Response to Comments
Low-Activity Waste Pretreatment System Project
Proposed Construction and Operation of New Waste Storage and Treatment Unit

May 1 to June 30, 2019

Summary of a public comment period and responses to comments

June 2020
Publication no. 20-05-017
Publication and Contact Information

This publication is available on the Department of Ecology’s (Ecology) website at https://fortress.wa.gov/ecy/publications/SummaryPages/2005017.html

For more information contact:

Yoana Lucatero, WTP Permit Writer
Nuclear Waste Program
3100 Port of Benton Boulevard
Richland, WA 99354
Phone: 509-372-7950
Email: Hanford@ecy.wa.gov


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

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

To request ADA accommodation including materials in a format for the visually impaired, call Ecology at 360-407-6831 or visit https://ecology.wa.gov/accessibility. People with impaired hearing may call Washington Relay Service at 711. People with speech disability may call TTY at 877-833-6341.
Response to Comments
Low-Activity Waste Pretreatment System (LAWPS) Project
Proposed Construction and Operation of New Waste Storage and Treatment Unit

May 1 to June 30, 2019

Nuclear Waste Program
Washington State Department of Ecology
Richland, Washington
Response to Comments
Low-Activity Waste Pretreatment System (LAWPS) Project

This page is purposely left blank.
Response to Comments
Low-Activity Waste Pretreatment System (LAWPS) Project

Table of contents

Introduction ................................................................. 1
Reasons for the permit modification................................. 1
Public involvement actions............................................. 2
List of Commenters......................................................... 4
Attachment 1: Comments and responses
Appendix A: Copies of all public notices
Response to Comments
Low-Activity Waste Pretreatment System (LAWPS) Project

Introduction

The Washington State Department of Ecology’s Nuclear Waste Program (Ecology) manages dangerous waste within the state by writing permits to regulate its treatment, storage, and disposal. When a new permit or a significant modification to an existing permit is proposed, 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 document is being issued to address public comments received during the first public comment period for a Class 3 Permit Modification submitted by the Permittees. The comment period was held May 1 through June 30, 2019.

The purpose of this Response to Comments is to:

- Specify which provisions, if any, of a permit will become effective upon issuance of the final permit, providing reasons for those changes.
- Describe and document public involvement actions.
- List and respond to all significant comments received during the public comment period.

This Response to Comments is prepared for:

Comment period: Low-Activity Waste Pretreatment System (LAWPS) Project Proposed Construction and Operation of New Waste Storage and Treatment Unit
May 1 to June 30, 2019

Permit: Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit for the Treatment, Storage, and Disposal of Dangerous Waste, Part III, Operating Unit Group 1 (WA7890008967), Low-Activity Waste Pretreatment System (LAWPS)


Original issuance date: September 27, 1994

To see more information related to the Hanford Site and nuclear waste in Washington, please visit our website: https://www.ecology.wa.gov/Hanford.

Reasons for the permit modification

This Class 3 Permit Modification would add a new Operating Unit Group, the Low-Activity Waste Pretreatment System (LAWPS), into the Hanford Facility Dangerous Waste Permit. This permit modification covers design and construction activities to support the LAWPS Project Phase One.

The LAWPS Project will be operated in phases with LAWPS Phase One as a Tank Side Cesium Removal (TSCR) unit. LAWPS Phase Two will use either a permanent cesium removal capability
or an additional TSCR unit to support full operations of the Waste Treatment and Immobilization Plant Low-Activity Waste Facility (WTP LAW Facility).

LAWPS Project Phase One: TSCR is a mixed waste treatment and storage unit that will treat double-shell tank supernatant waste, which contains undissolved solids and radionuclides. The TSCR unit treatment consists of solids filtration and cesium removal by ion exchange, and tank and container storage for waste generated during the process.

During Phase One, the TSCR unit operations will account for approximately one half of the required 10-gallon per minute treatment capacity throughput necessary to operate both melters in the WTP LAW Facility.

