 and detailed in Appendix A of the draft closure plan.

**Comment # 51 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Chapter 7:

See #3, Section 5.4 comment:

**Ecology Response:** Thank you for your comment. If required, post closure plans would follow [WAC 173-303-610](#)(7) and (8).

**Comment # 52 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Chapter 8:

For clarity, YN requests a more detailed schedule; see attached example table; edit to include Table 6 information:

Closure Activity Description	Expected Duration <sup>1</sup>
Receipt of final volume of dangerous waste	N/A
Notify Ecology that the Permittee expect to begin closure.	60 days <sup>2</sup>
Remove waste inventory – package all dangerous waste, manifest, and transfer to permitted facility for further storage, treatment and/or disposal	45 days
Visual inspection, survey, and record review	30 days
Complete all closure activities (i.e., structural decontamination and/o removal, analysis of decontamination waste, waste disposal)	90 days
Upon completion of closure, transmit independent qualified registered professional engineer certification to Ecology	60 days

**Ecology Response:** Thank you for your comment. Table 6 has been revised to reflect the use of temporary authorization (TA) and applicable TA extension schedule. Other schedules are to comply with those presented in [WAC 173-303](#).

<sup>1</sup> Time durations are consecutive and are added together.

<sup>2</sup> 60 days prior to receiving last shipment of waste.

**Comment # 53 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Chapter 9:

1. YN request edits to line #s 4-10 to reflect the actual regulatory language.

*Ecology Response: Thank you for your comment. The regulation is incorporated by reference in Section 4.9 of the closure plan.*

**Comment # 54 from Russell Jim, Yakama Nation, dated August 27, 2015:**

2. YN requests the minimum field activities and documents reviewed by the IQPRE include all the supporting documentation listed on page 25. The IQPRE should have a thorough understanding of closure activities.

*Ecology Response: Thank you for your comment. The role of the Independent Qualified Registered Professional Engineer (IQRPE) is to certify that sampling activities were completed in the manner specified by the closure plan. Whether or not clean closure was achieved is determined by Ecology and is not the responsibility of the IQRPE. Additionally, the IQRPE does not have authority to question a procedure or analytical method; the IQRPE only verifies that the samplers followed stated procedures.*

**Comment # 55 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Chapter 10:

See #3, Section 5.4 comment

*Ecology Response: Thank you for your comment. If required, as discussed in permit condition V.5.B.5 and Section 4.10 of the closure plan, post closure plans will follow [173-303-610](#)(7) and (8).*

**Comment # 56 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“Chapter 11:

YN requests inclusion of reference to WAC 173-303-830/840 regulations

*Ecology Response: Thank you for your comment. The regulations noted are incorporated by reference in [WAC 173-303-610](#)(3)(b), as cited in the closure plan.*

**Comment # 57 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure:

YN request inclusion of citation reference WAC 197-11-960 in #1.

*Ecology Response: Thank you for your comment. No change to SEPA checklist.*

*The standard SEPA Checklist form does not cite the governing regulation. (Please paste the following address into an internet browser then choose the SEPA checklist form to view the format: <http://www.ecy.wa.gov/programs/sea/sepa/forms.htm>).*

*Per guidance from Ecology Publication # 02-06-018, SEPA Guide for Project Applicant, item A.1 requires only a proposed project name.*

**Comment # 58 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure:

1. YN requests edits to #6 to include the following information: This SEPA Environmental Checklist is being concurrently with a closure plan [DOE/RL-2005-89, Rev 1] prepared in accordance with Washington Administrative Code (WAC) 173-303 Dangerous Waste Regulations.

**Ecology Response:** *Thank you for your comment. No change to SEPA checklist.*

*The DOE-RL submitted the SEPA checklist with their dangerous waste permit modification request on June 25, 2015. Ecology deemed the checklist to be complete on review. Part A.6 requires information on when the project is expected to begin and end. Closure activities associated with the SEPA checklist are anticipated to be completed within the schedule provided in the closure plan, with one possible 180 day extension, as allowed under [WAC 173-303-830\(4\)\(e\)\(iv\)](#).*

**Comment # 59 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure:

2. YN requests edits to #8 to include the following information (which is also cited in references in the Closure Plan): DOE/RL-2004-025, Remedial Investigation Report for the 2000-PW2 Uranium-Rich Process Waste Group and the 200-PW-4 General Process Condensate Group Operable; DOE/RL-2000-60, Uranium-Rich/General Process Condensate and Process Waste Group Operable Unit RI/FS Work Plan and RCRA TSD Unit Sampling Plan-Including 200-PW-2 and 200-PW-4 Operable Unit groundwater data contained in HEIS. Non-TSD unit constituents will be addressed through the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 past practice processes identified in the Tri-Party Agreement (Section 7.2) for the consolidated 200-PW-2 and 200-PW-4 Operable Units.

**Ecology Response:** *Thank you for your comment. No change will be made to the SEPA checklist.*

*The documents requested address the radioactive components that the USDOE-RL must address per its sovereign authority under CERCLA. USDOE-RL did not prepare the documents requested to close the 207-A SRB dangerous waste management unit, specifically.*

*Ecology regulates the waste management units that are considered dangerous waste treatment, storage and disposal (TSD) units. The documents that the DOE-RL identified for use in the SEPA checklist include environmental information that is relevant to the area around the 207-A SRB. That TSD unit is co-located with several Tank Farms and support facilities and provided direct*

*support to the 242-A Evaporator. Therefore, environmental information prepared for the Tank Farms was considered to be relevant to the 207-A SRB. Both NEPA and SEPA allow documents to be incorporated by reference, rather than repeating the information. Identification of relevant documents meets the SEPA requirements*

*Cleanup levels will use MTCA Method B unrestricted land use exposure assumptions. Ecology suggests that the references to the documents remain in the description.*

**Comment # 60 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure:

3. YN requests edits to #9 to include the following information: DOE/RL has forwarded the aforementioned 207-A South Retention Basin Closure Plan (DOE/RL-2005-89, Rev 1).

***Ecology Response:*** *Thank you for your comment. No change will be made to SEPA checklist.*

*Publication #02-06-018 instructs the applicant to include any permits, funding, or other approvals that have already been applied for that affect the project zone, but are not part of the current proposal. The current proposal is the closure of the 207-A SRB.*

**Comment # 61 from Russell Jim, Yakama Nation, dated August 27, 2015:**

“State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure:

4. YN requests edits to #9 to include the following information: DOE/RL has forwarded the aforementioned 207-A South Retention Basin Closure Plan (DOE/RL-2005-89, Rev 1).

***Ecology Response:*** *Thank you for your comment. No change will be made to SEPA checklist.*

*Ecology publication # 02-05-018 guidance for Item A.9 instructs the applicant to include any permits, funding, or other approvals that have already been applied for that affect the project site, but are not part of the current proposal. The 207-A SRB draft Closure Plan forms the current proposal.*

**Comment # 62 from Russell Jim, Yakama Nation, dated August 27, 2015:**

State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure:

5. “YN requests edits to be included in #11 as follows:
  - a. The 207-A South Retention Basin operated as a surface impoundment.

***Ecology Response:*** *Thank you for your comment. No change will be made to SEPA checklist.*

*Reference to the use of the 207-A SRB as a surface impoundment appears in the checklist on page 4 of 19, in paragraph 2, sentence 5: “Under the definition of surface impoundment ([WAC 173-303-040](#), Dangerous Waste Regulations, Definitions), this unit has no associated*

*ancillary equipment.” However, the piping between the 207-A SRB storage cells and the pump pit was included as part of the 207-A SRB and was removed.*

**Comment # 63 from Russell Jim, Yakama Nation, dated August 27, 2015:**

State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure:

6. “YN noted that there were some paint chips, etc. to the basin surfaces. Please edit this section to include this information.”

**Ecology Response:** *Thank you for your comment. No change will be made to SEPA checklist.*

*Ecology found the SEPA checklist submitted by the applicant to be complete without that level of detail.*

**Comment # 64 from Russell Jim, Yakama Nation, dated August 27, 2015:**

State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure:

7. “Inclusion 207-A central pump pit and associated piping supporting the south basin system as a part of the clean closure actions and to the Closure Plan and Part A.”

**Ecology Response:** *Thank you for your comment. No change will be made to SEPA Checklist.*

*The pump pit is not part of the 207-A SRB closure. The piping running between the 207-A SRB storage cells and the pump pit is part of the 207-A SRB and has been removed. The draft closure plan has been revised to incorporate these details.*

**Comment # 65 from Russell Jim, Yakama Nation, dated August 27, 2015:**

State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure:

8. “Edits to depth of soil removal to at least 15ft”

**Ecology Response:** *Thank you for your comment. No change will be made to SEPA checklist.*

*Additional soil excavation is the primary option should sampling results identify contamination. The total depth of the excavation is anticipated to be sufficient to meet the expectations set forth in the draft closure plan. However, analytical concentrations in soil sampled exceeding MTCA Method B cleanup levels for unrestricted land use will need to be identified in order to warrant additional excavation.*

**Comment # 66 from Russell Jim, Yakama Nation, dated August 27, 2015:**

State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure:

9. “YN requests Ecology consider our comments regarding footprint size, etc.”

**Ecology Response:** Thank you for your comment. No change will be made to SEPA checklist.

Footprint estimates and other details included in Part A.11 of the SEPA checklist are sufficient for the SEPA Checklist.

**Comment # 67 from Russell Jim, Yakama Nation, dated August 27, 2015:**

State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure:

10. “Environmental elements:
  - a. #c: YN requests more identification of soil types
  - b. #e: YN requests identification of backfill materials to be used”

**Ecology Response:** Thank you for your comment. No change will be made to the SEPA Checklist.

#c. In the Tank Closure & Waste Management EIS subsection 3.2.5.1.5 is a description of the soils in the 200 Areas.

#e. Backfill material will be removed from Borrow Pit #30.

**Comment # 68 from Russell Jim, Yakama Nation, dated August 27, 2015:**

State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure:

11. “Air:
  - a. #a: YN requests additional text: DUST from demolition activities will be generated.
  - b. #c: YN requests more information regarding visible dust emissions from active demolition activities, waste usage for dust suppressions, etc.

**Ecology Response:** Thank you for your comment. No change to SEPA checklist required.

Information about typical air emissions that may occur during construction appears in TC&WM EIS Appendix G subsection G.2.1.

The State considers dust emissions as fugitive emissions. Thus, the State requires the USDOE-RL and its contractors to prepare specific dust control plans for large construction projects (e.g., WTP). For every project that could generate dust (excluding projects the USDOE-RL completes under CERCLA, the State requires the USDOE-RL and its contractor to plan for dust control. The actions in the plan may vary, depending upon the material that may generate dust and the area where work will take place.

For most outside areas where fugitive dust emissions may occur, the plan for mitigation includes the application of water to the surface. The intent is that proper application of water will not result in surface penetration greater than 6” on fine grained soil (the type of soil a dust plan is needed for).

**Comment # 69 from Russell Jim, Yakama Nation, dated August 27, 2015:**

State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure:

12. “Energy and Natural Resources

- a. #a: YN requests inclusion of the following: Fossil fuel will be used in vehicles to access the site, conduct demolition, and remove waste to ERDF.”

*Ecology Response: Thank you for your comment. No change to SEPA Checklist required.*

*The information already appears in B.6.a.*

**Comment # 70 from Russell Jim, Yakama Nation, dated August 27, 2015:**

State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure:

13. “Environmental Health:

- a. #a: Please include additional information as to whether there are any known or possible contamination at the site from present or past uses.; the existing hazardous chemicals/conditions that might affect the project development and design, including underground hazards, etc.; describe any toxic or hazardous chemicals which might be stored, used, or produced during the project.”

*Ecology Response: Thank you for your comment. No change to SEPA Checklist required.*

*The draft closure plan contains sufficient information for a reader to understand what activities were completed in the past and what the approach will be to close the 207-A SRB. Section 4.5.4 addresses worker health and safety. Worker health and safety and protection of the environment determine how the USDOE-RL and its contractor will perform closure activities.*

*The contractor will conduct training and pre-job briefings to evaluate activities and associated hazards that may arise during closure.*

**Comment # 71 from Russell Jim, Yakama Nation, dated August 27, 2015:**

State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure:

14. “Historical and cultural preservation:

- a. YN requests a much more complete explanation of the Cultural Resources Reviews within the 200 Areas of the Hanford site and the methods used to assess the potential impacts to the cultural and historic resources on or near the project site.

*Ecology Response: Thank you for your comment. No change to SEPA Checklist required.*

*USDOE-RL provided the YN representative the document number for the Cultural and Ecological Review for the Demolition and Removal of the 207-A SRB, as well as the document numbers for reference documents, separately at the representative’s request.*

*The applicable memorandum is: L. M. Dittmer and D.R. Turlington to D.R. Corriell and E.A. Prichard, "Cultural and Ecological Review for the Demolition of the Removal of the 207-A South Retention Basin," CHPRC-1502655, dated June 25, 2015. See pages 2 – 3 for cultural evaluation.*

**Comment # 72 from Russell Jim, Yakama Nation, dated August 27, 2015:**

State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure:

15. "Utilities:

#b: YN requests inclusion of discussion of power generators, etc."

**Ecology Response:** *Thank you for your comment. No change in SEPA checklist.*

*The 207-A SRB is out of service. It requires no power for operation or closure.*

*Information about the utilities in use in the 200 East Area appears in the Tank Closure and Waste Management Environmental Impact Statement, Vol. 1, Sec. 3.2.2.2.2 (electricity), 3.2.2.3.2 (fuel), 3.2.2.4.3 (water).*

**Comment # 73 from Ms. Nancy Kroening, Citizen, dated August 6, 2015:**

"Dear Ms. Skopec: Re: 207-A South Retention Basin Closure

I say "Amen" & "Awomen" to the closure of all these retention basins! The recent story in The New Yorker re: the earthquake potential in the northwest is reason enough to close all tanks and solidify the waste. So your work toward that end is so important.

I'm always curious as to why the closure plan wasn't in place long ago!

Question: If leaks are found what actions will be taken?

And I am interested in the compliance history during the life of the permit. Can you provide me with Nina Menard's email address!

Thank you for all your work. This is one of the nation's top priorities in my book. Unseen, unheard, but deadly stuff."

**Ecology Response:** *Thank you for your comment. Ecology agrees that closing the 207-A SRB is important. Based on available documentation, the 207-A SRB did not leak. However, if soil sampling identifies a release, said release will have to be addressed under the Dangerous Waste Regulations, WAC 173-303.*

*Soil sampling requirements are identified in the closure plan. If the unit cannot be clean closed, a post-closure plan is anticipated to be submitted by the Permittees to Ecology.*

**SECTION 2 - COMMENTS FROM REVISION 9 PUBLIC COMMENT PERIOD (May 1 to October 22, 2012)**

**Comment # 74 from Russell Jim, Yakama Nation**

"SEPA: Indication of submittal of a required closure plan and closure actions under M-037-10 & -02 does not meet WAC 173-303-610(3) regulation. It is a milestone for completion of closure

work, not submission of a closure plan. The determination should be a MONS at the minimum and permit conditions written to reflect mitigation.”

**Ecology Response:** *Thank you for your comment. The Permittees submitted a closure plan to meet the TPA M-037-02 milestone. Since that submittal the Permittees revised the closure plan and submitted it as a Class 3 permit modification request.*

*Ecology reviewed the plan and found it complies with [WAC 173-303-610\(3\)](#) requirements. Additionally, Ecology’s review of the SEPA checklist submitted by the Permittees for the 207-A SRB closure plan resulted in a Determination of Non-Significance (DNS).*

#### **Comment # 75 from Russell Jim, Yakama Nation**

“Statements in the Fact Sheet inconsistent with the Dangerous Waste Regulations WAC 173-303-610 requirements for closure details to be in the permit [e.g. contingency plans are a requirement of closure].”

**Ecology Response:** *Thank you for your comment. A contingency plan is not a requirement for closing a dangerous waste management unit under [WAC 173-303-610](#), Closure and post-closure.*

#### **Comment # 76 from Russell Jim, Yakama Nation**

“Statements in Fact Sheet inconsistent with Dangerous Waste – WAC 173-303. Simply because the unit is not included in a groundwater monitoring network, does not exclude the requirement for a groundwater monitoring under WAC 173-303-610(3).”

**Ecology Response:** *Thank you for your comment. The Permittees have proposed to clean close the 207-A SRB. If the unit cannot clean close, then a groundwater monitoring plan will be required per the draft closure plan and draft Permit Condition V.5.B.5.*

#### **Comment # 77 from Russell Jim, Yakama Nation**

“Incorrect use of Waiver [variance] to closure regulations (WAC 173-303-610(4)(b))

**Ecology Response:** *Thank you for your comment. Ecology recognizes that closure of this unit has exceeded the required time limit in [WAC 173-303-610\(4\)\(b\)](#). The Permittees revised the closure plan and submitted it as a Class 3 permit modification request. Ecology reviewed the plan and found it complies with [WAC 173-303-610\(3\)](#) requirements.*

#### **Comment # 78 from Russell Jim, Yakama Nation**

“4. Basis for permit conditions rather than identified as requirements under the Dangerous Waste regulations is incorrectly stated as coming from CERCLA & TPA Milestone requirements.”

**Ecology Response:** *Thank you for your comment. Ecology agrees.*

*The Permittees revised the closure plan and submitted it as a Class 3 permit modification request. Ecology reviewed the plan and found it complies with [WAC 173-303-610\(3\)](#) requirements.*

*A new fact sheet has been prepared and will be issued for public comment with the draft permit modification, in accordance with [WAC 173-303-840](#).*

**Comment # 79 from Russell Jim, Yakama Nation**

“5. No list of other applicable laws discussed.”

***Ecology Response:** Thank you for your comment. Ecology agrees. Throughout the Fact Sheet, the regulation appropriate for the text indicated is included. However, Site-wide Permit Condition I.E.2 addresses the applicability of other environmental laws at the Hanford Facility.*

**Comment # 80 from Russell Jim, Yakama Nation**

“All required information to write a Permit should have been submitted with Permit Application in 2004. Ecology deemed the application complete when in fact the draft permit contradicts this determination. Requirement of submittal of a Part A to correct errors after approval should have resulted in the denial of the permit application. PPC 9524.1984(01) COMPLIANCE SCHEDULES IN RCRA PERMITS OCT 5 1984, an EPA memorandum on a compliance schedules, states a compliance schedule cannot be used to allow a facility additional time to provide Part B application information after the permit is issued.

***Ecology Response:** Thank you for your comment. Ecology agrees.*

*The original permit application for the Hanford facility was submitted in 1994 (the 10 year permit renewal date was 2004). The Hanford facility has been operating under this permit since that date. Also, since 1994, the permit has been modified several times to incorporate changes or updates, and add and delete waste unites as applicable. (Fact Sheet Permit Conditions I & II).*

*In 2004, Department of Energy submitted a permit renewal letter for the units in permit Revision 8c only. In 2004, Ecology stated the information submitted was considered “sufficiently complete” to begin preparation of a draft permit.*

*Ecology is working to fix the areas of the permit application that were not complete and obtain certification for the responses.*

**Comment # 81 from Russell Jim, Yakama Nation**

“No Performance Standards included in permit. Required by WAC 173-303-283.”

***Ecology Response:** Thank you for your comment. [WAC 173-303-283](#) addresses designing, constructing, operating, and maintaining dangerous waste facilities. The Permittees are proposing to clean close the 207-A SRB.*

**Comment # 82 from Russell Jim, Yakama Nation**

“No closure plan(s) in the new RCRA permit(s) although these were submitted. DOE submitted a Closure Plan for 207-A SRB (DOE/RL-2005-89, Draft A). Delay of development of closure

plan/contingency plans/post-closure plans until after remedy selections does not ensure compliance with the Dangerous Waste Regulations [WAC 173-303].

**Ecology Response:** Thank you for your comment. The Permittees are proposing to clean close the 207-A SRB. The Permittees submitted a closure plan to meet the M-037-02 milestone. Since that submittal, the Permittees revised the closure plan and submitted it as a Class 3 permit modification request. Ecology reviewed the plan and found it complies with [WAC 173-303-610\(3\)](#) requirements.

**Comment # 83 from Russell Jim, Yakama Nation**

“Edit all hyper-links to include entire citation references (e.g. WAC 173-303-815(2)(b)(i)) is hyper-linked and not the necessary (2) portion).

**Ecology Response:** Thank you for your comment. To the extent technically feasible, Ecology hyperlinked WAC references in the draft permit conditions and draft closure plan.

**Comment # 84 from Russell Jim, Yakama Nation**

“V.9.B.1: Revise V.9.B.1 to state closure in accordance with Permit Condition V.9.A. Revise all permit conditions and Addenda to include the required information according to WAC 173-303-806 & -610. Dangerous Waste closure regulation require these details in an approved Closure Plan.”

**Ecology Response:** Thank you for your comment. The draft closure plan complies with [WAC 173-303-806](#) (Final facility permits) and [WAC 173-303-610](#) (Closure and post-closure).

**Comment # 85 from Russell Jim, Yakama Nation**

“Delete current V.9.B.1: Conditions for submittal of documents which were or should have been included in the Permit Application in accordance with DW closure requirements. Additionally, as required by WAC 173-303-806 & -610, Closure plans must include details of actions [e.g. complete designs of landfill covers.] Furthermore, the Permittees aren’t the ones who have made the determination that the unit can’t meet clean closure standards, Ecology makes permitting decisions

**Ecology Response:** Thank you for your comment. The 207-A SRB is anticipated to clean close. Applicable closure and post-closure requirements for 207-A SRB are addressed in the current draft closure plan.

**Comment # 86 from Russell Jim, Yakama Nation**

“V.9.B.1.a: Questionable need for permit condition V.9.B.1.a. –requirement for a cultural and biological report. When the SEPA checklist was submitted with the permit application, this should have been a part of the submittal. If not, Ecology should have indicated so in their decision and called out a MDNS. Delete condition and revise SEPA determination. Include mitigations within Permit conditions.

**Ecology Response:** Thank you for your comment. A SEPA checklist was submitted with the draft closure plan for Ecology's review. Ecology issued a Determination of Nonsignificance.

**Comment # 87 from Russell Jim, Yakama Nation**

“V.9.B.2: Permit lacks a compliance schedule in accordance with -610 closure regulations. Incorrect application of WAC 173-303-815(3)(b) compliance schedules; see General Comment #1 above.”

**Ecology Response:** Thank you for your comment. Hanford Federal Facility Agreement and Consent Order (TPA) Milestone, M-037-10 was written for completion of closure requirements. The milestone due date is 9/30/2020. A schedule for completion of closure activities is included in the draft closure plan.

**Comment # 88 from Russell Jim, Yakama Nation**

“V.9.B.3 & 4: No Performance Standards includes in the permit. Required by WAC 173-303-283. Revise as follows: Closure of a RCRA TSD facility is described in these Dangerous Waste Regulations under WAC 173-303-610. WAC 173-303-610(2)(b)(i) requires for soils, groundwater, surface water, and air, the numeric cleanup levels calculated using residential exposure assumptions according to the Model Toxics Control Act Regulations (MTCA), chapter 173-340 WAC, as now or hereafter amended. Primarily, these will be numeric cleanup levels calculated according to MTCA Method B, although MTCA Method A may be used as appropriate (industrial use land).

To ensure compliance with the Dangerous Waste Regulations, include the following closure performance standards for contaminated soils:

Closure performance standards for soils will satisfy the most stringent (lowest) of:  
[WAC 173-303-610(3)(a)(v)]  
Direct contact consistent with WAC 173-340-900 (Table 745-1),  
Soil concentrations to protect groundwater: derived using WAC 173-340-747(4),  
Protection of ecological receptors achieved through one the following methods:  
Excavation of contaminated soil to a minimum of 15 feet below ground surface, or  
Excavation of contaminated soil such that residual soil concentrations do not exceed ecological screening levels listed in WAC 173-340-900 (Table 749-1), or  
A site-specific demonstration that remedial standards eliminate threats to ecological receptors.”

**Ecology Response:** Thank you for your comment. New permit conditions have been drafted for public comment as part of the Class 3 modification to the Revision 8c permit.

The closure performance standards from [WAC 173-303-610\(2\)\(a\)\(i\)-\(iii\)](#) were included in the current version of the draft closure plan. MTCA Method B cleanup levels for unrestricted land use were used in the draft closure plan. No release has been confirmed at this time, and ecological receptors are not at risk if there is no release. Provisions for excavation of contaminated soil is also addressed in the draft closure plan.

**Comment # 89 from Russell Jim, Yakama Nation**

“6. V.9.B.5 & 6 & 7: Delete: To ensure compliance with the Dangerous Waste Regulations, WAC 173-303-610(3) requires this information to be in the issued Permit. Update the Addenda to ensure compliance.”

*Ecology Response: Thank you for your comment. The Permittees submitted a draft closure plan as a Class 3 permit modification request. Ecology reviewed the plan and found it complies with [WAC 173-303-610\(3\)](#) requirements.*

**Comment # 90 from Russell Jim, Yakama Nation**

“7. V.9.B.8 & 9: While acceptable, they are incomplete and should be included in the permit per the requirements of WAC 173-303-610 as a part of the required Closure Plan. In addition, include the following as required in the Sampling and Analysis Plan (SAP), to be located in Addendum B and ensure consistency with Ecology Publication #09-05-007 [Guidance for Preparing Waste Sampling and Analysis Documents and QA/QC Requirements at Nuclear Waste Sites]:

- Documentation of the necessary quantity and quality of data for each decision for which sampling and analysis may be required pursuant to conditions of this Chapter. [WAC 173-303-300(1)]
- The parameters for which each environmental media sample will be analyzed and the rationale for selecting these parameters and the frequency with which analysis of a waste will be reviewed, or repeated, to ensure that the analysis is accurate and current. [WAC 173-303-300(5)(a)]
- Procedures for how non-detects, and any tentatively identified compounds which may be reported with laboratory analytical results will be assessed and/or used for decision-making purposes, and to identify any contaminants in addition to those already identified for which establishment of closure performance standards may be warranted. [WAC 173-303-300(5)(a)]
- Analytical methods, including field measurements, which will be used for analysis of environmental media samples. [WAC 173-303-300(5)(b)]
- Methods of obtaining representative samples of soils for all sampling and analysis which may be required pursuant to WAC 173-303-110 requirements analysis which may be required pursuant to WAC 173-340-810 and WAC 173-340-820. [WAC 173-303-300(5)(c)]
- A quality assurance/quality control (QA/QC) plan, or equivalent, to document all monitoring procedures so as to ensure that all information, data, and resulting decisions are technically sound, statistically valid, and properly documented. Each QA/QC plan shall include, or contain a reference to another document, which will be used and includes, the elements as defined. Each QA/QC plan shall contain a Data Quality Assurance Plan which includes the following:
- Data Collection Strategy section including, but not limited to, the following:

- A description of the intended uses for the data, and the necessary level of precision and accuracy for those intended uses; and,
- A description of methods and procedures to be used to assess the precision, accuracy, and completeness of the measurement data;
- Sampling section which shall include or describe, and reference or cite:
- Criteria for selecting appropriate sampling locations, depths, etc., or identification and justification of sample collection;
- Sampling methods including the identification of sampling equipment and a description of decontamination procedures to be used;
- Criteria for providing a statistically sufficient number of sample as defined in EPA guidance, or criteria for determining a technically sufficient number of measurements to meet the needs of the project as determined through the Data Quality Objective (DQO) planning process;
- Methods for, or specification of, measuring all necessary ancillary data;
- Criteria for establishing, or specification of, which parameters are to be measured at each collection point, and the frequency that each parameter is to be measured;
- Criteria for, or specification of, measures to be taken to prevent contamination of the sampling equipment and cross contamination between sampling points;
- Methods and documentation of field sampling operations and procedure descriptions, as appropriate, including:
  - Procedure descriptions and forms for recording the exact location, sampling conditions, sampling equipment, and visual condition of samples;
  - Calibration of field devices (as applicable);
  - Collection of replicate samples
  - Submission of field-biased blanks, where appropriate;
  - Potential interferences present at the facility;
  - Field equipment listing and sampling containers;
  - Sampling order; and,
  - Descriptions of decontamination procedures.
- Selection of appropriate sample containers, as applicable;
- Sample preservation methods, as applicable; and,
- Chain-of-custody procedure descriptions as applicable; including:
  - Standardized field tracking reporting forms to establish sample custody in the field prior to, and during shipment; and,

- Pre-prepared sample labels containing all information necessary for effective sample tracking, except where such information is generated in the field, in which case blank spaces shall be provided on the pre-prepared sampling label.
- Certification that all samples obtained for analysis will be delivered to a responsible person, at the recipient laboratory, who is authorized to sign for incoming field samples, obtain documents of shipment, and verify the data entered onto the sample custody records;
- Provision for a laboratory sample custody log; and,
- Specification of chain-of-custody procedures for sample handling, storage, and disbursement for analysis.
- Sample storage procedure descriptions and storage times;
- Sample preparation methods;
- Descriptions of analytical procedures, including:
  - Scope and application of the procedures;
  - Sample matrix;
  - Potential interferences;
  - Precision and accuracy of the methodology; and,
  - Method detection limits.
- Descriptions of calibration procedures and frequency;
- Data reduction, validation, and reporting;
- Internal laboratory quality control checks, laboratory performance, and systems audits and frequency, include:
  - Method blank(s);
  - Laboratory control sample(s);
  - Calibration check sample(s);
  - Replicate sample(s);
  - Matrix-spiked sample(s);
  - “Blind” quality control;
  - Control charts;
  - Surrogate samples;
- Each QA/QC plan shall include a Data Management Plan, or equivalent, to document and track data and results. [WAC 173-303-380(1)(f)]. This plan shall identify and establish data documentation materials and procedures, project or unit file requirements, and project-related progress reporting procedures and documents. The storage location for the raw data shall be identified. The plan shall also provide the format to be used to record and, for projects, present the validated and invalidated data and conclusions.
- The Data Management Plan shall include the following as applicable:
  - A data record including the following:

- Unique sample or field measurement code;
- Sampling or field measurement location including surveyed horizontal coordinates and elevation of the sample location, and sample or measurement type;
- Sampling or field measurement raw data;
- Laboratory analysis identification (ID) number;
- Result of analysis (e.g., concentration);
- Tabular displays, as appropriate, illustrating:
  - Unsorted validated and invalidated data;
  - Results for each medium and each constituent monitored;
  - Data reduction for statistical analysis;
  - Sorting of data by potential stratification factors (e.g., location, soil layer, topography); and,
  - Summary data.
- Graphical displays (e.g., bar graphs, line graphs, area or plan maps, isopleth plots, cross-sectional plots or transects, three dimensional graphs, etc.), as appropriate, presenting the following:
  - Displays of sampling location and sampling grid;
  - Identification of boundaries of sampling area and areas where more data is required;
  - Displays of concentrations of contamination at each sampling location;
  - Displays of geographical extent of contamination;
  - Aerial and vertical displays of contamination concentrations, concentration averages, and concentration maxima, including isoconcentration maps for contaminants found in environmental media at the Facility;
  - Illustrations of changes in concentration in relation to distance from the source, time, depth, or other parameters;
  - Identification of features affecting intramedia transport and identification of potential receptors;
- All data obtained pursuant to this Permit should be made available to Ecology within forty-five (45) days of receipt by the Permittees, or after completion of QA/QC activities, if applicable. If Ecology agrees that data will be obtained on a routine basis for a particular unit, the Permittees shall only be required to provide notification of data availability within forty-five (45) days of first availability, along with a statement as to expected frequency of future data. If routine data is not acquired at the stated expected frequency, the Permittees shall notify Ecology within (30) days with an explanation and revision, if applicable. A new permit condition should be written to ensure this notification requirement shall also apply to any other information obtained from activities conducted, or data obtained, that may influence activities pursuant to the 216-A-37-1 permit.

**Ecology Response:** Thank you for your comment. Analytical work will be performed in compliance with the guidance in the Hanford Analytical Services Quality Assurance Requirements Document (DOE/RL-96-68, Rev. 4).

Analytical methods and procedures will be performed at laboratories that are accredited by the State of Washington. Section 9.6 of the TPA identifies sampling and analytical requirements. Analytical data delivery schedules are included in section 9.6.6 of the TPA.

Soil sample locations and procedures for 207-A SRB closure are discussed in Section 4.6.2 and detailed in Appendix A of the draft closure plan.

**Comment # 91 from Russell Jim, Yakama Nation**

“V.9.C: Delete: To ensure compliance with the Dangerous Waste Regulations, WAC 173-303-610(3) requires this information to be in the issued Permit.”

**Ecology Response:** Thank you for your comment. Post-closure is addressed in the draft closure plan, and draft Permit Condition V.5.B.5.

**Comment # 92 from Russell Jim, Yakama Nation**

“V.9.D: To ensure compliance with the Dangerous Waste Regulations, require Addenda B & H to include WAC 173-303-610(3) required information. No list of other applicable laws.”

**Ecology Response:** Thank you for your comment. Sampling and analysis and closure and post-closure are addressed in the current draft closure plan. Site-wide Permit Condition I.E.2 addresses the applicability of other environmental laws at the Hanford Facility.

**Comment # 93 from Russell Jim, Yakama Nation**

“Difficult to track permitting actions in referenced rather than attached/include documents. A matrix approach whereas the applicable sections of the CERCLA documents are directly included in the permit is more transparent and publicly accessible. Concerns regarding “double jeopardy” are eliminated by including only those sections of the CERCLA documents needed to fulfill RCRA DW permitting requirements and modification process. CERCLA documents could contain a table of contents identifying these area and/or separate chapters for the permit requirements. This would also not be a “duplication of efforts” as two separate documents are not necessary.

**Ecology Response:** Thank you for your comment. The 207-A SRB is anticipated to clean close, and RCRA-CERCLA integration would not be required.

**Comment # 94 from Russell Jim, Yakama Nation**

“Addenda: All required information should have been submitted with Permit Application in 2004. Ecology deemed the application complete when in fact the draft permit contradicts this determination. Inconsistency is evident throughout the permit conditions and the addendums.”

**Ecology Response:** Thank you for your comment. The Permittees are proposing to clean close the 207-A SRB. Since 2004, the Permittees revised the closure plan and submitted it as a Class 3

*permit modification request. Ecology has reviewed the plan and found it complies with [WAC 173-303-610\(3\)](#) requirements.*

**Comment # 95 from Russell Jim, Yakama Nation**

“1. Addendum B: Reserved but information was submitted with application and should be included. The SAP should be consistent with Ecology Publication #09-05-007 Guidance for Preparing Waste Sampling and Analysis Documents and QA/QC Requirements at Nuclear Waste Sites. Include the following as required in the Sampling and Analysis Plan (SAP), to be located in Addendum B]:

- Documentation of the necessary quantity and quality of data for each decision for which sampling and analysis may be required pursuant to conditions of this Chapter. [WAC 173-303-300(1)]
- The parameters for which each environmental media sample will be analyzed and the rationale for selecting these parameters and the frequency with which analysis of a waste will be reviewed, or repeated, to ensure that the analysis is accurate and current. [WAC 173-303-300(5)(a)]
- Procedures for how non-detects, and any tentatively identified compounds which may be reported with laboratory analytical results will be assessed and/or used for decision-making purposes, and to identify any contaminants in addition to those already identified for which establishment of closure performance standards may be warranted. [WAC 173-303-300(5)(a)]
- Analytical methods, including field measurements, which will be used for analysis of environmental media samples. [WAC 173-303-300(5)(b)]
- Methods of obtaining representative samples of soils for all sampling and analysis which may be required pursuant to WAC 173-303-110 requirements analysis which may be required pursuant to WAC 173-303-110 requirements and consistent with the requirements specified in WAC 173-340-810 and WAC 173-340-820. [WAC 173-303-300(5)(c)].
- A quality assurance/quality control (QA/QC) plan, or equivalent, to document all monitoring procedures so as to ensure that all information, data, and resulting decisions are technically sound, statistically valid, and properly documented. Each QA/QC plan shall include, or contain a reference to another document, which will be used and includes, the elements as defined. Each QA/QC plan shall contain a Data Quality Assurance Plan which includes the following:
  - Data Collection Strategy section including, but not limited to, the following:
  - A description of the intended uses for the data, and the necessary level of precision and accuracy for those intended uses; and
  - A description of methods and procedures to be used to assess the precision, accuracy, and completeness of the measurement data;
  - Sampling section which shall include or describe, and reference or cite:
  - Criteria for selecting appropriate sampling locations, depths, etc., or identification and justification of sample collection;

- Sampling methods including the identification of sampling equipment and a description of decontamination procedures to be used;
- Criteria for providing a statistically sufficient number of samples as defined in EPA guidance, or criteria for determining a technically sufficient number of measurements to meet the needs of the project as determined through the Data Quality Objective (DQO) planning process;
- Methods for, or specification of, measuring all necessary ancillary data;
- Criteria for establishing, or specification of, which parameters are to be measured at each sample collection point, and the frequency that each parameter is to be measured;
- Criteria for, or specification of, identifying the type of sampling (e.g., discrete), and number of samples to be collected;
- Criteria for, or specification of, measures to be taken to prevent contamination of the sampling equipment and cross contamination between sampling points;
- Methods and documentation of field sampling operations and procedure descriptions, as appropriate, including:
  - Procedure descriptions and forms for recording the exact location, sampling conditions, sampling equipment, and visual condition of samples;
  - Calibration of field devices (as applicable);
  - Collection of replicate samples;
  - Submission of field-biased blanks, where appropriate;
  - Potential interferences present at the facility;
  - Field equipment listing and sample containers;
  - Sampling order; and,
  - Descriptions of decontamination procedures.
- Selection of appropriate sample containers, as applicable;
- Sample preservation methods, as applicable; and,
- Chain-of-custody procedure descriptions as applicable, including:
  - Standardized field tracking reporting forms to establish sample custody in the field prior to, and during shipment; and,
  - Pre-prepared sample labels containing all information necessary for effective sample tracking, except where such information is generated in the field, in which case, blank spaces shall be provided on the pre-prepared sampling label.
- Certification that all samples obtained for analysis will be delivered to a responsible person, at the recipient laboratory, who is authorized to sign for incoming field samples, obtain documents of shipment, and verify the data entered onto the sample custody records;
- Provision for a laboratory sample custody log; and,
- Specification of chain-of-custody procedures for sample handling, storage, and disbursement for analysis.
- Sample storage procedure descriptions and storage times;

- Sample preparation methods;
- Descriptions of analytical procedures, including:
  - Scope and application of the procedures;
  - Sample matrix;
  - Potential interferences;
  - Precision and accuracy of the methodology; and,
  - Method detection limits.
- Descriptions of calibration procedures and frequency;
- Data reduction, validation, and reporting;
  - Internal laboratory quality control checks, laboratory performance, and systems audits and frequency, include:
    - Method blank(s);
    - Laboratory control sample(s);
    - Calibration check sample(s);
    - Replicate sample(s);
    - Matrix-spiked sample(s);
    - “Blind” quality control;
    - Control charts;
    - Surrogate samples;
- Each QA/QC plan shall include a Data Management Plan, or equivalent, to document and track data and results. [WAC 173-303-380(1)(f)]. This plan shall identify and establish data documentation materials and procedures, project or unit file requirements, and project-related progress reporting procedures and documents. The storage location for the raw data shall be identified. The plan shall also provide the format to be used to record and, for projects, present the validated and invalidated data and conclusions.
- The Data Management Plan shall include the following as applicable:
  - A data record including the following:
    - Unique sample or field measurement code;
    - Sampling or field measurement location including surveyed horizontal coordinates and elevation of the sample location, and sample or measurement type;
    - Sampling or field measurement raw data;
    - Laboratory analysis identification (ID) number;
    - Results of analysis (e.g., concentration);
    - Tabular displays, as appropriate, illustrating:
      - Unsorted validated and invalidated data;
      - Results for each medium and each constituent monitored;
      - Data reduction for statistical analysis;

- Sorting of data by potential stratification factors (e.g., location, soil layer, topography); and,
- Summary data.
- Graphical displays (e.g., bar graphs, line graphs, area or plan maps, isopleth plots, cross-sectional plots or transects, three dimensional graphs, etc.), as appropriate, presenting the following:
  - Displays of sampling location and sampling grid;
  - Identification of boundaries of sampling area and areas where more data is required;
  - Displays of concentrations of contamination at each sampling location;
  - Displays of geographical extent of contamination;
  - Aerial and vertical displays of contamination concentrations, concentration averages, and concentration maxima, including isoconcentration maps for contaminants found in environmental media at the Facility;
  - Illustrations of changes in concentration in relation to distance from the source, time, depth, or other parameters;
  - Identification of features affective intramedia transport and identification of potential receptors;
- All data obtained pursuant to this Permit should be made available to Ecology within forty-five (45) days of receipt by the Permittees, or after completion of QA/QC activities, if applicable. If Ecology agrees that data will be obtained on a routine basis for a particular unit, the Permittees shall only be required to provide notification of data availability within forty-five (45) days of first availability, along with a statement as to expected frequency of future data. If routine data is not acquired at the stated expected frequency, the Permittees shall notify Ecology within thirty (30) days with an explanation and revision, if applicable. A new permit condition should be written to ensure this notification requirement shall also apply to any other information obtained from activities conducted, or data obtained, that may influence activities pursuant to the 207-A-SRB permit.

***Ecology Response:*** Thank you for your comment. Analytical work will be performed in compliance with the guidance set forth in the Hanford Analytical Services Quality Assurance Requirements Document (DOE/RL-96-68, Rev. 4).

*Analytical methods and procedures will be performed at laboratories that are accredited by the State of Washington. Section 9.6 of the TPA identifies sampling and analytical requirements. Analytical data delivery schedules are included in section 9.6.6 of the TPA.*

*Soil sample locations and procedures for 207-A SRB closure are discussed in Section 4.6.2 and detailed in Appendix A of the draft closure plan.*

**Comment # 96 from Russell Jim, Yakama Nation**

“Addendum C: Reserved but information was submitted with application and should be included.”

***Ecology Response:*** Thank you for your comment. Process information necessary to inform closure decisions is included in the draft closure plan.

**Comment # 97 from Russell Jim, Yakama Nation**

“3. Addendum D: Reserved. However, U.S. DOE defined contamination at the 207-A South Retention Basin through remedial investigations (DOE/RL-2004-25 DRAFT A). The following are indicated to be contaminants of concern (COCs) and should be identified as such in the permit:

- Spent halogenated and nonhalogenated solvents (F001, F002, F003, F004, and F005)(Acetone, Cresol-m, Cresol-o, Cresol-p, Methylene Chloride, Methyl Ethyl Ketone, Methyl Isobutyl Ketone, Trichloroethene)
- silver,
- arsenic,
- nitrate,
- tributyl phosphate
- 2,4-dichlorophenoxyacetic acid,
- 2-(2,4,5-trichlorophenoxy)
- propionic acid,
- acetone,
- chloroform,
- butylbenzylphthalate,
- and the state-only dangerous waste, ammonia (WT02).”

***Ecology Response:** Thank you for your comment. The draft closure plan has been revised to identify carbon tetrachloride and chloroform as possible dangerous waste constituents in case the Hypalon® liner is degraded at the time of removal. If the liner is not degraded and in good condition at removal, these analyses will not be required.*

*Dangerous waste constituents were sampled in 2003, and concentrations were less than the MTCA Method B cleanup levels for unrestricted land use, except for arsenic. The maximum arsenic concentration in soil samples collected in 2003 was less than the 20 milligrams per kilogram (mg/kg) background/cleanup level. Applicable dangerous waste constituents are included in the closure plan.*

**Comment # 98 from Russell Jim, Yakama Nation**

“Addendum E: Reserved but information was submitted with application and should be included. Required by WAC 173-303-310.”

***Ecology Response:** Thank you for your comment. The 207-A SRB closure unit is not operational. Security information relevant to closure activities is included in the current draft closure plan.*

**Comment # 99 from Russell Jim, Yakama Nation**

“Addendum F: Reserved. Required by WAC 173-303-340.”

**Ecology Response:** Thank you for your comment. Preparedness and prevention requirements in [WAC 173-303-340](#) are not applicable to closing units. As discussed in the draft closure plan, field operations will be performed in accordance with applicable health and safety requirements.

**Comment # 100 from Russell Jim, Yakama Nation**

“Addendum G: References an unavailable document rather than including it within this addendum.”

**Ecology Response:** Thank you for your comment. Training requirements related to closure are described in the draft closure plan.

**Comment # 101 from Russell Jim, Yakama Nation**

“Addendum H: Information should have been submitted with application.”

**Ecology Response:** Thank you for your comment. A revised closure plan was submitted in 2015 as part of the Class 3 permit modification request.

**Comment # 102 from Russell Jim, Yakama Nation**

“Addendum J: Reserved but information should have been submitted.”

**Ecology Response:** Thank you for your comment. Because the 207-A SRB no longer accepts liquid waste and is not in operation, there is no need for a unit-specific contingency plan. Condition II.A describes the requirements for facility contingency planning in Revision 8c.

**Comment #103 from the United States Department of Energy:**

**Comment Number: 10148**

**Permit Section:** CUG-9 (207-A SRB) V.9.B.1

**Comment Text:**

In Permit Condition V.9.B.1, the reference to Permit Condition I.C.3 needs to be deleted, and the text regarding contingent closure modified.

**Basis Text:**

The text regarding Permit Condition I.C.3, the permit modification process for the permit, needs to be deleted from the Permit because when the closure plan is submitted under HFFACO Milestone M-037-02, a permit modification is not appropriate at that time. The Permittees will submit a closure plan to meet the milestone, and then the Notice of Deficiency process of the HFFACO Action Plan Figure 9-2 and Section 9.2.2 is followed unless the Project Managers agree to a different schedule. After the issues are resolved between Ecology and DOE, then the revised closure plan can be submitted for incorporation into the permit through a permit modification.