After waste is treated through TSCR, it will be routed to Double-shell Tank 241-AP-106 for storage and subsequent transfer to the WTP LAW Facility. The first phase of the LAWPS Operating Unit Group will include three Dangerous Waste Management Units: the TSCR, the IXC Storage Pad, and the IXC Staging Area.

The following documents were included in this modification and provided to support the public comment period:

- Addendum A, Part A Form
- Addendum B, Waste Analysis Plan
- Addendum C, Process Information
- Addendum E, Security Requirements
- Addendum F, Preparedness and Prevention
- Addendum G, Personnel Training
- Addendum H, Closure Plan
- Addendum I, Inspection Plan
- Addendum J, Contingency Plan
- Supporting design media (specifications, calculations, reports, and engineering drawings)
- Seismic and traffic evaluations
Public involvement actions

The Permittees held a 60-day public comment period from May 1 to June 30, 2019, to support the requested permit modification to add the new Operating Unit Group 1, LAWPS to the Hanford Site-Wide Permit.

The following actions were taken to notify the public:

- Mailed a public notice announcing the comment period to 1,220 members of the public.
- Distributed copies of the public notice to members of the public at Hanford Advisory Board meetings.
- Placed a public announcement legal classified advertisement in the *Tri-City Herald* on May 2 and May 3, 2019.
- Emailed a notice announcing the start of the comment period to the Hanford-Info email list, which has 1,250 recipients.
- Posted as an event on the Washington Department of Ecology - Hanford Facebook page.

The Permittees held a public meeting on May 29, 2019, at 5:30 p.m. at the Richland Public Library. Sixteen members of the public attended, and no comments were collected during the meeting.

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
- Proposed LAWPS Permit Modification

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

- Public notice (fact sheet)
- Classified advertisement in the *Tri-City Herald*
- Notice sent to the Hanford-Info email list
- Event posted on the Washington Department of Ecology - Hanford Facebook page
List of Commenters

The table below lists the names of organizations or individuals who submitted a comment on the LAWPS Class 3 permit modification. The comments and responses are in Attachment 1.

<table>
<thead>
<tr>
<th>Commenter</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anonymous</td>
<td>Citizen</td>
</tr>
<tr>
<td>Mike Conlan</td>
<td>Citizen</td>
</tr>
<tr>
<td>Hanford Challenge</td>
<td>Organization</td>
</tr>
<tr>
<td>Columbia Riverkeeper</td>
<td>Organization</td>
</tr>
</tbody>
</table>
Attachment 1: Comments and responses

Description of comments:
Ecology accepted comments from May 1 through June 30, 2019. This section provides a summary of comments that we received during the public comment period and our responses, as required by RCW 34.05.325(6)(a)(iii). Comments are grouped by individual and each comment is addressed separately.
I-1: MIKE CONLAN

Comment I-1-1

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

Response to I-1-1

Ecology is working to ensure that long-term storage, treatment and disposal of the waste is protective of human health and the environment.

The proposed permit changes are not to allow new waste, but to better manage the waste already at Hanford.

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 Plant now being built. The construction and operation of the Low-Activity Waste Pretreatment System (LAWPS) is a positive step to eventual treatment of tank waste currently stored at Hanford. Stopping any potential nuclear waste from impacting the Columbia River is not within the scope of the LAWPS Dangerous Waste Permit. Prevention of groundwater and surface water impacts are addressed in operations associated with other units.

I-2: ANONYMOUS CITIZEN

Comment I-2-1

The Public Review Package is Difficult to Use

The permit review package for public comment is 3,114 pages long (19-ECD-0028, Part 1). This comprises a single pdf document that has a very large file size and is very awkward to search. Previous public reviews for this permit provided a link to each individual document or set of documents. It would help if this could be done again in the future, to save time for the reviewers and help ensure completeness. In addition, the drawings are actually images that are not searchable. It would help if the whole content was searchable.

Response to I-2-1

Thank you for your comment. When DOE posts permit information, there are certain limits within the DOE procedures on how the information can be posted. On longer permit modifications, DOE provides technical fact sheets which identifies information in the modification to help the reviewer find information in the package. The supporting technical information was provided in a second link to help focus between the permit application material and other supporting information. When Ecology hosts a public comment period we do make every effort to link each document or file individually, this is because of different internal guidance for Ecology.
Comment I-2-2
The Process Flow Diagram is Incomplete

I appreciate very much the process flow diagram in Drawing H-14-111242, because it includes a data table for design basis flows and parameters. (This is something the WTP process flow diagrams omit). However, to be useful for safety and hazards analysis, the concentrations and mass flows of key constituents are also needed, including the cesium, sodium, nitrate, and ammonia concentrations, and also the pH. The curies of cesium-137 per loaded IX column should also be shown. Since this is a Rev 0 final design flow sheet - it should also reference a final mass balance calculation, which appears to be missing.

Response to I-2-2
Please reference 19-ECD-0079, dated October 31, 2019 for 100% design. Calculations were submitted with the referenced LAWPS permit application, and provides the hazards analysis and mass balance calculations for key constituents of the LAWPS Operating Unit Group, including the TSCR System. Traditional engineering practice is not to include hazards analysis and mass flows in Process Flow Diagrams.

Comment I-2-3
A Completed Design is Needed to Underpin the Permit Modification

The dangerous waste regulations require a completed design in support of a permit. This package does not contain a completed design. This is evident by looking at the calculations. ARES corporation calculations are at Rev B, which is not final design. Drawings provided are stamped "for permitting purposes" which means that they are not final designs or suitable for construction either. Multiple drawings are also letter revisions, such as Rev B2 for Drawing H-14-111241.

Response to I-2-3
On July 3, 2019, (19-NWP-103) Ecology determined that the permit application was incomplete and required the Permittees to submit additional information in order to call the application complete. On October 31, 2019, (19-ECD-0079) the Permittees submitted updated documentation and finalized drawings in order to support Ecology's review of the application. Ecology has worked with the Permittees to address existing technical deficiencies and will host the draft permit for public comment starting on June 22, 2020. During this time the public can review the draft permit and supporting documentation which will include the updated and revised documents and drawings.

Comment I-2-4
The IQRPE Report is Incomplete and Should be Improved

According to the Fact Sheet, the Independent Qualified Registered Professional Engineering (IQRPE) design assessment report is not complete. Past reviews have shown that IQPRE reports have "checked the boxes" to verify documents exist, but have not checked to see if the documents are of requisite quality and completeness. Ecology should look closely at the finished products, and review the instructions for the IQRPE to see if they actually add any value.
Response to I-2-4

Any documentation reviewed by the IQRPE is complete at the time the IQRPE review for certification is made, and before the reports are submitted to Ecology for approval, they are reviewed for accuracy and contain all required and updated facility documentation.

On July 3, 2019, (19-NWP-103) Ecology determined that the permit application was incomplete and required the Permittees to submit additional information in order to call the application complete. On October 31, 2019, (19-ECD-0079) the Permittees submitted updated documentation and finalized drawings in order to support Ecology's review of the application. This updated submittal, (19-ECD-0079) also included the final IQRPE Design Assessment Reports. The three separate reports address TSCR, TSCR Upgrades, and Waste Feed Delivery design scope.

Comment I-2-5

A Vessel is Stamped with Incorrect Data

AVANTech Calculation 66749-001-SUB-008-001 Rev 01-A (Sheet 788 of 19-ECD-0028, part 1 ) identifies that the delay tank vessel "is designed with a corrosion allowance value but will be marked for "non-corrosive" service so that the applicable requirements from Section VIII will not apply." The marking appears to be a violation of nuclear quality assurance and safety requirements. The vessel should be stamped accurately. Otherwise, in the future, wrong information could be used in evaluating the vessel. Future users could be misled that the contents are not corrosive. This vendor's quality assurance program should be evaluated.