There is no need to submit a closure plan and a separate post closure plan. These two topics have been successfully prepared in one document in the past and can in the future. The closure plan outline for closure plans submitted in the past has accounted for closure and post closure.

Contingent closure and post closure is a requirement for surface impoundments from WAC 173-303-650(6)(c), however there are also financial assurance requirements in WAC

173-303-650(6)(c)(ii) which do not apply to the federal government. See Permit Condition II.H. As a result, flexibility should be provided to the Permittees for not having to fully comply with the contingent closure and post closure requirements for the surface impoundments at the time the closure plan is prepared and submitted to meet the HFFACO Milestone M-37. Flexibility can be achieved by utilizing the alternative closure requirements in WAC 173-303-610(1)(e) at the same time to replace the detailed requirements in WAC 173-303-650(6)(c) with a placeholder in the closure plan. As closure work progresses towards clean closure, the Permittees will have enough time to prepare documentation for closure as a landfill if needed. There is known no impediment to achieving clean closure at this point for the TSD unit.

**Recommendation Text:**

Permit Condition V.9.B.1 should be revised to state: "The Permittees will submit a closure/post closure plan in accordance with the schedule specified in HFFACO Milestone M-037-02, which is incorporated by reference herein under the terms of Permit Condition I.A.4 (Attachment 1). As part of the revised closure/post closure plan, the Permittees will address the potential need for contingent closure and contingent post closure requirements through a future permit modification in the closure plan to be implemented if clean closure by removal or decontamination is not possible. Following resolution of Ecology comments on the closure/post closure plan, the Permittees will submit a permit modification to incorporate the closure/post closure plan into Addendum H. [WAC 173-303-610(3) and -610(8), Attachment 1 HFFACO Action Plan Section 6.3.1]."

*Ecology Response: Thank you for your comment. The 207-A SRB is anticipated to clean close under Permit Revision 8c. Proposed permit conditions will be available for comment by the Permittees during Ecology's public comment period. Post-closure is addressed in the draft closure plan and through draft Permit Condition V.5.B.5.*

**Comment #104 from the United States Department of Energy:**

**Comment Number: 10149**

**Permit Section:** CUG-9 (207-A SRB) V.9.B.2

**Comment Text:**

Submittal of the review 90 days before the start of the closure process is outside the scope of RCRA and is not supported with justification in the fact sheet.

**Basis Text:**

There is no requirement in WAC 173-303 to perform a site-specific biological and cultural resources review. For RL, this requirement is based on NEPA and for the state, the need for this type of review is dictated by SEPA.

This condition is arbitrary, has no basis in the law or regulations, and is not justified in the fact sheet to be necessary to protect human health and the environment.

Washington law prohibits the arbitrary exercise of power by a state agency. *State ex rel. Pub. Util. Dist. No. 1 of Okanogan County v. Dep't of Pub. Serv.*, 21 Wn.2d 201, 208-09 (1944). Imposing requirements that exceed an agency's statutory or regulatory authority constitutes arbitrary action. *Id.* To the extent that the Department of Ecology has imposed conditions under the Permit that exceed the Department's authority, it has acted in an arbitrary manner. Accordingly, those conditions which have been arbitrarily imposed under the Permit should be stricken as the product of impermissible and arbitrary agency action.

Further, it appears to be an inappropriate use of the omnibus provision of the regulations. This condition is void since no basis has been articulated in the Permit, Fact Sheet, or supporting documents that supports the use of omnibus permitting authority to impose this condition.

The State has failed to articulate specific facts supporting the contention that this condition is "necessary to achieve compliance with the Hazardous Waste Management Act", nor is there any specific provision in WAC 173-303 that necessitates that additional requirement. Compliance with the HWMA is fully addressed in the normal permitting requirements of WAC 173-303-810. This condition has no reasonable basis in fact or law, and no reasonable relation to the "omnibus authority" in WAC 173-303-800(8) and WAC 173-303-815(2)(b)(ii). A regulatory basis for this permit condition is absent from the Washington State Hazardous Waste Act.

Omnibus authority is not unlimited and courts have consistently required that permit conditions based on omnibus authority (a) be necessary to protect human health or the environment, (b) that there must be a nexus between the permit condition and the hazardous waste activities being carried out at the facility, and (c) that Omnibus authority must be supported by facts and a cogent explanation in the administrative record.

**Recommendation Text:**

Delete Permit Condition V.9.B.2. No recommended text.

*Ecology Response: Thank you for your comment. Ecology agrees. Proposed permit conditions related to submittal of biological and cultural reviews have been deleted.*

**Comment #105 from the United States Department of Energy:**

**Comment Number: 10334**

**Permit Section: CUG-9 (207-A SRB) V.9.B.5**

**Comment Text:**

Condition as written may be interpreted in a manner that would cause cleanup that is more conservative than required for surrounding areas.

**Basis Text:**

The flexibility is needed to allow for a cleanup level to be adjusted to meet the final cleanup levels of the geographic area where the unit is located.

**Recommendation Text:**

Add the following sentence to the end of the condition:

"In the event the closure performance standard of removal or decontamination cannot be met for this dangerous waste management unit the Permittee may propose a post closure approach using the alternative requirements in WAC 173-303-610(1)(e)."

***Ecology Response:** Thank you for your comment. Because 207-A-SRB is anticipated to clean close, alternative requirements are not proposed in the draft closure plan. The closure performance standard was cited in the draft closure plan, and the V.9.B.5 permit condition is not included as a permit condition. Proposed permit conditions will be available for comment by the Permittees during Ecology's public comment period.*

**Comment #106 from the United States Department of Energy:**

**Comment Number: 10607**

**Permit Section:** CUG-9 (207-A SRB) V.9.B.8

**Comment Text:**

Permit Condition V.9.B.8 contains a need for a revised sampling and analysis plan when one had not been prepared yet and may not be needed for clean closure, a reference to Permit Condition II.D that needs to be revised, and a reference to a HFFACO Milestone M-37 that needs to be changed.

**Basis Text:**

A sampling and analysis plan for clean closure verification of the 207-A SRB Ditch has not been prepared to date. The word "revised" needs to be deleted. The 207-A SRB is a lined concrete structure, and clean closure may not require a verification sampling plan. The condition should be revised to say is applicable for the 207-A SRB.

The Permittees have commented elsewhere to delete Permit Condition II.D.3 because all waste analysis plans for operating unit groups have been submitted and are included in the permit. For closure units with sampling and analysis plan yet to be submitted, the sampling and analysis plan should be prepared to meet the requirements of the HFFACO Action Plan Section 6.5 for TSD unit quality control and quality assurance. The permit condition should be updated to reference the HFFACO Action Plan Section 6.5 for compliance.

Also, a reference to a schedule in Milestone M-037-02 is specified when no schedule for sampling and analysis is contained in Milestone M-037-02. Milestone M-037-02 is merely the milestone to submit the closure plan. The closure schedule is contained in Milestone M-037-10. The milestone should be changed from M-037-002 to M-037-10.

**Recommendation Text:**

Permit Condition V.9.B.8 should be revised to state: "In conjunction with the closure plan, the Permittees will submit a closure verification sampling and analysis plan, if applicable, in accordance with HFFACO Action Plan Section 6.5 (Attachment 1), and the schedule specified in HFFACO Milestone M-037-10, which are incorporated by reference herein under the terms of Permit Condition I.A.4."

**Ecology Response:** Thank you for your comment. The 207-A SRB draft closure plan was submitted as part of a Class 3 permit modification request, which included review of sampling and analysis (SAP) requirements. Proposed permit conditions will be available for comment by the Permittees during Ecology's public comment period.

**Comment #107 from the United States Department of Energy:**

**Comment Number:** 9774

**Permit Section:** CUG-9 (207-A SRB) V.9.B.9

**Comment Text:**

Permit condition referenced needs updating, and deletion of the word "revised"

**Basis Text:**

The condition referenced is incorrect, and a sampling and analysis plan has NOT yet been prepared.

**Recommendation Text:**

Change text to: "The sampling and analysis plan (noted in Permit Condition V.9.B.8) will include, but not be limited to:"

**Ecology Response:** Thank you for your comment. The 207-A SRB draft closure plan was submitted as part of a Class 3 permit modification request, which included review of sampling and analysis (SAP) requirements. Proposed permit conditions will be available for comment by the Permittees during Ecology's public comment period.

**Comment #108 from the United States Department of Energy:**

**Comment Number:** 10452

**Permit Section:** CUG-9 (207-A SRB) V.9.B.10

**Comment Text:**

Permittees need flexibility to deviate from field sampling plan when site conditions require a deviation.

**Basis Text:**

While field sampling plans are designed to be able to be implemented as written, sometimes field conditions arise that require some sort of deviation. This deviation process will be identified in the sampling and analysis plan.

**Recommendation Text:**

Revise text to state: "The Permittees will conduct all sampling and analysis of environmental media pursuant to the requirements of the sampling and analysis plan. Any deviations from the field sampling plan will be documented as described in the sampling and analysis plan."

**Ecology Response:** Thank you for your comment. The draft closure plan addresses unexpected events as required by [WAC 173-303-610\(3\)\(b\)\(iii\)](#) and [WAC 173-303-830](#). Proposed permit

*conditions will be available for comment by the Permittees during Ecology's public comment period.*

**Comment #109 from the United States Department of Energy:**

**Comment Number: 9779**

**Permit Section:** CUG-9 (207-A SRB) V.9.C

**Comment Text:**

There is not an Addendum H. The condition should be marked "Reserved."

**Basis Text:**

A condition for complying with post closure plan is premature until a final closure plan is submitted. If the unit is clean closed, no post closure plan will be incorporated.

**Recommendation Text:**

Delete Permit Condition V.9.C. Replace with "Reserved."

***Ecology Response:** Thank you for your comment. Ecology agrees. The 207-A SRB is expected to clean close. The draft closure plan and draft Permit Condition V.5.B.5 addresses post closure requirements if clean closure cannot be met. Proposed permit conditions will be available for comment by the Permittees during Ecology's public comment period.*

**Comment #110 from the United States Department of Energy:**

**Comment Number: 14169**

**Permit Section:** CUG-9 (207-A SRB) V.9.D

**Comment Text:**

This condition is redundant with Permit Condition V.9.B.9.

**Basis Text:**

This condition says follow the sampling and analysis plan and Permit Condition V.9.B.9 does as well.

**Recommendation Text:**

Delete Permit Condition V.9.D and replace with "Reserved."

***Ecology Response:** Thank you for your comment. Ecology agrees. The draft closure plan now addresses waste management and disposal. Proposed permit conditions will be available for comment by the Permittees during Ecology's public comment period.*

**Comment #111 from the United States Department of Energy:**

**Comment Number: 14170**

**Permit Section:** CUG-9 (207-A SRB) V.9.D.1

**Comment Text:**

Permit Condition V.11.D.1 should be deleted.

**Basis Text:**

A sampling and analysis plan (SAP) for soil is not the same as a waste analysis plan (WAP) for an operation. The focus, requirements and need for a SAP is not the same as for a WAP. A verification SAP for soils and/or debris should not be considered waste analysis, since soil is environmental media, not waste. This is prescriptive language that is not supported by a regulation.

**Recommendation Text:**

Delete Permit Condition V.9.D.1. No recommended text.

*Ecology Response: Thank you for your comment. The current draft closure plan addresses soil sampling and analysis required for clean closure. Waste disposal is discussed in the draft closure plan and via reference to DOE/RL-2015-51, Rev 0: Action Memorandum for the Time-Critical Removal Action for 207-A South Retention Basin Closure Disposal at the Environmental Restoration Disposal Facility (ERDF). Proposed permit conditions will be available for comment by the Permittees during Ecology's public comment period.*

**Comment #112 from the United States Department of Energy:**

**Comment Number: 14171**

**Permit Section: CUG-9 (207-A SRB) V.9.D.2**

**Comment Text:**

Permit Condition V.9.D.2 should be deleted.

**Basis Text:**

There is no need for this condition, as any changes to the approved sampling and analysis plan would require a permit change

**Recommendation Text:**

Delete Permit Condition V.9.D.2. No recommended text.

*Ecology Response: Thank you for your comment. Ecology agrees. The permit condition was deleted. The current draft closure plan addresses soil sampling and analysis requirements for clean closure. Proposed permit conditions will be available for comment by the Permittees during Ecology's public comment period.*

**Comment #113 from the United States Department of Energy:**

**Comment Number: 13966**

**Permit Section: CUG-9 (207-A SRB) V.9.I.2**

**Comment Text:**

Permit Condition V.9.I.2 should be modified to notify Ecology if any threats to human health or the environment are discovered.

**Basis Text:**

The approach to non-operational TSD units was agreed to with Ecology in 2003. In the letter approving annual inspections on June 10, 2003 (Administrative Record Accession # D1886185), Ecology states: "if any annual inspection identifies any potential threats to human health or the environment, Ecology must be immediately notified and will reevaluate the necessity of monthly or quarterly inspections." The condition needs to be modified to be consistent with the letter.

**Recommendation Text:**

Permit Condition V.9.I.2 should be revised to state: "The Permittees will immediately notify Ecology if the inspection identifies any potential threats to human health or the environment in accordance with Permit Condition I.F.5."

**Ecology Response:** *Thank you for your comment. The 207-A SRB is anticipated to clean close. The permit condition described above is not included in the draft 207-A SRB permit conditions. Inspection is described in the draft closure plan. Proposed permit conditions will be available for comment by the Permittees during Ecology's public comment period.*

**Comment #114 from the United States Department of Energy:**

**Comment Number: 9198**

**Permit Section:** CUG-9 (207-A SRB) Add G

**Comment Text:**

The training matrix should be updated to match the content of the Dangerous Waste Training Plan.

**Basis Text:**

The training matrix contained in Addendum G is intended to match the training requirements for the TSD unit contained in the Dangerous Waste Training Plan.

**Recommendation Text:**

The following changes should be made to the training matrix for 207-A South Retention Basin: A new row should be added as the first row in the matrix for the job title/position of "Nuclear Chemical Operator" with an "X" added to the Orientation Program column, and an "X" added to the Contingency Plan & Emergency Response column.

**Ecology Response:** *Thank you for your comment. The permit condition has been deleted. Personnel training is described in the draft closure plan. Proposed permit conditions will be available for comment by the Permittees during Ecology's public comment period.*

## **APPENDIX A: COPIES OF ALL PUBLIC NOTICES**

Public notices for the June 30, 2015 to August 28, 2015 comment period:

1. Fact Sheet
2. Public notice (focus sheet)
3. Classified advertisement in the *Tri-City Herald*
4. Notice sent to the Hanford-Info email list

Public notices for the May 1, 2012 to October 22, 2012 comment period:

1. Fact Sheet
2. Public notice (focus sheet)
3. Classified advertisement in the *Tri-City Herald*
4. Notice sent to the Hanford-Info email list



## Public Comment Period on the 207-A South Retention Basin Closure Plan

*The U.S. Department of Energy (DOE) is holding a 60-day comment period on the proposed closure plan for the 207-A South Retention Basin treatment, storage, and/or disposal unit. This closure plan will be a Class 3 modification to the Hanford Dangerous Waste Permit. Class 3 permit changes call for a 60-day comment period led by the permittee (DOE), and a public meeting. This will be followed by a separate 45-day comment period by the Washington Department of Ecology (Ecology).*

### Background

The 207-A South Retention Basin is in Hanford's 200 East Area just east of the 242-A Evaporator. The facility began operations in March 1977 and consisted of three open concrete liquid effluent storage cells. Each of the three cells had a 70,000-gallon design capacity and was 55 feet long and 10 feet wide at the bottom and 7 feet deep. These concrete structures have remained intact since operations ceased. No leaks were reported from the basin during inspections.

The cells were used for storage of condensate, a mixed waste solution containing trace amounts of dissolved sodium, potassium, aluminum, hydroxides, nitrates, and nitrites with radionuclides. The condensate came from the 242-A Evaporator process. It was collected in the retention basin for sampling before it was discharged to the soil column. The 242 A Evaporator discharge to the basin ended on April 12, 1989, and the basin has been inactive since.

### The Proposed Closure Plan

DOE seeks a change to Hanford's Dangerous Waste Permit to close the 207-A South Retention Basin. The proposed closure plan calls for removal of the basin storage cells and up to 3 feet of soil. The material removed is planned to be disposed of in Hanford's Environmental Restoration Disposal Facility. The cleanup levels will be developed to meet unrestricted use standards under the state's Model Toxics Control Act. These cleanup standards consider carcinogens, non-carcinogens, groundwater protection, and ecological indicator values. To allow the work to be completed in this fiscal year, DOE plans to submit a Temporary Authorization request to Ecology.

Sampling and analysis of the 207-A South Retention Basin will be performed to verify cleanup standards have been met. Should sampling and analysis indicate contamination above unrestricted use standards, a post-closure plan will be submitted as required by state Dangerous Waste regulations.

Closure of the 207-A South Retention Basin will include:

- Basin demolition and disposal
- Soil removal as needed
- Waste management activities
- Air emission controls
- Health and safety requirements
- Cultural and ecological resource reviews
- Soil verification sampling and analysis plans

The DOE-RL contact person for this permit change is Kris Skopeck, 509-376-5803. The Ecology contact person is Nina Menard, 509-372-7950. The permittee's compliance history during the life of the permit being modified is available from the Ecology contact person.

### Get Involved!

#### Public Comment Period

June 30 – August 28, 2015

#### Public Meeting

August 5, 2015 at 5:30 p.m.  
Richland Public Library  
955 Northgate Drive  
Richland, WA 99352

#### You can also submit comments by

#### August 28, 2015 to:

Nina Menard  
Department of Ecology  
3100 Port of Benton Blvd.  
Richland, WA 99354  
or email: [Hanford@ecy.wa.gov](mailto:Hanford@ecy.wa.gov)



**U.S. Department of Energy**  
Richland Operations Office  
P.O. Box 550, A7-75  
Richland, WA 99352

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

### HANFORD PUBLIC INFORMATION REPOSITORY LOCATIONS

#### **Portland**

Portland State University Library  
Government Information  
Branford Price Millar Library – LIBW  
PO Box 1151  
Portland, OR 97207-1151  
Attn: Claudia Weston (503) 725-4542  
Map: <http://bit.ly/1K7BfuK>

#### **Richland**

U.S. Department of Energy Public Reading Room  
Washington State University, Tri-Cities  
Consolidated Information Center, Room 101-L  
2770 University Drive  
Richland, WA 99352  
Attn: Janice Scarano (509) 375-7443  
Map: <http://bit.ly/1LpZKUa>

#### **Seattle**

University of Washington  
Suzzallo Library  
Box 352900  
Seattle, WA 98195-2900  
Attn: Hilary Reinert c/o ARCS  
(206) 543-5597  
Map: <http://bit.ly/1QMtUog>

#### **Spokane**

Gonzaga University  
Foley Center Library  
East 502 Boone Avenue  
Spokane, WA 99258  
Attn: John Spencer (509) 313-6110  
Map: <http://bit.ly/1Cp0mRT>

#### **Administrative Record and Public Information Repository**

2440 Stevens Center Place, Room 1101, Richland, WA  
509-376-2530

<http://pdw.hanford.gov/arpir/>

# Obama signs trade, worker assistance bills

ASSOCIATED PRESS

WASHINGTON — In a rare bipartisan scene at the White House, President Obama on Monday signed into law two hard-fought bills giving him greater authority to negotiate international trade deals and providing aid to workers whose jobs are displaced by such pacts.

The measures were politically linked to secure bipartisan support for the trade legislation, and they set the stage for the Obama administration to conclude negotiations on a 12-nation Pacific Rim economic pact. Five Democratic and two Republi-

can members of Congress watched as Obama affixed his name to the two bills.

The trade bill gives Congress the right to approve or reject trade agreements, but not change or delay them. Obama defied the wishes of most members of his Democratic Party and frayed relations with organized labor to push the legislation.

The worker assistance was part of a broader trade preferences bill that extends a measure easing trade between the U.S. and sub-Saharan Africa.

"I think it's fair to say that getting these bills through Congress has not

been easy," Obama said. "They've been declared dead more than once. They have inspired long and passionate debates and that's entirely appropriate for our democracy."

But he said they will ultimately be good for American workers and for American business.

Obama worked in unusual partnership with House Speaker John Boehner and Senate Majority Leader Mitch McConnell to hold a small minority of pro-trade Democrats and prevent too many Republican defections to ultimately win.

Trade critics say the legislation doesn't go far enough to ensure

strong enforcement of labor and environmental standards and does not hold countries accountable if they manipulate their currency. Union leaders say trade will cost American jobs.

Obama used the event to push for further bipartisan legislation, particularly for a massive infrastructure bill that would help build new highways, airports and shipping ports.

Tensions within the Democratic Party were visible throughout the debate on the legislation and prompted warnings from labor leaders that Democrats who supported the bill could be targeted for defeat.

THE LATEST SCORES  
tricityherald.com/sports



For Your Health by Mindi Irvine, DPT

**Plantar Fasciitis**  
Plantar fasciitis is a painful condition affecting the bottom of the foot. It is a common cause of heel pain and it is sometimes called a heel spur. Plantar fasciitis is the correct term to use when there is active inflammation. It is usually just in one foot but in about 30% of all cases, both feet are affected. Plantar fascia is the thick band of connective tissue and runs from the front of the heel bone to the ball of the foot. This dense strip of tissue helps support the arch but is also a source of pain.  
Plantar fasciitis can come from a number of causes. It can come from being overstretched due to many hours on the feet, perhaps in a poor pair of shoes or from hours on a hard surface. The force of our body weight pushing down through the foot with each step can cause overstretching in the plantar fascia as the foot tries to flatten from the weight of the body. Small tears in the fascia can result. As this process of injury repeats itself many times, a bone spur sometimes forms as the body responds by trying to attach the fascia to the heelbone. Bone spurs occur along with plantar fasciitis but they are not the cause of the problem.  
If you have heel pain that you would like some help with please call one of our 3 offices. We are happy to schedule a FREE well check to help you evaluate the pain you are having. We will work with you and your doctor to create a regimen that takes into account your unique needs. Our offices are located at 6825 Burden Blvd, Ste D, Pasco, (509-293-7288), 2460 Gurlick Blvd., Richland, (509-559-6024), and at 4303 W 24th Ave, Kennewick (509-393-0991).  
*Start Living*  
Watch for more information on our July FREE seminar on foot pain. It will be featuring Dr. Rodney Graves and will be located in our Pasco office.  
**PATIENT TESTIMONIAL:** Before I came in I was apprehensive of my ability to start working 12 hour shifts on my feet. Over the course of my therapy my foot pain was almost completely relieved. I am able to work now with little to no pain. It has made a big difference in my daily life and ability to exercise as well. T.G.



www.oasisphysicaltherapy.com

# Law backs trooper who shot unarmed escapee

ASSOCIATED PRESS

NEW YORK — A New York State trooper had the law on his side when he shot unarmed escapee David Sweat as the convicted killer ran toward a forest near the Canadian border.