Response to I-2-5

Section VIII code for corrosion would require the installation of additional inspection ports into the delay tank vessel, and additional inspections. The risk to the integrity of the delay tank vessel, and the risk of compromising ALARA principles by requiring workers to enter high dose environments for inspection through the ports are considered far more significant than the vessel integrity risks associated with corrosion. It was determined that these risks created a greater concern with regard to nuclear quality assurance and safety requirements. As a result, the recommended path forward was to invoke the ASME Pressure Vessel Code Part UG-46(a)(4) that provides an exception to the additional inspection ports "for noncorrosive service" vessels. This exception would eliminate the need to install the Section VIII code-mandated inspection ports, and protect workers by reducing their time in the process enclosure. Therefore, the vessel is marked for "non-corrosive service". As a conservative measure, a corrosion allowance of 0.2 millimeters per year was incorporated into the design of the delay tank vessel to account for the potential of corrosion during the life of the vessel.

Comment I-2-6

A Completed Safety Analysis Report is Needed prior to Construction or Long Lead Procurement

The AVANTech Calculations RPP-CALC-62464 (and others) indicate that they were not compared to a safety analysis document, because no safety analysis report exists that is related to the analyses (seismic and structural). Why is there no safety analysis? Previous projects have suffered rework due to non-alignment with the safety basis. An example is the prior LAWPS permitting effort which was produced and then withdrawn in February of 2018 (See letters 17-ECD-0073 and 18-NWP-028). The prior version of LAWPS failed to be developed consistent
with a safety basis and wasted considerable funds. Note that LAWPS is NOT a fast track design-build project as is WTP. As a result, the design, safety basis, and design verification should be complete before there is any construction or procurement.

**Response to I-2-6**

*Ecology regulates management of dangerous waste under Washington Administrative Code (WAC) 173-303. Ecology does not have regulatory authority for management of the Department of Energy's (DOE) Atomic Energy Act (AEA) authority related to Nuclear Safety. If DOE makes decisions that directly affect permitting, Ecology will ensure that necessary details and information are evaluated and appropriately incorporated into the Dangerous Waste Permit.*

**Comment I-2-7**

Ecology Should Require DOE to Maintain Existing Purchased Equipment

Ecology has not required USDOE to maintain the partially-constructed LAWPS facilities to the standards Ecology expects generally under the preservation and surveillance program, based on Ecology's "good faith reliance" that these facilities are going to operate in 2033 as required by the Consent Decree (see letter 19-NWP-081). In the case of WTP, the failure to maintain purchased equipment has led to additional waste, expense, and rework. The same should not be allowed here, particularly as Ecology has now stated that the odds are low that WTP DFLAW will start on the promised schedule. This is important because the TSCR system will provide only half the flow rate needed for a full DFLAW startup that includes two operating melters. Allowing equipment to deteriorate, without even exceeding it to recover taxpayer money, is a gross waste of funds. The failure of the original LAWPS approach provides lessons learned for not purchasing "long lead" equipment early, based on an incomplete safety basis, just to throw it away.

**Response to I-2-7**

No on-site construction has occurred to support the LAWPS Project. There has been work performed to design and build the TSCR Process Enclosure skid and the construction certification process is currently in place to ensure that the equipment has been constructed as designed in accordance with WAC 173-303-810(14)(a)(i). Once the LAWPS Operating Unit Group is permitted, Ecology will actively monitor the progress toward operations, if it appears that the Permittees are not going to meet their milestone to operate, additional steps will be taken to ensure the LAWPS facilities are adequately maintained. Waste treated by the TSCR system will be held in a double-shell tank to provide a sufficient volume of waste to operate both melters at the LAW Facility.

*How DOE manages their unused or excessed equipment is outside of the scope of Ecology's authority.*

**Comment I-2-8**

Calculations in this Package do Not Identify Assumptions Requiring Verification

Nuclear Quality Assurance (ASME NQA-1) requires the tracking and resolution of assumptions requiring verification as the design progresses, but the vendor calculations in this package lack even a section on this topic. I believe this should be corrected, and the vendor QA programs evaluated.
Response to I-2-8

It is DOE's responsibility to ensure that their vendor's quality assurance (QA) program is adequate and consistently followed. Ecology regulates management of dangerous waste under WAC 173-303. Ecology does not have regulatory authority to enforce the ASME NQA-1 requirements. If DOE and/or their vendors make a decision that directly affects permitting, Ecology will ensure that necessary details and information are evaluated and appropriately incorporated into the Dangerous Waste Permit.

The calculations included in the first public comment period package have since been updated from letter revisions to numbered revisions, for which updates include verification of assumptions made. These calculations will be included in the upcoming public comment period.

Comment I-2-9

The Office of River Protection's Supplement Analysis (DOE/EIS-0391-SA-002) is superficial and inadequate for providing NEPA coverage for storage and disposal of the 150 Loaded Ion Exchange Columns, at 30,000 lb. each, to be produced by the TSCR. This permit modification request relies on a NEPA Supplement Analysis for LAWPS (referenced in Section 2/sheet 18) that contains technical errors and misrepresentations. DOE, on January 17, 2019, published a "Supplement Analysis of the Final Tank Closure and Waste Management Environmental Impact Statement for the Hanford Site, Richland Washington1." The Supplement Analysis was followed promptly on January 28, 2019 by an amended Record of Decision2 for the Tank Closure and Waste Management EIS, claiming NEPA coverage exists for DFLAW for all portions "except" the storage pad for the non-elutable, high activity cesium-loaded ion exchange columns, which are created while producing low activity waste for DFLAW vitrification in the TSCR. (Production, storage, and disposal of the loaded cesium ion exchange columns are new actions that are not addressed in the Tank Closure and Waste Management Environmental Impact Statement.) Nevertheless, DOE determined that no further NEPA action was needed, due to qualitative comparisons in the Supplement Analysis. DOE took the optional approach that writing a supplement analysis was sufficient to underpin an amended record of decision to implement DFLAW design, construction, and operations, including the TSCR. Using the Supplement Analysis process avoided public comment on either the supplement analysis or on the amended Record of Decision. I believe that there are material errors in the supplement analysis that make the amended Record of Decision invalid.

a) In the supplement analysis, DOE makes a unilateral, unreviewed, determination that no new NEPA analysis is required for the changes between the original plan to start the WTP as a whole (with minimal sequencing), and instead operating the WTP on a DFLAW flowsheet with alternative feed for a period of 10 years (which is the "new" plan). Contrary to DOE's supplement analysis determination, significant new circumstances exist that should require a complete and publicly reviewed supplemental EIS.

b) To accomplish DFLAW, DOE states (Section 2.1 of the Supplement Analysis) that DOE would need to complete construction of the following facilities: the EMF, a cesium removal system (initially a tank side cesium removal (TSCR) unit followed by either an additional TSCR unit or construction and use of a permanent cesium removal capability-all under the LAWPS project), necessary transfer lines, and a loaded IX Column Storage Pad.
In order to pursue DFLAW all elements of the process must be present. Absent the loaded IX columns, there can be no feed to the LAW vitrification plant or the new WTP EMF evaporator. Because the flowsheet requires the IX Column storage pad to operate, and the IX Column storage pad has no NEPA coverage, none of the elements of this approach should be allowed to have construction, according to the National Environmental Policy Act (NEPA). DOE is not allowed to implement a decision via construction without this coverage. As a result, DOE is already violating the law by constructing the new effluent management facility without having NEPA coverage for the entire flowsheet decision.