State and federal law allows the use of deadly force to prevent an escape if the officer believes the suspect poses a significant threat. Law enforcement experts say this

shooting was clear-cut.

"There cannot be any cleaner situation than this one," said Maria Haberfeld, head of the law and police science department at John Jay College of Criminal Justice. "You cannot shoot any fleeing felon, but certainly you can shoot the one who poses a real threat. There was no reason to believe this person who had killed a police officer before was not posing a real threat."

The same legal reasoning applied to the killing of his accomplice, Richard Matt, who was shot three times in the head on Friday. Unlike Sweat, he was found with a weapon — a 20-gauge shotgun.

Sweat eluded capture for two more days, until he ran across Sgt. Jay Cook, a 21-year veteran who was part of the huge manhunt for the two convicted murderers who used power tools to break out of the Clinton Correctional Facility in

Dannemora on June 6.

A 1986 U.S. Supreme Court case known as *Tennessee v. Garner* laid out how force can be used to capture a fleeing suspect: Deadly force can't be used to prevent escape unless "the officer has probable cause to believe that the suspect poses a significant threat of death or serious physical injury to the officer or others."

New York state law also allows for deadly force if a dangerous convict is escaping

from a detention facility — which is why armed guards may be stationed in towers at prisons.

Sweat's shooting differs from the recent killing of Walter Scott in South Carolina because Scott was stopped for a minor traffic infraction, was unarmed and was not considered a dangerous criminal, experts said. The white officer who shot the black man five times in the back has been charged with murder.

## BRIEFS

### Hatchery intake plugs; 400,000 salmon die

ROSEBURG, Ore. — A plugged water intake at a southern Oregon fish hatchery has left 400,000 baby salmon dead.

The Oregon Department of Fish and Wildlife says a fish carcass plugged an intake at the Rock Creek Hatchery on the North Umpqua River, causing water to drop in a raceway where fish were being raised for release next spring.

The department says an alarm was not triggered, and the problem was discovered within an hour, but it was too late to salvage any fish.

Hatchery director Dan Meyer says the carcass that plugged the intake may have gotten into a water line during a power outage last month.

The department says the losses will be primarily felt by Umpqua River anglers in 2018, when several thousand of those fish would have returned as adults.

### Woman calls 911 after kidnapping; 1 arrested

PORTLAND — A woman kidnapped and raped by a man who broke into her car in eastern Oregon was able to call 911 after the vehicle got a flat tire, the authorities said Monday.

The woman phoned Saturday morning, and police got enough information to capture the suspect on Interstate 84 east of Arlington, said Oregon State Police Lt. Bill Fugate.

William T. Cooter, 46, of Greeneville, Tenn., was arraigned Monday afternoon on charges of kidnapping, rape, sex abuse, sodomy, assault, coercion, menacing, criminal mischief, meth possession, unauthorized use of a motor vehicle, providing false information to a police officer and interfering with making a report.

Marion Weatherford, the district attorney in sparsely populated Gilliam County, said the attack happened after the woman and her dog stopped to rest during a drive. They were in Arlington.

### Lawsuit settled in deaths of 19 firefighters

PHOENIX — The state of Arizona settled a lawsuit Monday brought by a dozen families who lost loved ones when a Hotshot firefighting crew was overcome by a wildfire near the small community of Yarnell.

The settlement announced by state Attorney General Mark Brnovich will pay the families \$50,000 each. Some vowed to donate the money to a new wildland firefighter safety foundation.

A second part of the agreement ends a state Forestry Division appeal of nearly \$560,000 in fines issued by Arizona's workplace safety agency, known as ADOSH. The state agreed to enhance safety training for wildland fire crews and a host of other changes in how it oversees fires and crews. It also will pay another seven families \$10,000 each.

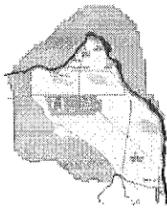
Family members say they didn't file the lawsuit for the money but to protect future firefighters.

— Tri-City Herald news services

It's a great time to BUY with the LOW interest rates & it's great time to SELL with the LOW listing inventory.  
"Helping Buyers & Sellers in all price ranges for 19 years"

Eric Culverhouse 539-6073 Teresa Culverhouse 531-7134  
Broker/Realtor  
Culverhouse@Windermere.com

## We want your input on Proposed Permit Changes for Hanford's 207-A South Retention Basin Closure Plan



The U.S. Department of Energy (DOE) seeks a change to Hanford's Dangerous Waste Permit to close the 207-A South Retention Basin (SRB). The basin is a concrete structure used from 1977 through 1989 to store process condensate from the 242-A Evaporator Facility. The basin has been empty since use of the facility ended in April 1989. DOE's closure process will include removal of the structure followed by sampling and analysis of the soil to assure that cleanup levels have been met.

DOE is submitting the 207-A SRB closure plan for public comment. This closure plan will be processed as a Class 3 modification to the permit. Class 3 permit changes call for a 60-day comment period on the proposal led by the permittee (DOE), and a public meeting. This will be followed at a later date by an Ecology-led 45-day comment period on the draft permit change.

To allow the work to be completed in this fiscal year, DOE plans to submit a Temporary Authorization request to Ecology.

The DOE-RL contact person for this permit change is Kris Skopec, 509-376-5803. The Department of Ecology contact person is Nina Menard, 509-372-7950.

Copies of the proposed closure plan and supporting documentation are available at the Administrative Record, 2440 Stevens Drive, Richland, WA or online <http://pdw.hanford.gov/arpit/>

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

Public Comment Period – June 30, 2015 – August 28, 2015

You can submit comments by August 28, 2015 to:  
Kristen Skopec  
U.S. Department of Energy  
Richland Operations Office  
P.O. Box 550, MSIN A7-75  
Richland, WA 99352

Public Meeting  
August 5, 2015 at 5:30 p.m.  
Richland Public Library  
955 Northgate Drive  
Richland, WA 99352



Please e-mail us at [Class3PermitInfo@1.gov](mailto:Class3PermitInfo@1.gov) if you require special accommodations to participate in the meetings.

## 35th Annual Trios Health Tri-Cities Marathon

Kennewick • Pasco • Richland

Sunday, October 25, 2015

Run along the banks of the mighty Columbia river, crossing the river four times on three bridges.

- Boston Marathon qualifier
- Marathon relay: 2, 3, and 4 person team options

Register online at [www.3RRR.org](http://www.3RRR.org).



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

The U.S. Department of Energy seeks a change to Hanford's Dangerous Waste Permit to close the 207-A South Retention Basin. The basin is a concrete structure used from 1977 through 1989 to store process condensate from the 242-A Evaporator Facility. The basin has been empty since use of the facility ended in April 1989. DOE's closure process will include removal of the structure followed by sampling and analysis of the soil to assure that cleanup levels have been met.

DOE is submitting the 207-A closure plan for public comment. This closure plan will be processed as a Class 3 modification to the permit. Class 3 permit changes call for a 60-day comment period on the proposal led by the permittee (DOE), and a public meeting. This will be followed at a later date by an Ecology-led 45-day comment period on the draft permit change.

To allow the work to be completed in this fiscal year, DOE plans to submit a Temporary Authorization request to Ecology.

The comment period on the proposed permit change to close the 207-A South Retention Basin is expected to start in late June.

# 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?

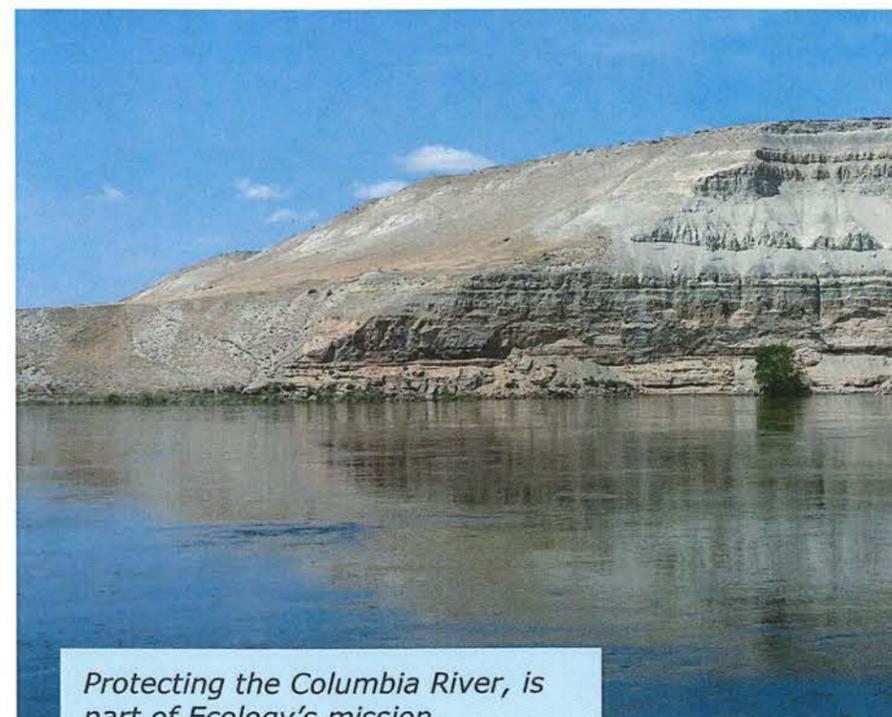
**Yes.** They will start with an overview of the draft permit, and a chance for informal questions and answers. After that the formal part of the hearing will begin. *See reverse for locations, dates and times.*

## 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/](http://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.

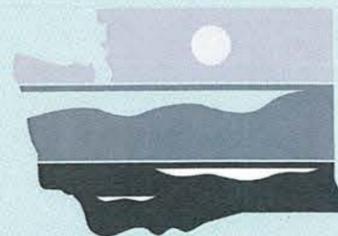
### How should I submit written comments?

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

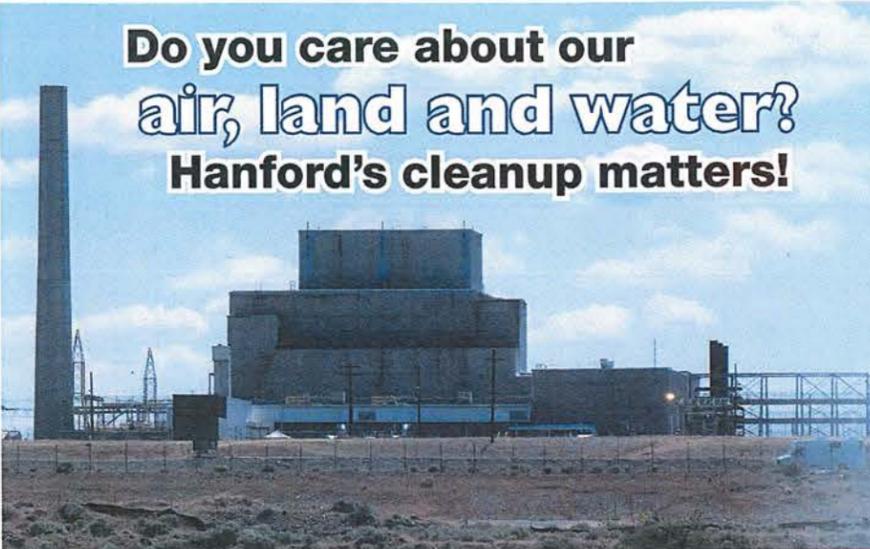
### Tell us what you think!

**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](http://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](mailto:Hanford@ecy.wa.gov) or call 800-321-2008.**



DEPARTMENT OF  
**ECOLOGY**  
State of Washington



## 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](http://ECY.WA.GOV)

Boost Unavailable



Like



Comment



Share



Liz Mattson and 2 others

2 shares



Write a comment...



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](http://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](mailto:Hanford@ecy.wa.gov) or 800-321-2008 if you would like more information.

**Madeleine C. Brown**

Washington Department of Ecology

Nuclear Waste Program

[Mabr461@ecy.wa.gov](mailto:Mabr461@ecy.wa.gov)

(509) 372-7936

## **APPENDIX B: COPIES OF ALL WRITTEN COMMENTS**

**From:** Mike [<mailto:mikeconlan@hotmail.com>]

**Sent:** Wednesday, July 15, 2015 6:58 PM

**To:** Skopeck, Kristen P

**Subject:** Comment on 207-A

- 1) Remove all nuclear waste,
- 2) Do not allow anymore nuclear waste into the facility,
- 3) Replace all the single storage tanks,
- 4) Stop all the nuclear leakage entering the Columbia River.

Mike Conlan  
Redmond WA

On Jul 5, 2015, at 11:12 AM, James Divine <[divine@chemmet.com](mailto:divine@chemmet.com)> wrote:

Just curious.

In the Background, 3rd sentence you say: "Each of the three cells had a 70,000-gallon design capacity and was 55 feet long and 10 feet wide at the bottom and 7 feet deep."

Assuming a rectangular cell, each was only 28,800 gallons. I assume therefore that the cells are trapezoidal with the top nearly 40 feet wide or the 70,000 gallons refers to total capacity.

Any comments?

James R Divine, PhD, PE, FNACE  
Chief Engineer & Corrosion Specialist  
ChemMet, Ltd., PC

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Confederated Tribes and Bands  
of the Yakama Nation ERWM

Established by the  
Treaty of June 9, 1855

August 27, 2015

Nina Menard  
Department of Ecology  
3100 Port of Benton Blvd.  
Richland, WA 99354

RE: YN ERWM PROGRAM (YN) comments on the Class 3 Modification to the Hanford site RCRA Permit for Closure of the 207-A South Retention Basins and Closure Plan - DOE/RL-2005-89, Rev 1 and State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure.

The Confederated Tribes and Bands of the Yakama Nation appreciate the opportunity to review and provide comments on these documents. Attached are our general and specific comments and requests for changes to the draft Closure Plan - DOE/RL-2005-89, Rev 1 and State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure.

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.

Sincerely,

Russell Jim  
Yakama Nation, ERWM Program Manager

cc:

Stacy Charboneau, Manager, Richland Operations Office, US Department of Energy  
Ken Niles, Oregon Department of Energy  
Stuart Harris, CTUIR  
Gab Bohnee, Nez Perce  
Marlene George, YN ERWM  
Administrative Record

Attachment:

**YN ERWM PROGRAM (YN) comments on the Class 3 Modification to the Hanford site RCRA Permit for Closure of the 207-A South Retention Basins and Closure Plan - DOE/RL-2005-89, Rev 1 and State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure.**

**Factsheet:**

YN suggest inclusion of the required WAC 173-303-830(4)(c)(ii)(F) statement: "The permittee's compliance history during the life of the permit being modified is available from the department of ecology contact person."

With Ecology's publication of draft document, YN suggests Ecology ensure all hyperlinks to referenced documents are active; the Part A form is available; and links to the 242-A Evaporator provided; explanation given to process of sending RCRA wastes to ERDF; explanation of why this is considered a DOE time critical removal action.

**Closure Plan DOE/RL-2005-89, Rev 1:**

**General Concerns:** To meet the requirements to propose a Class 3 modification to the Hanford Facility RCRA permit, per WAC 173-303-830(4)(c)(i)(D) the permittee should have provided the applicable information required by WAC 173-303-806 for the 207-A SRBs. WAC 173-303-806 states the requirements for final facility permit applications including Part A forms & Part B information. All this information was and remains vitally important for proper operations and/or closure of any treatment, storage, or disposal (TSD) unit under the RCRA permit, public understanding of the process of closure of a RCRA TSD unit, and protection of human health and the environment. Unfortunately, none of which have been approved through the Dangerous Waste Permitting process.

WAC 173-303-806(4)(d) lists the required information specific to surface impoundments. Regulations of importance to this proposed modification are found in 173-303-806(4)(d)(vi) & (vii). These directly reference the -806(4)(a) requirements which state the requirements for a description of how dangerous waste residues and contaminated materials will be removed and the requirement for a contingency plan (see WAC 173-303-650(5) & -(6) and WAC 173-303-610 for more clarification). The unit was not designed/constructed in compliance with WAC 173-303-650 requirements. The statement that "during construction of the basin, a Hypalon® liner was installed first" does not meet the requirements for a liner system. No leak detection systems were in place and there has never been RCRA compliant groundwater monitoring plan for the facility.

Upon review, the simplistic approach in DOE/RL-2005-89, Rev 1 falls short of providing the required information necessary for Ecology to establish permit conditions in compliance with the Hazardous Waste Management Act and WAC 173-303. Each permit issued under this chapter must contain terms and conditions as the director determines necessary to protect human health and the environment.

As currently written, there is approximately one page (pg. 13) to describe in detail Personnel Training Preparedness, Inspection and Sampling procedures. One cannot credibly determine compliance with WAC 173-303-610 requirements to have a detailed, complete closure plan (which should and does not, include a specifically detailed closure activity schedule with complete removal of wastes in 180 days) given the limited details presented in this Closure Plan.

## Comments: Specific Sections:

### Introduction:

1. The introduction does not mention that there is environmental information related to this unit contained DOE/RL-2004-025, *Remedial Investigation Report for the 200-PW2 Uranium-Rich Process Waste Group and the 200-PW-4 General Process Condensate Group Operable Units*; DOE/RL-2000-60, *Uranium-Rich/General Process Condensate and Process Waste Group Operable Unit REFS Work Plan and groundwater data* contained in the Hanford Environmental Information System (ISIS). Discussion (and those in subsequent Sections) does not include the following source sites or associated contaminants (which the 200 Area RI/FS Implementation Plan indicates the possibility of this type of steam waste reaching the associates crib(s) [216-A-37-1]): U and T Plants; the Reduction Oxidation (REDOX) Facility; the Plutonium-Uranium Extraction (PUREX) Plant; the Hot Semiworks Facility (C Plant); other tank farm related facilities' (S and A Tank Farm) condensates. YN requests inclusion of this information (and radionuclide contaminants of concern) in the Introduction for document continuity and comprehensive public understanding of the entire system processes. YN also requests updates to Figure #2 to include these source sites.
2. It does not discuss how non-TSD unit constituents will be addressed through the *Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)* past practice processes identified in the Tri-Party Agreement (Section 7.0). YN requests inclusion of this information (and radionuclide contaminants of concern) in the Introduction for document continuity and comprehensive public understanding of the entire system processes.
3. YN requests deletion or edit of lines #s21 thru 31 to clarify the final status permitting requirements for the 242-A Evaporator and to include the following text from the 242-A Evaporator Part A form; *The waste fed to the 242-A Evaporator is regulated as a mixed waste with the same waste constituents as the waste in the DST System.*
4. YN suggest inclusion of the following clarifying text to simplify lines #26-31: *Where information regarding treatment, management, and disposal of the radioactive source, byproduct material, and/or special nuclear components of mixed waste (as defined by the Atomic Energy Act of 1954, as amended) has been incorporated into this permit, it is not incorporated for the purpose of regulating the radiation hazards of such components under the authority of this permit and chapter 70.115 RCW. However, it is anticipated remedial actions for radioactive constituents shall be consistent with the closure activities required under WAC 173-303.*
5. YN requests deletion of portion of line #7; "and represents the baseline for closure and the enforceable compliance requirements for conducting closure." Closure plans must comply with the WAC 173-303-610 requirements; closure plans do not 'simply represent a baseline for closure' as stated. WAC 173-303-610(3)(iv thru vi) requires more information and details which are not included in this document.

### Chapter 1:

#### Section 1.1:

1. YN requests more details as to the design of the facility. References should be provided along with a more accurate diagram than what is provided in Figure #3. The statement is made that no leaks have been reported from the basin during inspections, etc, yet there is nothing substantively presented to be able conclude the construction, as described, would preclude this from occurring.

2. YN requests additional information regarding installation of a Hypalon® liner. Previously submitted information does not include this detail.
3. YN request updates to Figure #1 to include information regarding TPA change request C-07-02.

**Section 1.2:**

1. YN requests more detailed description of operations of the facility (e.g., details regarding the pumps and pumping station, waste transfers, spill history, etc).
2. YN requests inclusion of the 207-A central pump pit and associated piping (supporting the south basin system) to the Closure Plan and included in the facility description on the Part A Form Section XI (see WAC 173-303-650(2)(d)).
3. YN requests inclusion of a simplified explanation of the closure path of the 207-A North Retention Basin for and public understanding of the entire system processes.

**Section 1.3:**

6. In addition to the contaminants listed, DOE documents DOE/RL-2004-25 DRAFT A (i.e., RI) and DOE/RL-2004-85 DRAFT A (i.e., FS), identify the following chemicals as threats or potential threats to human health through the pathway of soil to groundwater: Arsenic, Nitrate/nitrite, 2-(2, 4, 5-trichlorophenoxy) propionic acid, 2,4-dichlorophenoxyacetic acid. The permittee also identified the following contaminants threatening ecological receptors through the soil pathway: 2-(2, 4, 5-trichlorophenoxy) propionic acid, 2,4-dichlorophenoxyacetic acid, Arsenic, Butyl benzyl phthalate, Silver. In the feasibility study (DOE/RL-2004-DOE proposed to exclude the following from the list of contaminants of concern (these are either human health or ecological contaminants of concern): 2-(2, 4, 5-trichlorophenoxy) propionic acid, 2, 4-dichlorophenoxyacetic acid, Arsenic, Butylbenzylphthalate, Nitrate/nitrite, Silver. The permittee also identified the site having the following radiological inventory threatening ecological receptors through the soil pathway: Actinium-228, Bismuth-212/214, Lead-212/214, Niobium-94, Thallium-208, Thorium-230/234. The 207-A SRB is not listed as associated with a CERCLA operable unit (OU) to remediate radiological hazards (However, it is anticipated remedial actions for radioactive constituents shall be consistent with the closure activities required under WAC 173-303). YN requests all these analytes as well as Methyl Ethyl Ketone, Methyl Isobutyl Ketone, Tributyl phosphate, Trichloroethane, be included in Table 1-Target Analytes. YN also requests carbon tetrachloride and chloroform be listed in Table 1 as a precaution due to use of a Hypalon® liner. YN also requests these contaminants also be captured on the 207-A SRB Part A form Section XIV.

**Section 1.4:**

1. YN requests more detailed description of how WAC 173-303-310 requirements are to be met.
2. YN requests clarification of why security changes are expected and what measures are anticipated to be taken.
3. YN suggest inclusion of the following text in addition to edits to Section 1.4: *Signs will be posted at public access points to Closure Unit 12 protected area stating, NO TRESPASSING. SECURITY BADGES REQUIRED BEYOND THIS POINT. AUTHORIZED VEHICLES ONLY. PUBLIC ACCESS PROHIBITED, or an equivalent legend. In addition, warning signs stating DANGER--UNAUTHORIZED PERSONNEL KEEP OUT, or an equivalent legend will be posted at all entrances to the unit. These signs are, or will be, written in English, legible from a distance of 7.6 meters, and visible from all angles of approach.*

**Chapter 2:**

1. YN has repeatedly searched the Administrative Record and failed to obtain a copy of the certified waiver of groundwater monitoring requirements for the 207-A- SRB as well as the cited document *PNNL, 2005, Basis for Waiver of Groundwater Monitoring Requirements for 207-A South Retention Basin*. YN is unable to verify that groundwater has not been adversely impacted. YN requests an active reference link to all documents.
2. The 207-A SRB was not designed/constructed in compliance with WAC 173-303-650 requirements. YN requests the Closure Plan be updated to include contingent post-closure care and maintenance requirements per WAC 173-303-650(6)(c)(i) and WAC 173-303-610(8).