c) The Supplement Analysis (Section 2.3) contains DOE's determination that the cesium removal system for DFLAW proposes to use non-elutable IX columns that permanently bind the cesium to the IX media; therefore, the spent IX columns are to be stored "until the media containing the cesium could be sent to the HLW Facility for vitrification." No analysis exists for processing cesium ion exchange loaded media in HLW vitrification at WTP, and no such process was evaluated in the TC&WM EIS. This omission is another area that lacks NEPA coverage (beyond the storage pad).

d) The Supplement Analysis (SA, Section 1.2) contains DOE's determination that the sequenced startup of WTP as analyzed in the Tank Closure and Waste Management EIS, Appendix E, has "no significant difference" from and bounds the 10+ year operation of DFLAW that will occur without the startup of the Pretreatment Facility or HLW vitrification Facility.

Contrary to DOE's determination, Appendix E of the TC&WM EIS was written consistent with the contract provisions at the time (which were pre-DFLAW). The Supplement Analysis omits discussion of the difference in time (and cumulative flow rates and discharges) between sequenced startup as defined in the TC&WM EIS and the 10+ years long HLW delay instituted by DFLAW. The Supplement Analysis omits discussion of the increasing subsidence risk of not stabilizing single shell tanks while they wait to be emptied of HLW.

At the time of the TC&WM EIS, the "Phased" startup of WTP was to result in the final turnover of Pretreatment to Operations on 11/30/2015 and the final turnover of HLW vitrification to operations less than a year later (per contract Modification 216, May 19, 2011). Further, in 2012, the ORP Project Execution Plan (MGT-PM-PL-06 Rev 1, March 2012) documented the planned full operations of PT, LAW and HLW together by November 2019. The consent decree milestone for Hot Start of the combined WTP (following the phased readiness review) was established preDFLAW as occurring by December 31, 2019 (Case 2:08-cv-05085-FVS, Document 59, Milestone A-17, October 25, 2010.)

Using the baseline WTP flowsheet, LAW could not operate without Pretreatment, and Pretreatment could only operate for the amount of time required to fill the LAW and HLW feed tanks before it would have to stop. As a result, the "sequenced" startup of WTP envisioned and analyzed in the TC&WM EIS was substantially different from the 10 year disconnect between PT/HLW and LAW that DOE claims is covered by NEPA in the Supplement Analysis. There is a big difference between phased readiness reviews, and a 10-year absence of HLW treatment while the low activity waste is processed.

e) The Supplement Analysis (footnote 14) also states that "Cesium is the primary contributor to annual worker dose. Removing and segregating the cesium into the self-shielded IX columns would gradually reduce the radiation risks to personnel from continued operations and maintenance activities in the tank farms. Once again, no life cycle integrated dose evaluation is
provided. The concern is expressed only for tank farm maintenance and operations, but not for Ion Exchange Storage Pad Operations or for WTP ion exchange media exposures from the unknown process that will receive and discharge the loaded ion exchange resin to the HLW melters and on to the off-gas system. Cesium is not just the primary dose in the tank farms, but elsewhere as well. The ion exchange columns will have a source term in the hundreds of thousands of curies.

f) The Supplement Analysis superficially compared a previously analyzed project (in the TC&WM EIS) to store cesium chloride capsules from the Waste Encapsulation and Storage Facility to the not-analyzed proposed storage pad for the DFLAW loaded ion exchange columns. The pad area and curie contents were compared. However, these points of comparison are incomplete. What was overlooked is that the WESF cesium capsules have a storage mission (a decision to store), the cesium capsules are approved "sealed sources" in triple welded confinement, and there is no disposal decision for the capsules that would require them to ever be reopened. Contrary to the Capsules project, the DFLAW loaded ion exchange columns are of a different chemical form in a different packaging, are not sealed sources, and are committed to being opened and treated in the WTP, resulting in much more exposure and risk. The Supplement Analysis overlooked these aspects in the comparison. For life cycle risk and exposures, the capsules storage pad project is not bounding of the DFLAW IX column storage and process project. The Supplement Analysis conclusions are in error.