### Chapter 3:

#### Closure Performance Standards:

1. Section 6.3.1 is the more important Section to reference as the 207-A SRB must close under requirements of WAC173-303-10. YN suggests you delete reference to Section 5.3 and descriptive text regarding 'interim status TSD unit closures'. The site is a final status permitted facility and this language only muddles public understanding.
2. YN requests correction to pg. 6, lines #s 3 & 4 text to state: "clean closure must demonstrate (*and include documentation*) that unit operations did not adversely affect soils *and that groundwater has not been adversely impacted, as described in WAC 173-303-645.*"
3. YN requests edits to pg. 6, lines 7-29 to reflect the direct language as cited in WAC 173-303-610(2)(a)(i)-(iii) (e.g., #3-Returns the land to the appearance and use of surrounding land areas to the degree possible given the nature of the previous dangerous waste activity.) YN disagrees with statements in lines #s 25-27 that appearance of the land should be consistent with future land-use determinations for adjacent portions of the 200 Areas as an industrial-exclusive portion of the Hanford Site.
4. YN request edits to pg. 6, line # 13. Delete the quotation marks, as this is not a direct quote of the regulations of WAC 173-303-610(2)(b)(i). Additionally, define the model being used under WAC 173-340-747. See comments on Table 4.

### Chapter 4:

1. YN requests edits to pg 7, line 2-4 to read as follows: *The objective of the sampling described in this document is to determine if MTCA unrestricted used standards for soil-direct contact and soils protective of groundwater have be met after removal of the 207-A SRBs*. It is a run-on sentence, and authority to determine if clean closure has been met resides with Ecology.

#### Section 4.2:

1. Use of MTCA Method B unrestricted use standards is appropriate but Ecology should not backslide from any earlier, more stringent cleanup levels listed in earlier versions of CLARC or under the various interim records of decision for the Hanford site. YN ERWM PROGRAM and public stakeholder response has consistently requested Ecology to ensure this does not happen.
2. Table 4: Table 4 appears to identify as closure performance standards soil direct contact values from the CLARC table listed on WA State Department of Ecology website. Clarification of how values were derived is requested. Furthermore, values for soils protective of groundwater vadose are provided in the CLARC table and have not been considered. The lowest value identified should be the Closure Performance Standard (i.e., the cleanup level). YN ERWM PROGRAM requests the following edits to Table 4 (ref; CLARC: Soil Protective of Groundwater Vadose @ 25/13 degrees C).

*m-cresol=2.33 mg/kg*

*o*-cresol=2.33 mg/kg  
*p*-cresol=2.33 mg/kg  
Methylene Chloride=0.022 mg/kg  
Acetone= 28.9 mg/kg

YN additionally requests Table 4 be updated to include contaminants listed in Section 1.3 comment.

YN additionally requests Table 1, Chapter 6 be updated to include contaminants listed in Section 1.3 comment.

3. Footnote 'a': There are other pathways which must be considered; these are identified in WAC 173-340-740(3). Values for ecological (biota and plants) were not considered. YN ERWM PROGRAM suggests the protection of ecological receptors could be achieved through one of the following methods:
  1. Excavation of contaminated soil to a minimum of 15 feet below ground surface, or
  2. Excavation of contaminated soil such that residual soil concentrations do not exceed ecological screening levels listed in WAC 173-340-900 (Table 749-3).
4. The 207-A SRB was not designed/constructed in compliance with WAC 173-303-650 requirements. YN requests there be no delay in the submittal of a post-closure plan and requests the Closure Plan be updated to include contingent post-closure care and maintenance requirements per WAC 173-303-650(6)(c)(i) and WAC 173-303-610(8). YN requested edits to pg. 7, lines 35-40 to reflect inclusion of this information.

**Chapter 5:** YN recognizes some details are presented, however, there is a lot of uncertainty in how the work will actually be performed and request additional information is provided overall. YN suggest the Permittee revisit Ecology's Publications #s 05-04-008 & 94-111 to assist in updating this closure plan.

**Sections 5.1-5.1.5:**

1. YN requests a detailed excavation design, and excavation work plan be attached as an Addendum to the Closure Plan. The excavation work plan shall also include a schedule for excavation work activities, as well as a treatment plan (to include a waste analyses plan, types of equipment that will be used for treatment, how the treatment process will be conducted, how success or completion of treatment will be verified, what sort of safety equipment or procedures will be used, etc.) for excavated soils in accordance with WAC 173-303-610(3)(a) as necessary to meet Waste Acceptance Criteria at the Environmental Restoration Disposal Facility or other RCRA permitted facility.
2. YN notes the proposed total footprint for clean closure activities does not seem consistent with all the activities described. There is no discussion of an *Area of Contamination* (AOC) within this closure plan. YN requests that there be no soils placed outside the cells but directly into ERDF containers. YN request that no bulk containers or 55 gallon drums (see Sections 5.2.3.1 & 5.2.3.2) be stored/staged adjacent to the basin. If there is to be an AOC, YN requests information be included in the Closure Plan as to how WAC 173-303-395 requirements will be met as well as WAC 173-303-630 requirements.
3. YN requests additional information in Section 5.2.4 as to how treatment to meet WAC 173-303-140 (LDRs) will be performed (see comments regarding footprint size). YN requests also request additional information in Section 5.2.4 regarding application of debris standards, etc.
4. YN suggest edit to run-on sentence pg. 12, line #s 1-4.

5. YN requested the 207-A central pump pit and associated piping (supporting the south basin system) be included in the clean closure of the 207-A SBR. Edit text to reflect these will be removed (Sec 5.1.2.1).
6. YN requests edits to pg. 9, line #s 11 and 21 to reflect final excavation footprint depth will be 15ft and additional soil removal maybe performed to meet clean closure performance standards.
7. YN requests clarification as to what is the intention of Section 5.1.5 and how this correlates to the statements that "the basin will be backfilled and revegetated."
8. YN requests additional details as to how storm water run-on and run-off controls will be implemented; the sampling of any liquids present in the basins; procedures for cleaning/decontamination of equipment.
9. YN clarification as to use of the word containers throughout Chapter 5; in some instances the word is understood to mean a 55-gallon drum and other cases, an ERDF roll-off box.
10. YN request identification of WAC 173-303 and DOT citations throughout Chapter 5, where appropriate.

**Section 5.2 & 5.3:**

1. YN requests additional details in Sections 5.2.2-5.2.3 as to how compliance with WAC 173-303 will be met. Include more detail with regard to characterization and management as well. YN requests anticipated storage area/ facilities to be used be identified by name.
2. YN requests edits to pg. 11, line #11 to delete text: "If a container is in poor conditions, etc." No containers in poor condition should be used.
3. YN request additional details regarding how DOE will determine potential sources of airborne emissions. Will air monitoring be conducted during excavation activities? Where will air-monitoring stations be located? Provide references to documents governing *DOE radiation control and substantive air pollution control standards*.

**Section 5.4:** There are portions of the requirements for operating units that are valuable to tailor to, and incorporate details into the closure of the 207-A SRBs. As currently written, there is approximately one page (Section 5.4, pg. 13) to describe in detail Personnel Training, Preparedness and Prevention, Inspection Plans. These plans should be directed towards the ongoing cleanup closure/post-closure actions (e.g., inspections should be on a weekly basis at a minimum.) Any beliefs *that applying all interim status requirements to TSD units not operating and awaiting approval of closure plans is challenging due to funding* does not relieve the Permittee of his obligations under the Dangerous Waste Regulations. YN requests the Closure Plan for the 207-A SRB facility incorporate the required WAC 173-303 information in detail:

1. Personnel Training Plan (In accordance with WAC 173-303-330.): Please ensure the following trainings/requirements are included as well:
  - Training related to equipment type [e.g., sampling equipment, operational procedures and equipment maintenance] relevant to task performed.
  - For Samplers: Additional training in collecting, packaging & shipping of samples to field & off-site labs (including special requirements for collecting and packaging samples containing volatile organic materials that require acid preservatives or special filtering) and chain of custody procedures.
2. Preparedness and Prevention Plan (In accordance with WAC 173-303-340.).
3. Inspection Plan (In accordance with WAC 173-303-320.): Please ensure the following information/requirements are included as well:

- Inspection of erosion damage & vegetative cover; to include looking for evidence of animal/pest intrusion such as anthills, termite nests, animal burrows, bird nests, water erosion, etc., that might spread contamination.
  - Replacement procedures for emergency & monitoring equipment; to include checking for proper location of these (e.g., air monitoring equipment).
  - Surface inspections/security inspections; to include looking for damages to security postings; incorrect barriers, unidentified containers or hazardous wastes, site is free of obvious safety hazards, an evidence of spills or releases, etc. YN has requested no temporary placement of containers, however, should this be allowed, YN requests the information regarding container management to be included in the Inspection Plan.
4. Contingency Plan/Contingent Post Closure Plan (to include a groundwater monitoring plan) (In accordance with WAC 173-303-650(6)(c)(i).).

**Section 5.5:** YN requests future consultation regarding this portion of the Closure Plan. Clearly, the Closure Plan does not adequately explain how cleanup will meet the National Historic Preservation Act consultation process, including, for example, the specific and concrete steps for how cleanup in the cultural areas will proceed in a manner that prevents disturbances (e.g., specific soil sampling designs to protect artifacts).

**Chapter 6:**

1. YN requests Ecology review and comparison of the parameters from the 200-MG-1 and the 200-PW-2/4 OU waste sites SAPs as input parameters for the soil to determine if these are still appropriate. The 207-A SRB unit was previously in the 200-PW-2/4 OU.
2. YN requests clarification as to the location and number of sample sites and samples taken. Discussions during the public meeting (August 5, 2015) indicated more than three locations for each basin. Provide a figure of basins (ex. Figure 3) with overlay of sample sites. Three locations with multiple sampling are unclear to reader.
3. YN requests samples are taken to a minimum depth of 6" and at a depth of 15ft. This will help to eliminate ecological concerns.
4. YN request Sampling and Analysis Plan(s) [per WAC 173-303-610(3)(a)(v)] be consistent with Ecology Publication #09-05-007 [Guidance for Preparing Waste Sampling and Analysis Documents and QA/QC Requirements at Nuclear Waste Sites] and include the following:
  - Documentation of the necessary quantity and quality of data for each decision for which sampling and analysis may be required pursuant to conditions of this Chapter. [WAC 173-303-300(1)]
  - The parameters for which each environmental media sample will be analyzed and the rationale for selecting these parameters and the frequency with which analysis of a waste will be reviewed, or repeated, to ensure that the analysis is accurate and current. [WAC 173-303-300(5)(a)]
  - Procedures for how non-detects, and any tentatively identified compounds which may be reported with laboratory analytical results will be assessed and/or used for decision-making purposes, and to identify any contaminants in addition to those already identified for which establishment of closure performance standards may be warranted. [WAC 173-303-300(5)(a)]
  - Analytical methods, including field measurements, which will be used for analysis of environmental media samples. [WAC 173-303-300(5)(b)]

- Methods of obtaining representative samples of soils for all sampling and analysis, which may be, required pursuant to WAC 173-303-110 requirements and consistent with the requirements specified in WAC 173-340-810 and WAC 173-340-820. [WAC 173-303-300(5)(c)]
- A quality assurance/quality control (QA/QC) plan, or equivalent, to document all monitoring procedures to ensure that all information, data, and resulting decisions are technically sound, statistically valid, and properly documented. Each QA/QC plan shall include, or contain a reference to another document, which will be used and includes, the elements as defined. Each QA/QC plan shall contain a Data Quality Assurance Plan which includes the following:
  - Data Collection Strategy section including, but not limited to, the following:
    - A description of the intended uses for the data, and the necessary level of precision and accuracy for those intended uses; and,
    - A description of methods and procedures to be used to assess the precision, accuracy, and completeness of the measurement data;
    - Sampling section, which shall include or describe, and reference or cite:
    - Criteria for selecting appropriate sampling locations, depths, etc., or identification and justification of sample collection;
    - Sampling methods including the identification of sampling equipment and a description of decontamination procedures to be used;
    - Criteria for providing a statistically sufficient number of samples as defined in EPA guidance, or criteria for determining a technically sufficient number of measurements to meet the needs of the project as determined through the Data Quality Objective (DQO) planning process;
    - Methods for, or specification of, measuring all necessary ancillary data;
    - Criteria for establishing, or specification of, which parameters are to be measured at each sample collection point, and the frequency that each parameter is to be measured;
    - Criteria for, or specification of, identifying the type of sampling (e.g., discrete), and number of samples to be collected;
    - Criteria for, or specification of, measures to be taken to prevent contamination of the sampling equipment and cross contamination between sampling points;
    - Methods and documentation of field sampling operations and procedure descriptions, as appropriate, including:
      - Procedure descriptions and forms for recording the exact location, sampling conditions, sampling equipment, and visual condition of samples;
      - Calibration of field devices (as applicable);
      - Collection of replicate samples;
      - Submission of field-biased blanks, where appropriate;
      - Potential interferences present at the facility;
      - Field equipment listing and sample containers;
      - Sampling order; and,
      - Descriptions of decontamination procedures.
    - Selection of appropriate sample containers, as applicable;
    - Sample preservation methods, as applicable; and,

- Chain-of-custody procedure descriptions as applicable, including:
  - Standardized field tracking reporting forms to establish sample custody in the field prior to, and during shipment; and,
  - Pre-prepared sample labels containing all information necessary for effective sample tracking, except where such information is generated in the field, in which case, blank spaces shall be provided on the pre-prepared sampling label.
  - Certification that all samples obtained for analysis will be delivered to a responsible person, at the recipient laboratory, who is authorized to sign for incoming field samples, obtain documents of shipment, and verify the data entered onto the sample custody records;
  - Provision for a laboratory sample custody log; and,
  - Specification of chain-of-custody procedures for sample handling, storage, and disbursement for analysis.
  - Sample storage procedure descriptions and storage times;
  - Sample preparation methods;
  - Descriptions of analytical procedures, including:
  - Scope and application of the procedure;
  - Sample matrix;
  - Potential interferences;
  - Precision and accuracy of the methodology; and,
  - Method detection limits.
  - Descriptions of calibration procedures and frequency;
  - Data reduction, validation, and reporting;
    - Internal laboratory quality control checks, laboratory performance, and systems audits and frequency, include:
      - Method blank(s);
      - Laboratory control sample(s);
      - Calibration check sample(s);
      - Replicate sample(s);
      - Matrix-spiked sample(s);
      - "Blind" quality control;
      - Control charts;
      - Surrogate samples;
- Each QA/QC plan to include a Data Management Plan, or equivalent, to document and track data and results.[WAC 173-303-380(1)(f)]. This plan should identify and establish data documentation materials and procedures, project or unit file requirements, and project-related progress reporting procedures and documents. The storage location for the raw data should be identified. The plan should also provide the format to be used to record and, for projects, present the validated and invalidated data and conclusions.
- The Data Management Plan should include the following as applicable:
  - A data record including the following:
  - Unique sample or field measurement code;
  - Sampling or field measurement location including surveyed horizontal coordinates and elevation of the sample location, and sample or measurement type;
  - Sampling or field measurement raw data;

- Laboratory analysis identification (ID) number;
- Result of analysis (e.g., concentration);
- Tabular displays, as appropriate, illustrating:
  - Unsorted validated and invalidated data;
  - Results for each medium and each constituent monitored;
  - Data reduction for statistical analysis;
  - Sorting of data by potential stratification factors (e.g., location, soil layer, topography); and,
  - Summary data.
- Graphical displays (e.g., bar graphs, line graphs, area or plan maps, isopleth plots, cross-sectional plots or transects, three dimensional graphs, etc.), as appropriate, presenting the following:
  - Displays of sampling location and sampling grid;
  - Identification of boundaries of sampling area and areas where more data is required;
  - Displays of concentrations of contamination at each sampling location;
  - Displays of geographical extent of contamination;
  - Aerial and vertical displays of contamination concentrations, concentration averages, and concentration maxima, including isoconcentration maps for contaminants found in environmental media at the Facility;
  - Illustrations of changes in concentration in relation to distance from the source, time, depth, or other parameters;
  - Identification of features affecting intramedia transport and identification of potential receptors;
- All data obtained should be made available to Ecology within forty-five (45) days of receipt or after completion of QA/QC activities, if applicable.

**Chapter 7:** See #3, Section 5.4 comment:

**Chapter 8:** For clarity, YN requests a more detailed schedule; see attached example table; edit to include Table 6 information:

**Chapter 9:**

1. YN request edits to line #s 4-10 to reflect the actual regulatory language.
2. YN requests the minimum field activities and documents reviewed by the IQRPE include all the supporting documentation listed on page 25. The IQRPE should have a thorough understanding of closure activities.

**Chapter 10:** See #3, Section 5.4 comment.

**Chapter 11:** YN requests inclusion of reference to WAC 173-303-830/840 regulations.

Closure Activity Description	Expected Duration <sup>1</sup>
Receipt of final volume of dangerous waste	N/A
Notify Ecology that the Permittee expect to begin closure.	60 days <sup>2</sup>
Remove waste inventory – package all dangerous waste, manifest, and transfer to permitted facility for further storage, treatment and/or disposal	45days
Visual inspection, survey, and record review	30 days
Complete all closure activities (i.e. structural decontamination and/or removal, analysis of decontamination waste, waste disposal)	90 days
Upon completion of closure, transmit independent qualified registered professional engineer certification to Ecology	60 days

1. Time durations are consecutive and are added together.

2. 60 days prior to receiving last shipment of waste.

**YN comments on : State Environmental Policy Act checklist for the Hanford Facility 207-A South Retention Basin Closure:**

1. YN request inclusion of citation reference WAC 197-11-960 in #1.
2. YN requests edits to #6 to include the following information: This SEPA Environmental Checklist is being concurrently with a closure plan [DOE/RL-2005-89, Rev 1] prepared in accordance with Washington Administrative Code (WAC) 173-303 Dangerous Waste Regulations.
3. YN requests edits to #8 to include the following information (which is also cited in references in the Closure Plan): DOE/RL-2004-025, Remedial Investigation Report for the 2000 -PW2 Uranium-Rich Process Waste Group and the 200-PW-4 General Process Condensate Group Operable; DOE/RL-2000-60, Uranium-Rich/General Process Condensate and Process Waste Group Operable Unit RI/FS Work Plan and RCRA TSD Unit Sampling Plan-Including 200-PW-2 and 200-PW-4 Operable Unit groundwater data contained in HEIS. Non- TSD unit constituents will be addressed through the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 past practice processes identified in the Tri-Party Agreement (Section 7.2) for the consolidated 200-PW-2 and 200-PW-4 Operable Units.
4. YN requests edits to #9 to include the following information: DOE/RL has forwarded the aforementioned 207-A South Retention Basin Closure Plan (DOE/RL-2005-89, Rev 1).
5. YN requests edits to be included in #11 as follows:
  - *The 207-A South Retention Basin operated as a surface impoundment.*

- YN noted that there were some paint chips, etc to the basin surfaces. Please edit this section to include this information.
- Inclusion 207-A central pump pit and associated piping supporting the south basin system as a part of the clean closure actions and to the Closure Plan and Part A.
- Edits to depth of soil removal to at least 15ft.
- YN requests Ecology consider our comments regarding footprint size, etc.
- Environmental elements:
  - #c: YN requests more identification of soil types
  - #e: YN requests identification of backfill materials to be used.
- Air:
  - #a: YN requests additional text : Dust from demolition activities will be generated.
  - #c: YN requests more information regarding visible dust emissions from active demolition activities, water usage for dust suppressions, etc.
- Energy and Natural Resources
  - #a: YN requests inclusion of following: Fossil fuel will be used in vehicles to access the site, conduct demolition, and remove waste to ERDF.
- Environmental Health:
  - #a: Please include additional information as to whether there are any known or possible contamination at the site from present or past uses.; the existing hazardous chemicals/conditions that might affect the project development and design, including underground hazards , etc.; describe any toxic or hazardous chemicals which might be stored, used,, or produced during the project.
- Historical and cultural preservation:
  - YN requests a much more complete explanation of the Cultural Resources Reviews within the 200 Areas of the Hanford site and the methods used to assess the potential impacts to the cultural and historic resources on or near the project site.
- Utilities:
  - #b: YN requests inclusion of discussion of power generators, etc.



Dear Ms. Skopeck: Re: 207-A South  
Retention Basin Closure

I say "Amen" + "Amomen" to the closure of all these retention basins! The recent story in The New Yorker re: the earthquake potential in the northwest is reason enough to close all tanks + solidify the waste. So your work toward that end is so important.

I'm always curious as to why the closure plan wasn't in place long ago?

Question: If leaks are found what actions will be taken?

And, I am interested in the compliance history during the life of the permit.

Can you provide me with Nina Menard's email address?

Thank you for all your work, This is one of the nation's top priorities in my book. Unseen, unheard, but deadly stuff.

Nancy Koenig  
greeniefrost@yahoo.com



Confederated Tribes and Bands  
of the Yakama Nation ERWM

Established by the  
Treaty of June 9, 1855

1217605

October 18, 2012

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

**RE: Comments on Draft Hanford Facility Dangerous Waste Permit (Site-Wide Permit),  
WA 7890008967**

Dear Mr. Skinnarland:

The Yakama Nation ER/WM Program appreciates the opportunity to review and provide comments on the Draft Hanford Facility Dangerous Waste Permit (Site-Wide Permit), Revision 9 – WA 7890008967.

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

There is no issue of greater importance to the Yakama Nation than protection of, and respect for the treaty-reserved rights. Within this ceded area, the Yakama Nation retains the rights to natural and cultural resources including but not limited to areas of ancestral use, archaeological sites and burial grounds. These resources are sacred and sensitive to the Yakama Nation, and must be managed to preserve, protect and perpetuate the resources that are inseparable from our way of life.

Attached are our general and specific comments and requests for changes to the draft Hanford Facility Dangerous Waste Permit. We are attaching our comments on Ecology's State Environmental Policy Act (SEPA) determinations.

**General Over-arching SEPA determination comments:** Associated with the Permit are SEPA determinations for the specific units and an over-arching determination. Comments on these are attached and/or included in our comments on the draft Hanford Facility permit.

SEPA determinations:

1. Ecology has also chosen to implement a "Phase Review" despite the fact that SEPA checklists were or should have been submitted with the Part B Applications. If they were not then Ecology is not in compliance with WAC 173-303 in accepting the Application as complete. The SEPA regulations at WAC 197-11-060 specifically say that phased review can't be used if it would split up units and allow an agency to ignore the cumulative impacts of the units.