g) In the Supplement Analysis the statement is made that "DOE did not identify any, past, present, or reasonably foreseeable additional future projects, beyond the demonstration testing phase" [in support of DFLAW]. This is an incorrect statement and an unverified assumption, given the need to develop a whole process and Facility for IX resin disposal to HLW.

h) The Supplement Analysis presents no objective evidence - no life cycle material balance or flow sheet to evaluate quantitatively the consequences of de-coupling HLW from LAW, or to quantify impacts to personnel doses and environmental releases over the life cycle. Comparison to the storage pad for the WESF cesium and strontium capsules was superficial and did not evaluate life cycle doses or costs. The differences are significant, and DOE has failed to analyze them. Was any aspect of nuclear quality assurance used to evaluate the data underlying DOE’s arbitrary determination in the SA?

i) DOE has apparently "changed the rules" for Supplement Analyses, just in time for this publication. The change reduces the rigor of reviews and eliminates DOE-HQ oversight. On September 17, 2018, the Assistant Secretary for Environmental Management issued a letter to establish "streamlining" of NEPA reviews³. The streamlining included delegation of NEPA activities to field offices. Page 2 notes that approval of Supplement Analyses, specific to the decision to prepare no further NEPA documentation, was generally to be delegated to the field offices.

On September 18, 2018, the Assistant Secretary for Environmental Management implemented the delegation of authority for Supplement Analyses to the Field Offices, eliminating HQ approval⁴. On September 27, 2018, the Associate Principal Deputy Assistant Secretary for Regulatory and Policy Affairs specifically delegated NEPA approval authority including for Supplement
Analyses to Hanford Field Offices, based on a Hanford NEPA Self-Assessment. A self-assessment is not reviewed by independent oversight, and this one was apparently completed in less than 10 days.

j) As a comparison, when the U.S. Navy identified options for disposal of the U.S.S Enterprise Reactor Compartments that were not covered in their existing NEPA documents, an announcement of intent to prepare a new EIS was published. See the Federal Register, Volume 84, No. 105, Friday May 31, 2019. Alternative processes and disposal destinations are to be reviewed. This situation does not differ from the DOE decision to accumulate cesium-137 on non-elutable resins for a disposal path to the WTP that does not exist, even in conceptual design. The life cycle exposures and costs are not known. I believe that DOE-HQ should, as a result, review DOE's approval of the supplement analysis and its underlying bases and quality of data.

Response to I-2-9
Ecology cooperated with USDOE in the preparation of the Tank Closure Waste Management Environmental Impact Statement, which included the evaluation of the waste streams that will be managed under the Direct Feed LAW (DFLAW) configuration, and thereby looked comprehensively at the management, treatment, and disposal of Hanford tank waste and solid waste. As USDOE makes proposals that are "different than, those analyzed in the existing documentation" (WAC 197-11-600), Ecology may still use the existing NEPA documentation and other information if Ecology reviews it and finds them to be adequate for Ecology's purposes.

O-1: HANFORD CHALLENGE

Comment O-1-1
The Administrative Record provided for this Comment is a 3,114 page PDF, which is a large amount of material to review in order to provide comments for a 60-day comment period. Further, the depth and breadth of technical material in the file requires expert analysis in order to understand and be able to sensibly comment on this proposal. Hanford Challenge objects to the short time frame given to provide public comment and the format of the document out for review. A more searchable set of documents should be provided instead of all documents as one massive pdf.