2. Ecology made an over-arching determination of non-significance (DNS). Ecology has no authority to make a DNS until it is known what all the Hanford Site mitigation plans will be.
3. At the very *minimum*, a determination of mitigated significance (MDNS) should have been the over-arching SEPA determination for the Hanford Facility based on the unit-specific SEPA determinations which indicated impacts or the need to mitigate impacts. Given these facts, even a MDNS has several concerns:
  - a. This determination assumes units, such as the SST unit, can be completely mitigated so there is no environmental impact during the closure process, but the permit applicants have provided no such evidence.
  - b. Any mitigation plans would have no EIS to confirm the extent or nature of the damage they claim to address without defensible justification.
  - c. A mitigated determination can be slightly deceptive: it assumes that once a permit is in place, there is no environmental impact, while at the same time it does not require mitigation plans be implemented.
  - d. Necessary mitigations within the unit-specific Permits should be included as required compliance conditions (Note: these mitigations are not evident in most permits).
  - e. Permit condition requirements for cultural and biological reports are not SEPA compliant. When the SEPA checklists were submitted with the permit applications, this *already* should have been a part of the information provided. If not, Ecology should have indicated so in their decision and issued a MDNS. Ecology should delete these permit conditions and revise its SEPA determination.

**General Over-arching Permit comments:**

1. All required information to write a Permit should have been submitted with Permit Application in 2004. Ecology deemed the application complete when in fact the draft permit contradicts this determination. *PPC 9524.1984(01) COMPLIANCE SCHEDULES IN RCRA PERMITS OCT 5 1984*, an EPA memorandum on compliance schedules, states a compliance schedule cannot be used to allow a facility additional time to provide Part B application information after the permit is issued. The draft permit does not comply with this EPA directive.

Furthermore, there is a general lack of clarity, rationale and logic presented in the document(s). No rationale or logic presented in either the overarching or unit-specific Fact Sheets or the unit-specific Permits to support Ecology's decision-making process. (e.g., Modified/Partial closure of an individual unit is not authorized under WAC 173-303-regulations [see 1325-N]. More examples: Introduction page 6; Reorganization of tank farms reorganized into 7 WMAs is not clear.)

2. Use of the Corrective Action/Record of Decision (CAD/ROD) approach to integrate Treatment Storage and Disposal Facility (TSD) closure with CERCLA for the Central Plateau TSD units and delay of development of closure plan/contingency plans/post-closure plans until after remedy selections does not ensure compliance with the Dangerous Waste Regulations [WAC 173-303-610]. The unit descriptions imply closure actions to be done under a CERCLA work plan authority rather than the RCRA permit. Workplans do not fall under the WAC 173-303-830/840 modification/review process. Corrective Action decisions (should this approach continue) have their own comment periods and are outside the

Dangerous Waste regulatory process. Additionally, Tribal or public comment or right of challenge are not subject to the same rights as under the Dangerous Waste process. See YN ERWM comment letter on the II.Y condition and changes to the TPA (2010).

3. Use of *past-practice authority* has not proven to be the most efficient way to remediate groundwater plumes of mixed waste from a combination of past-practice treatment, storage, and disposal units. Ecology's earlier "coordination" of corrective action at 300 APT with CERCLA remedial actions has not resulted in compliance with Dangerous Waste regulations –WAC 173-303-283, -610, -or -645 requirements to protect human health or the environment. More stringent facility cleanup standards should be applied. Ecology should implement groundwater monitoring plans compliant with WAC 173-303.
4. WAC 173-303-645-(1)(e) requires the director to determine that *it is not necessary to apply the requirements of this section because the alternative requirements will protect human health and the environment*. The required determination has not been made as there are no alternative requirements in place. Furthermore, it is inappropriate to prospectively accept CERCLA work via the II.Y conditions as satisfying the Dangerous Waste WAC 173-303-645/646 corrective action permit while the remedy selected remains an unproven technology.<sup>1</sup> Ecology should include WAC 173-303-610 and -645 requirements for soils and groundwater cleanup.
5. Ecology must first determine whether use of Alternative Standard for groundwater monitoring is applicable and meets the needed criteria. Until such time that Ecology has made the determination that STOMP-1D is a validated model per criteria in the Dangerous Waste Regulations, Ecology is required to incorporate unit specific permits groundwater monitoring into the RCRA Permit in compliance with WAC 173-303-610(2)(b)(i) requirements. Furthermore, there is an incorrect application of MTCA [173-340-410]. If alternative requirements are to be applied, then an enforceable action issued pursuant to MTCA must be done and Ecology is required to incorporate these into the permit at the time of permit issuance [WAC 173-303-646(3)(b) & (c)]. This has not been done.
6. Permits use of the words 'Ecology may accept' does not meet the requirements to have closure details, etc in the permit, there is no defined regulatory authority/pathway to do this, as stated, permit does not comply with DW Closure WAC 173-303-610(3) requirements; this approach is the prospective agreement of acceptance of CERCLA work meeting RCRA closure requirements as these CERCLA documents don't yet exist. Ecology should include WAC 173-303-610(3) requirements.
7. No Performance Standards are included in the permit as required by WAC 173-303-283. Ecology should revise Part II conditions and unit-specific permit condition(s) to include the following: Closure of a RCRA TSD facility is described in these Dangerous Waste Regulations under WAC 173-303-610. WAC 173-303-610(2)(b)(i) requires for soils, groundwater, surface water, and air, the numeric cleanup levels calculated using residential exposure assumptions according to the Model Toxics Control Act Regulations (MTCA), chapter 173-340 WAC, as now or hereafter amended. Primarily, these will be numeric

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<sup>1</sup> The preferred remedial alternative for the protection of groundwater relies on the application of polyphosphate solution to deeper zones of uranium contamination. Polyphosphate remediation has been previously attempted in the 300 Area and has proven to be both problematic and ineffective. In the event that the polyphosphate application does not reduce the mobility of uranium in the deep subsurface, the proposed alternative specifies that no additional treatment will be applied.

cleanup levels calculated according to MTCA Method B, although MTCA Method A may be used as appropriate (industrial use land). However, use of Methods A and C to meet cleanup standards is in violation of previous commitments by DOE to unrestricted residential use along the River Corridor. Additionally the Hanford site does not meet the criteria for application of Method A; it has too complex waste streams to qualify.

Ecology should include the following closure performance standards for contaminated soils to ensure compliance with the Dangerous Waste Regulations:

- Closure performance standards for soils will satisfy the most stringent (lowest) of: [WAC 173-303-610(3)(a)(v)]
  - Direct contact consistent with WAC 173-340-900 (Table 745-1),
  - Soil concentrations to protect groundwater: derived using WAC 173-340-747(4),
  - Protection of ecological receptors achieved through one of the following methods:
    - a. Excavation of contaminated soil to a minimum of 15 feet below ground surface, or
    - b. Excavation of contaminated soil such that residual soil concentrations do not exceed ecological screening levels listed in WAC 173-340-900 (Table 749-1), or
    - c. A site-specific demonstration that remedial standards eliminate threats to ecological receptors.
- 8. Permits lack conditions identifying required clean closure of, or excavation of near-surface soil and removal of any associated pipelines or structures (ancillary equipment) per WAC 173-303-283 performance standard requirements. Ecology should include requirements for RTD under WAC 173-303-630(10), -640(8), and -650(6).
- 9. The permits do not utilize the Closure Plans submitted in the Part B applications (2004). Ecology should utilize these closure plans and write appropriate Closure Permit conditions to rectify any non-compliance with unit specific closure requirements under WAC 173-303, and include these Closure Plans and/or Permit Conditions within the Permit(s) to ensure compliance with WAC 173-303-610. Ecology should ensure closure plans are consistent with unit-specific Dangerous Waste Regulations (e.g., WAC 173-303-650 Surface Impoundment regulations) as well as the rest of WAC 173-303.
- 10. All Addenda identified as “reserved” must include the WAC 173-303 required information in order to be in compliance with the regulations and be included in their respective unit permit (e.g., Sampling and Analysis Plans). Ecology should include required information.
- 11. All Addenda included in the permit should include the unit specific information, not merely reference a document (e.g., Training Plans are located in the unit-specific file rather than the permit, possibly confusing to the permittee. Definitely confusing to the public). Ecology should include these types of documents as attachments to their respective Permit Addendum.
- 12. Permits do not include Ecology approved and Dangerous Waste WAC 173-303 compliant RCRA Groundwater Monitoring Plans as attachments to unit specific Permits within their Closure Plan Addenda. Groundwater monitoring plans are not consistent with the DW regulation requirements. The permit should clearly identify the groundwater protection standards that satisfy WAC 173-303-645(4), (5), (6), (7), (8), and (9). The permit must clearly identify dangerous constituents, concentration limits, point of compliance, compliance period, and general groundwater monitoring requirements. Key elements that comprise groundwater protection standards (WAC 173-303-645(3)) are missing. Ecology should

- include these requirements to ensure compliance with Dangerous Waste regulations – WAC 173-303.
13. Some Permit conditions include incorrect use of waivers [variances] to closure regulations (WAC 173-303-610(4)(b)). Ecology should delete this waiver language.
  14. Modified/Partial closure of an individual unit is not authorized under WAC 173-303 regulations and is included as an option in permit closure [see 1325-N). Ecology should delete this language and update the Permit to reflect compliance with WAC 173-303-610(3) and other WAC 173-303 requirements:
  15. All unit-specific groundwater monitoring plans should be consistent with Ecology Publication # 04-03-030, *Guidelines for Preparing Quality Assurance Plans for Environmental Studies*. Ecology should include this as a requirement in all Permits.
  16. Permits' Contaminant of Concern (COC) lists do not encompass the full range of contaminants. Ecology should include, in each unit-specific Permit, the full list of COCs as noted or identified in associated draft RI/FS documents previously submitted to Ecology (e.g., Part V Permit unit-specific permits do not include COCs from earlier submitted RI/FS done to support submittal of Closure Plans: see DOE/RL-2004-17, Draft A, Pg. ES-5, Table ES-1 & pg 6-7).
  17. Permit conditions do not require use of a methods-based approach in the unit-specific Sampling and Analysis Plans. Nor is use of non-filtered sampling in the Sampling and Analysis Plans required. Ecology should include requirements for these in unit-specific Permit conditions (or include a Part II condition applicable to all units) to ensure compliance with WAC 173-303 regulations.
  18. Permit conditions do not require repairs and replacement of wells per WAC 173-160. Ecology should include Permit condition(s) to require compliance with these requirements.
  19. Permit conditions do not require coordination and incorporation of RCRA inspection requirements for the unit-specific permits with those for the associated CERCLA groundwater operable unit's. Inspection should at a minimum, be on a semi-annual basis. Ecology should include permit conditions to require coordination of inspections for unit-specific permits with those for the associated CERCLA groundwater operable unit's requirement.
  20. Permit conditions do not ensure that all unit-specific Closure Schedules are compliant with the Dangerous Waste WAC 173-303-610 requirements or 173-303-815(3)(b). Ecology should require this.
  21. Statements are made in several permit conditions to the effect that the Permittee has made the determination that the unit cannot meet clean closure standards. This text should be deleted and rewritten to reflect that Ecology makes permitting decisions in accordance with WAC 173-303.
  22. The Permit does not include a list of other applicable laws or required permits, nor are there conditions which reflect how compliance of these will be achieved. Ecology should identify these in each permit.

23. Ecology should evaluate and confirm that all information on these Part A forms is consistent with Washington State Dangerous Waste Permit Application; Part A Form and Instruction publication ECY 303-31 (6-2003) requirements as well as information presented in the SEPA checklists submitted with the Part B Permit application, the unit(s) specific draft Permit Conditions, and the draft factsheet(s) (e.g., the LLBG Part A form and the permit indicates in-trench treatment or placement of liquids within landfill; this is not allowed by the landfill regulations).
24. Ecology should review and revise Part V (Closing) Permits to ensure compliance with Land Disposal Restrictions (LDRs) – WAC 173-303-140.
25. Ecology should review and revise Part V (Closing) Permits to ensure that non-existent Part II conditions are not cited (e.g. 1301-N).
26. 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 by including language as such in all Permit conditions.
27. The basis for permit conditions is incorrectly stated as coming from CERCLA & TPA Milestone requirements rather than first identified as requirements under the Dangerous Waste regulations. It is very difficult to track permitting actions in referenced rather than attached/included documents. A matrix approach whereby the applicable sections of the CERCLA documents are directly included in the permit, rather than referenced, is more transparent and publicly accessible. Concerns regarding “double jeopardy” could be eliminated by including only those sections of the CERCLA documents needed to fulfill RCRA Dangerous Waste WAC 173-303 permitting requirements and modification process. CERCLA documents could contain a table of contents identifying these area and/or separate chapters for the permit requirements. This would also not be “duplication of efforts” as two separate documents are not necessary. Ecology should develop this matrix approach.
28. Permit lacks a Part II condition of the definition of the term “Critical Systems.” Ecology should include following definition: “Critical Systems, as applied to determining whether a Permit modification is required, means those specific portions of an operating unit group’s structure, or equipment, whose failure could lead to the release of dangerous waste into the environment, or systems which include processes which treat, transfer, store, or dispose of regulated wastes.” Changes to specific portions of a dangerous waste management TSD identified as a critical system are subject to the permit modification requirements of WAC 173-303-830.
29. The permit lacks a Part II condition of the definition of the term “Ancillary Equipment.” Ecology should include following definition: “The term ‘ancillary equipment’ means any device including, but not limited to, such devices as piping, fittings, flanges, valves, and pumps, that is used to distribute, meter or control the flow of dangerous waste from its point of generation to a storage or treatment tank(s), between dangerous waste storage and treatment tank(s) to a point of disposal on-site, or to a point of shipment for disposal off-site.”
30. Ecology should include the 324 Building in the Permit. Due to the B-Cell leak which requires extensive cleanup, this unit should be included in the Permit at the very least as a Part IV Corrective Action Unit. See attached comment file for the 324-Building.

31. Ecology should include the U.S. Ecology Low-level Radioactive Waste (LLRW) landfill in the Permit. As the landowner the Permittee is an "owner" of the landfill and as such is ultimately responsible for its operation, which includes management of dangerous waste in both its past practice and TSD inventory.
32. Off-site wastes should not be permitted to be buried on the Hanford site until a cumulative Risk Assessment indicates there will be no exceedances of groundwater cleanup standards. Ecology should include Permit conditions indicating as such to ensure large volumes of waste do not come to Hanford for disposal.
33. This is a new permit, not a revision of a permit. It should not be identified as Rev.9.

**Over-arching Comments for Part V permit units:**

1. Ecology should utilize the Closure Plans submitted in the Part B application and write appropriate Closure Permit conditions to rectify any non-compliance with unit specific closure requirements under WAC 173-303. Closure plans for some units reflect decisions based on the 1990s-era data embedded in the plans that should be viewed with considerable skepticism. As examples:
  - For 1301-N, the closure plan cites a DOE document stating that mercury will not reach groundwater for 1,000 years.
  - Also for 1301-N, the plan cites an assertion from DOE that there is not lateral movement of metals in the vadose zone. This broad assertion for all metals appears to be based on analysis of one metal (mercury) in one borehole.
  - At 1324-N/NA, it is asserted that there is no need for a cap. This conclusion is based on a claim that there is no driver for contaminant movement because precipitation will not reach groundwater for 200 years.
2. The groundwater monitoring plan for 183-H defines a local background concentration for chromium of 122 ug/L. While this might have been the concentration in plumes emanating from 100-D, it is difficult to accept this as a "background" concentration against which treatment effectiveness at the 100-F area can be meaningfully evaluated.
3. Ecology should ensure the approved closure plan is consistent with unit-specific Dangerous Waste Regulations-WAC 173-303 (e.g., Surface Impoundment regulations).
4. Ecology should include approved Closure Plans and/or Permit Conditions within the Permit(s) to ensure compliance with WAC 173-303-610 and unit specific closure requirements, and should not presumptively approve plans that do not yet exist. There is a lack of requirements for submittal of closure plans in the new RCRA Permit. Reference to closure actions under non-existent CERCLA document violates DW closure regulation requirements to have these details in an approved Closure Plan. Required by WAC 173-303-610(3).
5. Ecology should include Ecology approved and Dangerous Waste WAC 173-303 compliant RCRA Groundwater Monitoring Plans as attachments to unit specific Permits within their Closure Plan Addendums.

6. All Addendums identified as “reserved” should include the WAC 173-303 required information in order to be in compliance with the regulations.
7. Ecology should require all unit-specific groundwater monitoring plans be consistent with Ecology Publication # 04-03-030, *Guidelines for Preparing Quality Assurance Plans for Environmental Studies*.
8. Ecology should include in each unit-specific Permit the full list of COCs as noted or identified in unit- associated draft RI/FS documents previously submitted to Ecology.
9. Ecology should require use of a methods-based approach in the unit-specific Sampling and Analysis Plans.
10. Ecology should require use of non-filtered sampling in the Sampling and Analysis, and require repairs and replacement of wells per WAC 173-160.
11. Ecology should require the unit-specific training plans are included directly within the Training Addenda.
12. Ecology should coordinate and incorporate RCRA inspection requirements for the unit-specific Permits with those for the associated CERCLA groundwater operable unit’s.
13. Ecology should ensure that all unit-specific Closure Schedules are compliant with the Dangerous Waste WAC 173-303-610 requirements or 173-303-815(3)(b).
14. Ecology should review and revise Part V (closing) Permits to ensure compliance with Land Disposal Restrictions (LDRs).
15. Ecology should review and revise Part V (closing) Permits to ensure that non-existent Part II conditions are not cited (e.g. 1301-N).
16. All RCRA TSD closure performance standards must use MTCA Method B cleanup levels. Ecology should include Permit conditions to ensure closure of a RCRA TSD facility as described in the Dangerous Waste Regulations under WAC 173-303-610. WAC 173-303-610(2)(b)(i) requires for soils, groundwater, surface water, and air, the numeric cleanup levels calculated using residential exposure assumptions according to the Model Toxics Control Act Regulations (MTCA), chapter 173-340 WAC, as now or hereafter amended. Primarily, these will be numeric cleanup levels calculated according to MTCA Method B, although MTCA Method A may be used as appropriate (industrial use land).

To ensure compliance with the Dangerous Waste Regulations, Ecology should include the following closure performance standards for contaminated soils:

- Closure performance standards for soils will satisfy the most stringent (lowest) of: [WAC 173-303-610(3)(a)(v)]
- Direct contact consistent with WAC 173-340-900 (Table 745-1),
- Soil concentrations to protect groundwater: derived using WAC 173-340-747(4),
- Protection of ecological receptors achieved through one of the following methods:
  - a. Excavation of contaminated soil to a minimum of 15 feet below ground surface,
  - or

- b. Excavation of contaminated soil such that residual soil concentrations do not exceed ecological screening levels listed in WAC 173-340-900 (Table 749-1), or
- c. A site-specific demonstration that remedial standards eliminate threats to ecological receptors.

- 17. Permit(s) should include compliance schedules in accordance with WAC 173-303-610 closure regulations.
- 18. Ecology should include a Permit condition requiring submittal of all RD/RA work Plans to Ecology as subject to WAC 173-303-830/840 Permit modification process.
- 19. Ecology should include permit condition(s) for the contingency for additional cleanup should selected remedies, whether carried out under RCRA or CERCLA, prove to be inadequate (e.g., restoration of groundwater as an example).

The Yakama Nation ERWM Program looks forward to dialog on these concerns and comments. We hope that these comments will be helpful in evaluating the draft Hanford Site-Wide Permit.

If you have any questions, please contact me at (509) 945-6741, or Jean Vanni (509) 945-1100.

Sincerely,



Russell Jim, Manager  
Yakama Nation  
ER/WM Program

Attachments

cc: Matt McCormick, U.S. Department of Energy, Richland Office  
Scott Samuelson, U.S. Department of Energy, Office of River Protection  
Dennis Faulk, U.S. Environmental Protection Agency  
Jane Hedges, Washington State Department of Ecology  
Stuart Harris, Confederated Tribes of the Umatilla Indian Reservation  
Russell Jim, Yakama Indian Nation  
Gabriel Bohnee, Nez Perce Tribe  
Ken Niles, Oregon Department of Energy  
Susan Leckband, Hanford Advisory Board  
Ken Niles, Oregon Department of Energy  
Marlene Shavehead, Yakama Nation ERWM  
Tom Zeilman, Yakama Nation  
Administrative Record



**The YN ERWM program requests the following changes to the draft 207-A South Retention Basins (SRB) permit:**  
SEPA: Indication of submittal of a required closure plan and closure actions under M-037- 10 & -02 does not meet WAC 173-303-610(3) regulation. It is a milestone for completion of closure work, not submission of a closure plan. The determination should be a MDNS at the minimum and permit conditions written to reflect mitigation.

General comments on Fact Sheet:

1. Statements in the Fact Sheet inconsistent with the Dangerous Waste Regulations WAC 173-303-610 requirements for closure details to be in the permit [e.g. contingency plans are a requirement of closure].
2. Statements in Fact Sheet inconsistent with Dangerous Waste –WAC 173-303. Simply because the unit is not included in a groundwater monitoring network, does not exclude the requirement for groundwater monitoring under WAC 173-303-610(3).
3. Incorrect use of Wavier [variance] to closure regulations (WAC 173-303-610(4)(b)).
4. Basis for permit conditions rather than identified as requirements under the Dangerous Waste regulations is incorrectly stated as coming from CERCLA & TPA Milestone requirements
5. No list of other applicable laws discussed.

Permit Conditions General Comments:

1. All required information to write a Permit should have been submitted with Permit Application in 2004. Ecology deemed the application complete when in fact the draft permit contradicts this determination. Requirement of submittal of a Part A to correct errors after approval should have resulted in the denial of the permit application. PPC 9524.1984(01) COMPLIANCE SCHEDULES IN RCRA PERMITS OCT 5 1984, an EPA memorandum on compliance schedules, states a compliance schedule cannot be used to allow a facility additional time to provide Part B application information after the permit is issued.
2. No Performance Standards included in permit. Required by WAC 173-303-283.
3. No closure plan(s) in the new RCRA permit(s) although these were submitted. DOE submitted a Closure Plan for 207-A SRB (DOE/RL-2005-89, Draft A). Delay of development of closure plan/contingency plans/post-closure plans until after remedy selections does not ensure compliance with the Dangerous Waste Regulations [WAC 173-303].
4. Edit all hyper-links to include entire citation referenced (e.g. WAC 173-303-815(2)(b)(i)) is hyper-linked and not the necessary (2) portion).

Specific Permit Condition Comments:

1. V.9.B.1: Revise V.9.B.1 to state closure in accordance with Permit Condition V.9.A. Revise all permit conditions and Addenda to include the required information according to WAC 173-303-806 & -610. Dangerous Waste closure regulation require these details in an approved Closure Plan
2. Delete current V.9.B.1: Conditions for submittal of documents which were or should have been included in the Permit Application in accordance with DW closure requirements. Additionally, as required by WAC 173-303-806 & -610, Closure plans must include details of actions [e.g. complete designs of landfill covers]. Furthermore, the Permittees aren't the ones who have made the determination that the unit can't meet clean closure standards, Ecology makes permitting decisions
3. V.9.B.1.a: Questionable need for permit condition V.9.B.1.a. –requirement for a cultural and biological report. When the SEPA checklist was submitted with the permit application, this should have been a part of the submittal. If not, Ecology should have indicated so in their decision and called out a MDNS. Delete condition and revise SEPA determination. Include mitigations within Permit conditions.
4. V.9.B.2: Permit lacks a compliance schedule in accordance with -610 closure regulations. Incorrect application of WAC 173-303-815(3)(b) compliance schedules; see General Comment #1 above.
5. V.9.B.3 & 4: No Performance Standards included in permit. Required by WAC 173-303-283. Revise as follows: Closure of a RCRA TSD facility is described in these Dangerous Waste Regulations under WAC 173-303-610. WAC 173-303-610(2)(b)(i) requires for soils, groundwater, surface water, and air, the numeric cleanup levels calculated using residential exposure assumptions according to the Model Toxics Control Act Regulations (MTCA), chapter 173-340 WAC, as now or hereafter amended. Primarily, these will be numeric cleanup levels calculated according to MTCA Method B, although MTCA Method A may be used as appropriate (industrial use land).

To ensure compliance with the Dangerous Waste Regulations, include the following closure performance standards for contaminated soils:

- Closure performance standards for soils will satisfy the most stringent (lowest) of: [WAC 173-303-610(3)(a)(v)]

- Direct contact consistent with WAC 173-340-900 (Table 745-1),
  - Soil concentrations to protect groundwater: derived using WAC 173-340-747(4),
  - Protection of ecological receptors achieved through one of the following methods:
    1. Excavation of contaminated soil to a minimum of 15 feet below ground surface, or
    2. Excavation of contaminated soil such that residual soil concentrations do not exceed ecological screening levels listed in WAC 173-340-900 (Table 749-1), or
    3. A site-specific demonstration that remedial standards eliminate threats to ecological receptors.
6. V.9.B.5 & 6 & 7: Delete: To ensure compliance with the Dangerous Waste Regulations, WAC 173-303-610(3) requires this information to be in the issued Permit. Update the Addenda to ensure compliance.
7. V.9.B.8 & 9: While acceptable, they are incomplete and should be included in the permit per the requirements of WAC 173-303-610 as a part of the required Closure Plan. In addition, include the following as required in the Sampling and Analysis Plan (SAP), to be located in Addendum B and ensure consistency with Ecology Publication #09-05-007 [Guidance for Preparing Waste Sampling and Analysis Documents and QA/QC Requirements at Nuclear Waste Sites]:
- Documentation of the necessary quantity and quality of data for each decision for which sampling and analysis may be required pursuant to conditions of this Chapter. [WAC 173-303-300(1)]
  - The parameters for which each environmental media sample will be analyzed and the rationale for selecting these parameters and the frequency with which analysis of a waste will be reviewed, or repeated, to ensure that the analysis is accurate and current. [WAC 173-303-300(5)(a)]
  - Procedures for how non-detects, and any tentatively identified compounds which may be reported with laboratory analytical results will be assessed and/or used for decision-making purposes, and to identify any contaminants in addition to those already identified for which establishment of closure performance standards may be warranted. [WAC 173-303-300(5)(a)]
  - Analytical methods, including field measurements, which will be used for analysis of environmental media samples. [WAC 173-303-300(5)(b)]
  - Methods of obtaining representative samples of soils for all sampling and analysis which may be required pursuant to WAC 173-303-110 requirements and consistent with the requirements specified in WAC 173-340-810 and WAC 173-340-820. [WAC 173-303-300(5)(c)]
  - A quality assurance/quality control (QA/QC) plan, or equivalent, to document all monitoring procedures so as to ensure that all information, data, and resulting decisions are technically sound, statistically valid, and properly documented. Each QA/QC plan shall include, or contain a reference to another document, which will be used and includes, the elements as defined. Each QA/QC plan shall contain a Data Quality Assurance Plan which includes the following:
    - Data Collection Strategy section including, but not limited to, the following:
      - A description of the intended uses for the data, and the necessary level of precision and accuracy for those intended uses; and,
      - A description of methods and procedures to be used to assess the precision, accuracy, and completeness of the measurement data;
      - Sampling section which shall include or describe, and reference or cite:
      - Criteria for selecting appropriate sampling locations, depths, etc., or identification and justification of sample collection;
      - Sampling methods including the identification of sampling equipment and a description of decontamination procedures to be used;
      - Criteria for providing a statistically sufficient number of samples as defined in EPA guidance, or criteria for determining a technically sufficient number of measurements to meet the needs of the project as determined through the Data Quality Objective (DQO) planning process;
      - Methods for, or specification of, measuring all necessary ancillary data;
      - Criteria for establishing, or specification of, which parameters are to be measured at each sample collection point, and the frequency that each parameter is to be measured;
      - Criteria for, or specification of, identifying the type of sampling (e.g., discrete), and number of samples to be collected;
      - Criteria for, or specification of, measures to be taken to prevent contamination of the sampling equipment and cross contamination between sampling points;

- Methods and documentation of field sampling operations and procedure descriptions, as appropriate, including:
  - Procedure descriptions and forms for recording the exact location, sampling conditions, sampling equipment, and visual condition of samples;
  - Calibration of field devices (as applicable);
  - Collection of replicate samples;
  - Submission of field-biased blanks, where appropriate;
  - Potential interferences present at the facility;
  - Field equipment listing and sample containers;
  - Sampling order; and,
  - Descriptions of decontamination procedures.
  - Selection of appropriate sample containers, as applicable;
  - Sample preservation methods, as applicable; and,
  - Chain-of-custody procedure descriptions as applicable, including:
    - Standardized field tracking reporting forms to establish sample custody in the field prior to, and during shipment; and,
    - Pre-prepared sample labels containing all information necessary for effective sample tracking, except where such information is generated in the field, in which case, blank spaces shall be provided on the pre-prepared sampling label.
  - Certification that all samples obtained for analysis will be delivered to a responsible person, at the recipient laboratory, who is authorized to sign for incoming field samples, obtain documents of shipment, and verify the data entered onto the sample custody records;
  - Provision for a laboratory sample custody log; and,
  - Specification of chain-of-custody procedures for sample handling, storage, and disbursement for analysis.
  - Sample storage procedure descriptions and storage times;
  - Sample preparation methods;
  - Descriptions of analytical procedures, including:
    - Scope and application of the procedure;
    - Sample matrix;
    - Potential interferences;
    - Precision and accuracy of the methodology; and,
    - Method detection limits.
  - Descriptions of calibration procedures and frequency;
  - Data reduction, validation, and reporting;
    - Internal laboratory quality control checks, laboratory performance, and systems audits and frequency, include:
      - Method blank(s);
      - Laboratory control sample(s);
      - Calibration check sample(s);
      - Replicate sample(s);
      - Matrix-spiked sample(s);
      - “Blind” quality control;
      - Control charts;
      - Surrogate samples;
- Each QA/QC plan shall include a Data Management Plan, or equivalent, to document and track data and results.[WAC 173-303-380(1)(f)]. This plan shall identify and establish data documentation materials and procedures, project or unit file requirements, and project-related progress reporting procedures and documents. The storage location for the raw data shall be identified. The plan shall also provide the format to be used to record and, for projects, present the validated and invalidated data and conclusions.
- The Data Management Plan shall include the following as applicable:
  - A data record including the following:
    - Unique sample or field measurement code;

- Sampling or field measurement location including surveyed horizontal coordinates and elevation of the sample location, and sample or measurement type;  
Sampling or field measurement raw data;  
Laboratory analysis identification (ID) number;  
Result of analysis (e.g., concentration);
  - Tabular displays, as appropriate, illustrating:
    - Unsorted validated and invalidated data;
    - Results for each medium and each constituent monitored;
    - Data reduction for statistical analysis;
    - Sorting of data by potential stratification factors (e.g., location, soil layer, topography); and,
    - Summary data.
  - Graphical displays (e.g., bar graphs, line graphs, area or plan maps, isopleth plots, cross-sectional plots or transects, three dimensional graphs, etc.), as appropriate, presenting the following:
    - Displays of sampling location and sampling grid;
    - Identification of boundaries of sampling area and areas where more data is required;
    - Displays of concentrations of contamination at each sampling location;
    - Displays of geographical extent of contamination;
    - Aerial and vertical displays of contamination concentrations, concentration averages, and concentration maxima, including isoconcentration maps for contaminants found in environmental media at the Facility;
    - Illustrations of changes in concentration in relation to distance from the source, time, depth, or other parameters;
    - Identification of features affecting intramedia transport and identification of potential receptors;
- All data obtained pursuant to this Permit should be made available to Ecology within forty-five (45) days of receipt by the Permittees, or after completion of QA/QC activities, if applicable. If Ecology agrees that data will be obtained on a routine basis for a particular unit, the Permittees shall only be required to provide notification of data availability within forty-five (45) days of first availability, along with a statement as to expected frequency of future data. If routine data is not acquired at the stated expected frequency, the Permittees shall notify Ecology within thirty (30) days with an explanation and revision, if applicable. A new permit condition should be written to ensure this notification requirement shall also apply to any other information obtained from activities conducted, or data obtained, that may influence activities pursuant to the 216-A-37-1 permit.
8. V.9.C: Delete: To ensure compliance with the Dangerous Waste Regulations, WAC 173-303-610(3) requires this information to be in the issued Permit.
  9. V.9.D: To ensure compliance with the Dangerous Waste Regulations, require Addenda B & H to include WAC 173-303-610(3) required information. No list of other applicable laws.
  10. Difficult to track permitting actions in referenced rather than attached/include documents. A matrix approach whereas the applicable sections of the CERCLA documents are directly included in the permit is more transparent and publicly accessible. Concerns regarding “double jeopardy” are eliminated by including only those sections of the CERCLA documents needed to fulfill RCRA DW permitting requirements and modification process. CERCLA documents could contain a table of contents identifying these area and/or separate chapters for the permit requirements. This would also not be “duplication of efforts” as two separate documents are not necessary.

Addenda: All required information should have been submitted with Permit Application in 2004. Ecology deemed the application complete when in fact the draft permit contradicts this determination. Inconsistency is evident throughout the permit conditions and the addendums.

1. Addendum B: Reserved but information was submitted with application and should be included. The SAP should be consistent with Ecology Publication #09-05-007 Guidance for Preparing Waste Sampling and Analysis Documents and QA/QC Requirements at Nuclear Waste Sites. Include the following as required in the Sampling and Analysis Plan (SAP), to be located in Addendum B]:

- Documentation of the necessary quantity and quality of data for each decision for which sampling and analysis may be required pursuant to conditions of this Chapter. [WAC 173-303-300(1)]
- The parameters for which each environmental media sample will be analyzed and the rationale for selecting these parameters and the frequency with which analysis of a waste will be reviewed, or repeated, to ensure that the analysis is accurate and current. [WAC 173-303-300(5)(a)]
- Procedures for how non-detects, and any tentatively identified compounds which may be reported with laboratory analytical results will be assessed and/or used for decision-making purposes, and to identify any contaminants in addition to those already identified for which establishment of closure performance standards may be warranted. [WAC 173-303-300(5)(a)]
- Analytical methods, including field measurements, which will be used for analysis of environmental media samples. [WAC 173-303-300(5)(b)]
- Methods of obtaining representative samples of soils for all sampling and analysis which may be required pursuant to WAC 173-303-110 requirements and consistent with the requirements specified in WAC 173-340-810 and WAC 173-340-820. [WAC 173-303-300(5)(c)]
- A quality assurance/quality control (QA/QC) plan, or equivalent, to document all monitoring procedures so as to ensure that all information, data, and resulting decisions are technically sound, statistically valid, and properly documented. Each QA/QC plan shall include, or contain a reference to another document, which will be used and includes, the elements as defined. Each QA/QC plan shall contain a Data Quality Assurance Plan which includes the following:
  - Data Collection Strategy section including, but not limited to, the following:
    - A description of the intended uses for the data, and the necessary level of precision and accuracy for those intended uses; and,
    - A description of methods and procedures to be used to assess the precision, accuracy, and completeness of the measurement data;
    - Sampling section which shall include or describe, and reference or cite:
      - Criteria for selecting appropriate sampling locations, depths, etc., or identification and justification of sample collection;
      - Sampling methods including the identification of sampling equipment and a description of decontamination procedures to be used;
      - Criteria for providing a statistically sufficient number of samples as defined in EPA guidance, or criteria for determining a technically sufficient number of measurements to meet the needs of the project as determined through the Data Quality Objective (DQO) planning process;
      - Methods for, or specification of, measuring all necessary ancillary data;
      - Criteria for establishing, or specification of, which parameters are to be measured at each sample collection point, and the frequency that each parameter is to be measured;
      - Criteria for, or specification of, identifying the type of sampling (e.g., discrete), and number of samples to be collected;
      - Criteria for, or specification of, measures to be taken to prevent contamination of the sampling equipment and cross contamination between sampling points;
      - Methods and documentation of field sampling operations and procedure descriptions, as appropriate, including:
        - Procedure descriptions and forms for recording the exact location, sampling conditions, sampling equipment, and visual condition of samples;
        - Calibration of field devices (as applicable);
        - Collection of replicate samples;
        - Submission of field-biased blanks, where appropriate;
        - Potential interferences present at the facility;
        - Field equipment listing and sample containers;
        - Sampling order; and,
        - Descriptions of decontamination procedures.
      - Selection of appropriate sample containers, as applicable;
      - Sample preservation methods, as applicable; and,
      - Chain-of-custody procedure descriptions as applicable, including:

- Standardized field tracking reporting forms to establish sample custody in the field prior to, and during shipment; and,
- Pre-prepared sample labels containing all information necessary for effective sample tracking, except where such information is generated in the field, in which case, blank spaces shall be provided on the pre-prepared sampling label.
- Certification that all samples obtained for analysis will be delivered to a responsible person, at the recipient laboratory, who is authorized to sign for incoming field samples, obtain documents of shipment, and verify the data entered onto the sample custody records;
- Provision for a laboratory sample custody log; and,
- Specification of chain-of-custody procedures for sample handling, storage, and disbursement for analysis.
- Sample storage procedure descriptions and storage times;
- Sample preparation methods;
- Descriptions of analytical procedures, including:
- Scope and application of the procedure;
- Sample matrix;
- Potential interferences;
- Precision and accuracy of the methodology; and,
- Method detection limits.
- Descriptions of calibration procedures and frequency;
- Data reduction, validation, and reporting;
  - Internal laboratory quality control checks, laboratory performance, and systems audits and frequency, include:
    - Method blank(s);
    - Laboratory control sample(s);
    - Calibration check sample(s);
    - Replicate sample(s);
    - Matrix-spiked sample(s);
    - “Blind” quality control;
    - Control charts;
    - Surrogate samples;
- Each QA/QC plan shall include a Data Management Plan, or equivalent, to document and track data and results.[WAC 173-303-380(1)(f)]. This plan shall identify and establish data documentation materials and procedures, project or unit file requirements, and project-related progress reporting procedures and documents. The storage location for the raw data shall be identified. The plan shall also provide the format to be used to record and, for projects, present the validated and invalidated data and conclusions.
- The Data Management Plan shall include the following as applicable:
  - A data record including the following:
  - Unique sample or field measurement code;
  - Sampling or field measurement location including surveyed horizontal coordinates and elevation of the sample location, and sample or measurement type;
  - Sampling or field measurement raw data;
  - Laboratory analysis identification (ID) number;
  - Result of analysis (e.g., concentration);
  - Tabular displays, as appropriate, illustrating:
    - Unsorted validated and invalidated data;
    - Results for each medium and each constituent monitored;
    - Data reduction for statistical analysis;
    - Sorting of data by potential stratification factors (e.g., location, soil layer, topography); and,
    - Summary data.
  - Graphical displays (e.g., bar graphs, line graphs, area or plan maps, isopleth plots, cross-sectional plots or transects, three dimensional graphs, etc.), as appropriate, presenting the following:

- Displays of sampling location and sampling grid;
  - Identification of boundaries of sampling area and areas where more data is required;
  - Displays of concentrations of contamination at each sampling location;
  - Displays of geographical extent of contamination;
  - Aerial and vertical displays of contamination concentrations, concentration averages, and concentration maxima, including isoconcentration maps for contaminants found in environmental media at the Facility;
  - Illustrations of changes in concentration in relation to distance from the source, time, depth, or other parameters;
  - Identification of features affecting intramedia transport and identification of potential receptors;
- All data obtained pursuant to this Permit should be made available to Ecology within forty-five (45) days of receipt by the Permittees, or after completion of QA/QC activities, if applicable. If Ecology agrees that data will be obtained on a routine basis for a particular unit, the Permittees shall only be required to provide notification of data availability within forty-five (45) days of first availability, along with a statement as to expected frequency of future data. If routine data is not acquired at the stated expected frequency, the Permittees shall notify Ecology within thirty (30) days with an explanation and revision, if applicable. A new permit condition should be written to ensure this notification requirement shall also apply to any other information obtained from activities conducted, or data obtained, that may influence activities pursuant to the 207-A-SRB permit.
2. Addendum C: Reserved but information was submitted with application and should be included.
  3. Addendum D: Reserved. However, U.S. DOE defined contamination at the 207-A South Retention Basin through remedial investigations (DOE/RL-2004-25 DRAFT A). The following are indicated to be contaminants of concern (COCs) and should be identified as such in the permit:
    - Spent halogenated and nonhalogenated solvents (F001, F002, F003, F004, and F005)(Acetone, Cresol-m, Cresol-o, Cresol-p, Methylene Chloride, Methyl Ethyl Ketone, Methyl Isobutyl Ketone, Trichloroethene)
    - silver,
    - arsenic,
    - nitrate,
    - tributyl phosphate,
    - 2,4-dichlorophenoxyacetic acid,
    - 2-(2,4,5-trichlorophenoxy)
    - propionic acid,
    - acetone,
    - chloroform,
    - butylbenzylphthalate,
    - and the state-only dangerous waste, ammonia (WT02).
  4. Addendum E: Reserved but information was submitted with application and should be included. Required by WAC 173-303-310
  5. Addendum F: Reserved. Required by WAC 173-303-340
  6. Addendum G: References an unavailable document rather than including it within this addendum.
  7. Addendum H: Information should have been submitted with application
  8. Addendum J: Reserved but information should have been submitted.





**U.S. Department of Energy  
Hanford Site**

OCT 18 2012

13-EMD-0004

Mr. E. R. Skinnarland  
Nuclear Waste Program  
State of Washington  
Department of Ecology  
3100 Port of Benton Boulevard  
Richland, Washington 99354

Dear Mr. Skinnarland:

COMMENTS FROM THE U.S. DEPARTMENT OF ENERGY (DOE) RICHLAND OPERATIONS OFFICE (RL), U.S. DEPARTMENT OF ENERGY OFFICE OF RIVER PROTECTION (ORP), BECHTEL NATIONAL, INCORPORATED (BNI), CH2M HILL PLATEAU REMEDIATION COMPANY (CHPRC), WASHINGTON CLOSURE HANFORD LLC (WCH), AND WASHINGTON RIVER PROTECTION SOLUTIONS, LLC (WRPS) ON THE DRAFT "HANFORD FACILITY DANGEROUS WASTE PERMIT FOR THE TREATMENT, STORAGE, AND DISPOSAL OF DANGEROUS WASTE" ISSUED BY THE STATE OF WASHINGTON DEPARTMENT OF ECOLOGY (ECOLOGY) FOR PUBLIC COMMENT ON MAY 1, 2012

RL, ORP, and their contractors BNI, CHPRC, WCH, and WRPS have reviewed the draft "Hanford Facility Dangerous Waste Permit for the Treatment, Storage, and Disposal of Dangerous Waste" published by Ecology for public comment. To ensure a thorough understanding of the permit and conditions, we have reviewed each condition, addendum, and attachment to determine whether the condition or requirement:

- Is consistent with regulatory requirements under the Washington Administrative Code (WAC) and within the scope of Ecology's permitting authority.
- Is clearly written and understandable.
- Is consistent with the long history of our prior agreements with Ecology.
- Reflects current operational needs and requirements.
- Could practically be met to maintain compliance.

Due to the size and complexity of the permit (approximately 16,000 pages covering 39 Treatment, Storage, and Disposal [TSD] and two Corrective Action Units), the comment package we are submitting contains only those comments on conditions and requirements which were not acceptable to us as written. We elected not to comment on unenforceable portions of the draft Permit such as the Fact Sheets, even though our review revealed some inaccuracies in these documents.

We prepared our comments in a Review Comment Response format as requested by Ecology. This format provides (1) the condition or requirement identifier; (2) a comment that reflects what is necessary to be done with the condition or requirement;

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(3) a basis for the action proposed in the comment; and (4) suggested language where appropriate that would make the condition or requirement acceptable to the Permittees. We have identified several issues that are of concern to us. A summary of the issues include, but are not limited to:

- The issue of limitations on receipt of off-site waste has previously been litigated with Ecology and a Federal Court decision issued stating that Ecology cannot place limits on receipt of offsite waste. See, “e.g., U.S. v. Manning, 434 F. Supp. 2d 988, aff’d, 527 F. 3d 828 (9<sup>th</sup> Cir. 2008).” DOE has agreed to certain limitations on receipt of off-site waste in the Settlement Agreement in “Washington v. Bodman, Case No. 03-5018-AAM (E. D. Wa. January 6, 2006),” and has also unilaterally extended those limitations on receipt of off-site for several years into the future.
- The imposition of a requirement to develop and use a “risk budget tool” to evaluate whether wastes can be placed in Resource Conservation and Recovery Act (RCRA)/Hazardous Waste Management Act (HWMA) permitted landfills is outside the scope of the RCRA/HWMA, and Washington State Dangerous Waste regulations. The waste types and volumes of waste that can be disposed in RCRA/HWMA landfills are defined in the Part A portion of the permit application. As long as the RCRA/HWMA regulated waste types and quantities are within the design parameters for the landfill and meet land disposal restriction requirements, these wastes can be disposed in permitted landfills. There is no regulatory requirement to develop and use a “risk budget tool” for the disposal of hazardous or dangerous wastes. Further, it is not clear in the proposed requirement that use of the risk budget tool would be required only for evaluation of the impacts of the non-radioactive component of mixed dangerous wastes.
- There are multiple instances where Ecology has rewritten existing Hanford Facility documents (e.g., contingency plans and sampling and analysis plans) to such an extent that the rewritten documents incorrectly describe operations, are inconsistent with operational practices and regulatory requirements, and cannot be complied with. In many instances, Ecology’s proposed revisions will put the Permittees into non-compliance with environmental and safety regulations and the permit once the permit is issued and these revisions become effective.
- The Permittees have identified over 400 conditions or requirements in the draft permit that are not based on promulgated regulations. As Ecology has not cited any underlying regulatory authority for these conditions, it appears that Ecology is basing these requirements on its “omnibus authority”, in an attempt to create permit conditions that are purportedly intended to protect human health and the environment without establishing the required rational nexus between these conditions and the hazardous waste operations being conducted by the Permittees, as required by numerous court and administrative agency decisions.

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- DOE and Ecology have agreed – and acted upon this agreement for over 30 years – that the Single-shell tank (SST) System could not and cannot be brought into compliance with tank design and operating requirements promulgated under the Dangerous Waste regulations. Since initial approval of the Hanford Federal Facility Agreement and Consent Order (HFFACO) on May 15, 1989, the SST System has been recognized as "going to closure" with the closure requirement appearing at Milestone M-45-00; furthermore, there has never been a final status Part B permit application submittal requirement in the HFFACO (e.g., M-20-00). Consequently, DOE and Ecology have negotiated and agreed to a comprehensive series of enforceable milestones in the HFFACO to allow temporary continued use of SSTs pending closure. Despite these agreements under the HFFACO, Ecology has created a new category of regulatory requirements in the SST permit called "pre-closure requirements" that do not exist in the existing regulations that apply to the rest of the regulated community and that have not been subjected to proper rulemaking procedures.
- The draft permit has multiple conditions that require submittal of revised permit application documents within 14 days of final permit issuance. This timeframe is unreasonable. The Permittees have previously submitted all of the documents subject to these permit conditions in accordance with regulatory requirements. Ecology apparently has rejected the DOE documents without explanation. It is unclear how the documents would need to be revised, since Ecology has provided no information on how they are deficient. In addition, the Permittees do not have sufficient staff resources to produce revisions to multiple documents simultaneously, get them through the review and document release processes, and transmitted to Ecology in such an abbreviated time frame.
- Waste analysis plans have been rewritten by Ecology to require complete characterization of waste before it can be received at any of the permitted TSD units. This requirement is inconsistent with prior agreements between the Tri-Parties that emphasize the retrieval of buried mixed waste containers from the trenches. Those agreements were negotiated in good faith and the milestones related to those agreements would instantly be put in jeopardy by this requirement being imposed by one of the three parties ex post facto. Additionally, these requirements are inconsistent with prior direction from the Director of Ecology as written in a clarification of Administrative Order 1671 (2004).

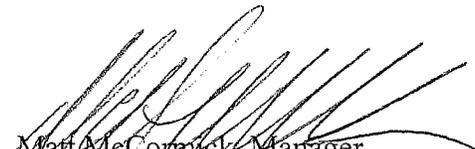
For newly generated waste, characterization and verification are not problematic. However, many of the wastes that must be managed on the Hanford Facility were previously disposed or buried 30 or more years ago, prior to the RCRA law and regulations,

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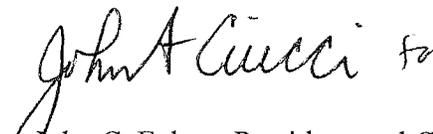
and contain radioactive constituents. DOE requirements for the safe management of radioactive materials limit the ability to open containers with radioactive contents except in very controlled locations designed to prevent the spread of radioactive contamination. As written, the draft permit conditions could essentially make it impossible for DOE to retrieve previously disposed or stored wastes and move them to other locations for further management and ultimate disposition, since it would be unable to move them to any of the permitted TSD units prior to fully characterizing the contents of the waste containers.

We look forward to Ecology's response to our comments, and we remain available to answer any questions Ecology may have on our comments.

If you have any questions, please contact us, or your staff may contact Ray J. Corey, Assistant Manager for Safety and Environment, on (509) 376-0108.

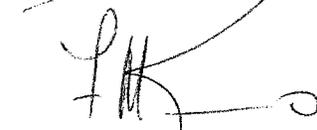
  
Matt McCannick, Manager  
Richland Operations Office

  
Scott L. Samuelson, Manager  
Office of River Protection

 for  
John C. Fulton, President and CEO  
CH2M HILL Plateau Remediation Company

  
Carol A. Johnson, President  
Washington Closure Hanford LLC

 for  
Michael D. Johnson  
President and Project Manager  
Washington River Protection Solutions LLC

  
F. M. Russo, Project Director  
Bechtel National, Inc.

**Comment Number: 10148****Permit Section:**

CUG-9 (207-A SRB) V.9.B.1

**Comment Text:**

In Permit Condition V.9.B.1, the reference to Permit Condition I.C.3 needs to be deleted, and the text regarding contingent closure modified.

**Basis Text:**

The text regarding Permit Condition I.C.3, the permit modification process for the permit, needs to be deleted from the Permit because when the closure plan is submitted under HFFACO Milestone M-037-02, a permit modification is not appropriate at that time. The Permittees will submit a closure plan to meet the milestone, and then the Notice of Deficiency process of the HFFACO Action Plan Figure 9-2 and Section 9.2.2 is followed unless the Project Managers agree to a different schedule. After the issues are resolved between Ecology and DOE, then the revised closure plan can be submitted for incorporation into the permit through a permit modification.

There is no need to submit a closure plan and a separate post closure plan. These two topics have been successfully prepared in one document in the past and can in the future. The closure plan outline for closure plans submitted in the past has accounted for closure and post closure.

Contingent closure and post closure is a requirement for surface impoundments from WAC 173-303-650(6)(c), however there are also financial assurance requirements in WAC 173-303-650(6)(c)(ii) which do not apply to the federal government. See Permit Condition II.H. As a result, flexibility should be provided to the Permittees for not having to fully comply with the contingent closure and post closure requirements for the surface impoundments at the time the closure plan is prepared and submitted to meet the HFFACO Milestone M-37. Flexibility can be achieved by utilizing the alternative closure requirements in WAC 173-303-610(1)(e) at the same time to replace the detailed requirements in WAC 173-303-650(6)(c) with a placeholder in the closure plan. As closure work progresses towards clean closure, the Permittees will have enough time to prepare documentation for closure as a landfill if needed. There is known no impediment to achieving clean closure at this point for the TSD unit.

**Recommendation Text:**

Permit Condition V.9.B.1 should be revised to state: "The Permittees will submit a closure/post closure plan in accordance with the schedule specified in HFFACO Milestone M-037-02, which is incorporated by reference herein under the terms of Permit Condition I.A.4 (Attachment 1). As part of the revised closure/post closure plan, the Permittees will address the potential need for contingent closure and contingent post closure requirements through a future permit modification in the closure plan to be implemented if clean closure by removal or decontamination is not possible. Following resolution of Ecology comments on the closure/post closure plan, the Permittees will submit a permit modification to incorporate the closure/post closure plan into Addendum H. [WAC 173-303-610(3) and -610(8), Attachment 1 HFFACO Action Plan Section 6.3.1]."

**Response Code (Either A for Accept or R for Reject):**



**Comment Number: 10149**

**Permit Section:**

CUG-9 (207-A SRB) V.9.B.2

**Comment Text:**

Submittal of the review 90 days before the start of the closure process is outside the scope of RCRA and is not supported with justification in the fact sheet.

**Basis Text:**

There is no requirement in WAC 173-303 to perform a site-specific biological and cultural resources review. For RL, this requirement is based on NEPA and for the state, the need for this type of review is dictated by SEPA.

This condition is arbitrary, has no basis in the law or regulations, and is not justified in the fact sheet to be necessary to protect human health and the environment.

Washington law prohibits the arbitrary exercise of power by a state agency. *State ex rel. Pub. Util. Dist. No. 1 of Okanogan County v. Dep't of Pub. Serv.*, 21 Wn.2d 201, 208-09 (1944). Imposing requirements that exceed an agency's statutory or regulatory authority constitutes arbitrary action. *Id.* To the extent that the Department of Ecology has imposed conditions under the Permit that exceed the Department's authority, it has acted in an arbitrary manner. Accordingly, those conditions which have been arbitrarily imposed under the Permit should be stricken as the product of impermissible and arbitrary agency action.

Further, it appears to be an inappropriate use of the omnibus provision of the regulations. This condition is void since no basis has been articulated in the Permit, Fact Sheet, or supporting documents that supports the use of omnibus permitting authority to impose this condition.

The State has failed to articulate specific facts supporting the contention that this condition is "necessary to achieve compliance with the Hazardous Waste Management Act", nor is there any specific provision in WAC 173-303 that necessitates that additional requirement. Compliance with the HWMA is fully addressed in the normal permitting requirements of WAC 173-303-810. This condition has no reasonable basis in fact or law, and no reasonable relation to the "omnibus authority" in WAC 173-303-800(8) and WAC 173-303-815(2)(b)(ii). A regulatory basis for this permit condition is absent from the Washington State Hazardous Waste Act.

Omnibus authority is not unlimited and courts have consistently required that permit conditions based on omnibus authority (a) be necessary to protect human health or the environment, (b) that there must be a nexus between the permit condition and the hazardous waste activities being carried out at the facility, and (c) that Omnibus authority must be supported by facts and a cogent explanation in the administrative record.

**Recommendation Text:**

Delete Permit Condition V.9.B.2. No recommended text.

**Response Code (Either A for Accept or R for Reject):**



**1. Comment Number: 10148****Permit Section:**

CUG-9 (207-A SRB) V.9.B.1

**Comment Text:**

In Permit Condition V.9.B.1, the reference to Permit Condition I.C.3 needs to be deleted, and the text regarding contingent closure modified.

**Basis Text:**

The text regarding Permit Condition I.C.3, the permit modification process for the permit, needs to be deleted from the Permit because when the closure plan is submitted under HFFACO Milestone M-037-02, a permit modification is not appropriate at that time. The Permittees will submit a closure plan to meet the milestone, and then the Notice of Deficiency process of the HFFACO Action Plan Figure 9-2 and Section 9.2.2 is followed unless the Project Managers agree to a different schedule. After the issues are resolved between Ecology and DOE, then the revised closure plan can be submitted for incorporation into the permit through a permit modification.

There is no need to submit a closure plan and a separate post closure plan. These two topics have been successfully prepared in one document in the past and can in the future. The closure plan outline for closure plans submitted in the past has accounted for closure and post closure.

Contingent closure and post closure is a requirement for surface impoundments from WAC 173-303-650(6)(c), however there are also financial assurance requirements in WAC 173-303-650(6)(c)(ii) which do not apply to the federal government. See Permit Condition II.H. As a result, flexibility should be provided to the Permittees for not having to fully comply with the contingent closure and post closure requirements for the surface impoundments at the time the closure plan is prepared and submitted to meet the HFFACO Milestone M-37. Flexibility can be achieved by utilizing the alternative closure requirements in WAC 173-303-610(1)(e) at the same time to replace the detailed requirements in WAC 173-303-650(6)(c) with a placeholder in the closure plan. As closure work progresses towards clean closure, the Permittees will have enough time to prepare documentation for closure as a landfill if needed. There is known no impediment to achieving clean closure at this point for the TSD unit.

**Recommendation Text:**

Permit Condition V.9.B.1 should be revised to state: "The Permittees will submit a closure/post closure plan in accordance with the schedule specified in HFFACO Milestone M-037-02, which is incorporated by reference herein under the terms of Permit Condition I.A.4 (Attachment 1). As part of the revised closure/post closure plan, the Permittees will address the potential need for contingent closure and contingent post closure requirements through a future permit modification in the closure plan to be implemented if clean closure by removal or decontamination is not possible. Following resolution of Ecology comments on the closure/post closure plan, the Permittees will submit a permit modification to incorporate the closure/post closure plan into Addendum H. [WAC 173-303-610(3) and -610(8), Attachment 1 HFFACO Action Plan Section 6.3.1]."



**2. Comment Number: 10149****Permit Section:**

CUG-9 (207-A SRB) V.9.B.2

**Comment Text:**

Submittal of the review 90 days before the start of the closure process is outside the scope of RCRA and is not supported with justification in the fact sheet.

**Basis Text:**

There is no requirement in WAC 173-303 to perform a site-specific biological and cultural resources review. For RL, this requirement is based on NEPA and for the state, the need for this type of review is dictated by SEPA.

This condition is arbitrary, has no basis in the law or regulations, and is not justified in the fact sheet to be necessary to protect human health and the environment.

Washington law prohibits the arbitrary exercise of power by a state agency. *State ex rel. Pub. Util. Dist. No. 1 of Okanogan County v. Dep't of Pub. Serv.*, 21 Wn.2d 201, 208-09 (1944). Imposing requirements that exceed an agency's statutory or regulatory authority constitutes arbitrary action. *Id.* To the extent that the Department of Ecology has imposed conditions under the Permit that exceed the Department's authority, it has acted in an arbitrary manner. Accordingly, those conditions which have been arbitrarily imposed under the Permit should be stricken as the product of impermissible and arbitrary agency action.

Further, it appears to be an inappropriate use of the omnibus provision of the regulations. This condition is void since no basis has been articulated in the Permit, Fact Sheet, or supporting documents that supports the use of omnibus permitting authority to impose this condition.

The State has failed to articulate specific facts supporting the contention that this condition is "necessary to achieve compliance with the Hazardous Waste Management Act", nor is there any specific provision in WAC 173-303 that necessitates that additional requirement. Compliance with the HWMA is fully addressed in the normal permitting requirements of WAC 173-303-810. This condition has no reasonable basis in fact or law, and no reasonable relation to the "omnibus authority" in WAC 173-303-800(8) and WAC 173-303-815(2)(b)(ii). A regulatory basis for this permit condition is absent from the Washington State Hazardous Waste Act.

Omnibus authority is not unlimited and courts have consistently required that permit conditions based on omnibus authority (a) be necessary to protect human health or the environment, (b) that there must be a nexus between the permit condition and the hazardous waste activities being carried out at the facility, and (c) that Omnibus authority must be supported by facts and a cogent explanation in the administrative record.

**Recommendation Text:**

Delete Permit Condition V.9.B.2. No recommended text.



**3. Comment**

**Number: 10334**

**Permit**

**Section:**

CUG-9 (207-A SRB)

V.9.B.5

**Comment**

**Text:**

Condition as written may be interpreted in a manner that would cause cleanup that is more conservative than required for surrounding areas.

**Basics**

**s**

**Text**

:

The flexibility is needed to allow for a cleanup level to be adjusted to meet the final cleanup levels of the geographic area where the unit is located.

**Recommendation**

**Text:**

Add the following sentence to the end of the condition:

"In the event the closure performance standard of removal or decontamination cannot be met for this dangerous waste management unit the Permittee may propose a post closure approach using the alternative requirements in WAC 173-303-610(1)(e)."

**4. Comment Number: 10607****Permit Section:**

CUG-9 (207-A SRB) V.9.B.8

**Comment Text:**

Permit Condition V.9.B.8 contains a need for a revised sampling and analysis plan when one had not been prepared yet and may not be needed for clean closure, a reference to Permit Condition II.D that needs to be revised, and a reference to a HFFACO Milestone M-37 that needs to be changed.

**Basis Text:**

A sampling and analysis plan for clean closure verification of the 207-A SRB Ditch has not been prepared to date. The word "revised" needs to be deleted. The 207-A SRB is a lined concrete structure, and clean closure may not require a verification sampling plan. The condition should be revised to say is applicable for the 207-A SRB.

The Permittees have commented elsewhere to delete Permit Condition II.D.3 because all waste analysis plans for operating unit groups have been submitted and are included in the permit. For closure units with sampling and analysis plan yet to be submitted, the sampling and analysis plan should be prepared to meet the requirements of the HFFACO Action Plan Section 6.5 for TSD unit quality control and quality assurance. The permit condition should be updated to reference the HFFACO Action Plan Section 6.5 for compliance.

Also, a reference to a schedule in Milestone M-037-02 is specified when no schedule for sampling and analysis is contained in Milestone M-037-02. Milestone M-037-02 is merely the milestone to submit the closure plan. The closure schedule is contained in Milestone M-037-10. The milestone should be changed from M-037-002 to M-037-10.

**Recommendation Text:**

Permit Condition V.9.B.8 should be revised to state: "In conjunction with the closure plan, the Permittees will submit a closure verification sampling and analysis plan, if applicable, in accordance with HFFACO Action Plan Section 6.5 (Attachment 1), and the schedule specified in HFFACO Milestone M-037-10, which are incorporated by reference herein under the terms of Permit Condition I.A.4."

**5. Comment Number: 9774**

**Permit Section:**

CUG-9 (207-A SRB) V.9.B.9

**Comment Text:**

Permit condition referenced needs updating, and deletion of the word "revised"

**Basis Text:**

The condition referenced is incorrect, and a sampling and analysis plan has NOT yet been prepared.

**Recommendation Text:**

Change text to: "The sampling and analysis plan (noted in Permit Condition V.9.B.8) will include, but not be limited to:"

**6. Comment Number: 10452**

**Permit Section:**

CUG-9 (207-A SRB) V.9.B.10

**Comment Text:**

Permittees need flexibility to deviate from field sampling plan when site conditions require a deviation.

**Basis Text:**

While field sampling plans are designed to be able to be implemented as written, sometimes field conditions arise that require some sort of deviation. This deviation process will be identified in the sampling and analysis plan.

**Recommendation Text:**

Revise text to state: "The Permittees will conduct all sampling and analysis of environmental media pursuant to the requirements of the sampling and analysis plan. Any deviations from the field sampling plan will be documented as described in the sampling and analysis plan."

**7. Comment Number: 9779**

**Permit Section:**

CUG-9 (207-A SRB) V.9.C

**Comment Text:**

There is not an Addendum H. The condition should be marked "Reserved."

**Basis Text:**

A condition for complying with post closure plan is premature until a final closure plan is submitted. If the unit is clean closed, no post closure plan will be incorporated.

**Recommendation Text:**

Delete Permit Condition V.9.C. Replace with "Reserved."

**8. Comment Number: 14169**

**Permit Section:**

CUG-9 (207-A SRB) V.9.D

**Comment Text:**

This condition is redundant with Permit Condition V.9.B.9.

**Basis Text:**

This condition says follow the sampling and analysis plan and Permit Condition V.9.B.9 does as well.

**Recommendation Text:**

Delete Permit Condition V.9.D and replace with "Reserved."

**9. Comment Number: 14170**

**Permit Section:**

CUG-9 (207-A SRB) V.9.D.1

**Comment Text:**

Permit Condition V.11.D.1 should be deleted.

**Basis Text:**

A sampling and analysis plan (SAP) for soil is not the same as a waste analysis plan (WAP) for an operation. The focus, requirements and need for a SAP is not the same as for a WAP. A verification SAP for soils and/or debris should not be considered waste analysis, since soil is environmental media, not waste. This is prescriptive language that is not supported by a regulation.

**Recommendation Text:**

Delete Permit Condition V.9.D.1. No recommended text.

**10. Comment Number: 14171**

**Permit Section:**

CUG-9 (207-A SRB) V.9.D.2

**Comment Text:**

Permit Condition V.9.D.2 should be deleted.

**Basis Text:**

There is no need for this condition, as any changes to the approved sampling and analysis plan would require a permit change

**Recommendation Text:**

Delete Permit Condition V.9.D.2. No recommended text.

**11. Comment Number: 13966****Permit Section:**

CUG-9 (207-A SRB) V.9.I.2

**Comment Text:**

Permit Condition V.9.I.2 should be modified to notify Ecology if any threats to human health or the environment are discovered.

**Basis Text:**

The approach to non-operational TSD units was agreed to with Ecology in 2003. In the letter approving annual inspections on June 10, 2003 (Administrative Record Accession # D1886185), Ecology states: "if any annual inspection identifies any potential threats to human health or the environment, Ecology must be immediately notified and will reevaluate the necessity of monthly or quarterly inspections." The condition needs to be modified to be consistent with the letter.

**Recommendation Text:**

Permit Condition V.9.I.2 should be revised to state: "The Permittees will immediately notify Ecology if the inspection identifies any potential threats to human health or the environment in accordance with Permit Condition I.F.5."

**12. Comment Number: 9198**

**Permit Section:**

CUG-9 (207-A SRB) Add G

**Comment Text:**

The training matrix should be updated to match the content of the Dangerous Waste Training Plan.

**Basis Text:**

The training matrix contained in Addendum G is intended to match the training requirements for the TSD unit contained in the Dangerous Waste Training Plan.

**Recommendation Text:**

The following changes should be made to the training matrix for 207-A South Retention Basin: A new row should be added as the first row in the matrix for the job title/position of "Nuclear Chemical Operator" with an "X" added to the Orientation Program column, and an "X" added to the Contingency Plan & Emergency Response column.

## **APPENDIX C: TRANSCRIPTS FROM PUBLIC HEARINGS**

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Mod: We are good to go. Let the record show it is 8:21 P.M. on Wednesday, May 16<sup>th</sup>, 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.

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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 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?

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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

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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 NFSB -- 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

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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

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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 19<sup>th</sup>, 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

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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

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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

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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

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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 50<sup>th</sup> 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.

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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

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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 30<sup>th</sup> 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.

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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

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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.

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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.

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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

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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

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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,

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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?

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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.

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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 the 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.

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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.

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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]

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MOD: Let the record show that it is 8:15 PM on Thursday, September 13<sup>th</sup>, 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

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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

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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 49<sup>th</sup> 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 22<sup>nd</sup>, 2012. And you can mail your comments by email to [Hanford@ecy.wa.gov](mailto: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

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October 22<sup>nd</sup>, 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]

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Moderator: Let the record show it's 7:27 on June 6<sup>th</sup> 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

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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 7<sup>th</sup>, 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

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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

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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.

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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.

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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 30<sup>th</sup>. 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 28<sup>th</sup>, because we will not be in the office on Sunday the 30<sup>th</sup>.

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 15<sup>th</sup>, 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.

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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 re-collect 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?

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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

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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 22<sup>nd</sup> 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, 4<sup>th</sup> 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?

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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 Arrognin.

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 Arrognin? 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

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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 19<sup>th</sup>, 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

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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

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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?

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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

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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 30<sup>th</sup>, 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](mailto: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 30<sup>th</sup>, 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]

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MOD: Let the record show that it is 8:19 PM on Wednesday, September 19<sup>th</sup>, 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 17<sup>th</sup>. 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 31<sup>st</sup>, 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 3<sup>rd</sup>, 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. 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.

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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

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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 28<sup>th</sup> 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

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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

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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 70<sup>th</sup> 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 34<sup>th</sup> 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 Cascadias, 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 39<sup>th</sup> 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

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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 38<sup>th</sup> 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.

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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.

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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 22<sup>nd</sup>, 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](mailto:Hanford@ecy.wa.gov). Fax number is 509-372-7971. Or if you'd like to mail comments, Ron Skinnarland, 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 22<sup>nd</sup>, 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]

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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.

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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.

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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

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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.

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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]

## REFERENCES

- 1) Draft Closure Plan, DOE/RL-2005-89, *207-A South Retention Basin Closure Plan*, Rev. 1, U.S. Department of Energy, Richland Operations Office, Richland, Washington. Available at: <http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=0080919H>