Response to O-1-1
Thank you for your comment. When DOE posts permit information, there are certain limits within the DOE procedures on how the information can be posted. On longer permit
modifications, DOE provides technical fact sheets which identifies information in the modification to help the reviewer find information in the package. The supporting technical information was provided in a second link to help focus between the permit application material and other supporting information. The Permittees complied with the required 60-day public comment period for a Class 3 Modification as detailed in WAC 173-303-830(4)(c). When Ecology hosts a public comment period we do make every effort to link each document or file individually, this is because of different internal guidance for Ecology.

Comment O-1-2

The Department of Energy is proposing to introduce an alternative treatment system of Hanford's high-level waste called the Low Activity Waste Pretreatment System (LAWPS) instead of relying upon the Waste Treatment Plant (WTP) Pretreatment facility (PT). The WTP PT facility is included in a federally-mandated consent decree issued by a U.S. District Court in 2016. That court order set a deadline for the opening of the PT facility by 2033. By undertaking LAWPS, the DOE seems to be undercutting the consent decree and the agreement with Washington State and EPA for the removal, treatment and storage of Hanford's high-level waste (HLW) currently stored in Hanford tanks.

Response to O-1-2

The 2016 Consent Decree established requirements for the Pretreatment and High Level Waste facilities to achieve operations by 2033. The Consent Decree also established a requirement for the Low Activity Waste Facility to be operational by 2023. An agreed to assumption of the 2023 date was that a Low Activity Waste Pretreatment System (LAWPS) of some kind would be needed to remove the cesium prior to the Pretreatment Facility being completed. A LAWPS facility and the LAW Vitrification Facility are needed to fulfill the DFLAW mission. Both DOE and Ecology have agreed that the implementation of the DFLAW configuration increases the likelihood of meeting longer term consent decree milestones.

Comment O-1-3

Hanford Challenge objects to the characterization of tank waste as "Low Activity Waste" since the statutory definition of HLW is quite clear: Hanford tank waste is HLW. a. The DOE, contrary to law, has "reinterpreted" the definition of HLW. By doing so, DOE is fundamentally altering more than 50 years of national consensus on how the most toxic, radioactive, and dangerous waste in the world is managed and ultimately disposed in geologic repositories. The proposal will seriously endanger millions of Americans and countless future generations. Because HLW contains highly radioactive fission products and radionuclides that pose long-term dangers to human health and the environment, Congress has enacted laws defining HLW and defined DOE responsibilities to safely manage the waste at its sites and to dispose of that waste in geologic repositories. It has not given DOE authority to change the definition of HLW.

Congress is clear. HLW by definition1 is:

(A) the highly radioactive material resulting from the reprocessing of spent nuclear fuel, including liquid waste produced directly in reprocessing and any solid material derived from such liquid waste that contains fission products in sufficient concentrations; and
(B) other highly radioactive material that the Commission [NRC], consistent with existing law, determines by rule.
Thus, the NWPA defines HLW by its source, "the highly radioactive material resulting from the reprocessing of spent nuclear fuel," rather than specifics of its hazardous characteristics. Reprocessing waste is categorically treated as HLW and defined by its origin because it is necessarily both "intensely radioactive and long-lived." Reprocessing is the act of separating the ingredients in irradiated nuclear reactor fuel and target materials, including plutonium, into constituent parts or streams. The extraordinarily radioactive waste that results from this requires permanent isolation. This process is HLW. This includes all of the wastes currently stored in Hanford nuclear waste tanks, as well as leaked and/or dumped wastes in the soil.

(B) 1 See, 42 U.S.C. § 10101(12), the Nuclear Waste Policy Act.
2 Natural Resources Defense Council v. Abraham, 2002 U.S Dist. LEXIS 28418 (D. Id. Aug. 9, 2002). The decision was appealed to the Ninth Circuit by DOE, which held that the issue was not ripe for consideration because DOE had not yet applied the Order at Hanford.

Response to O-1-3

Between 1993 and 1997, DOE and the Nuclear Regulatory Commission (NRC) went through an extensive process to establish a technical basis for classifying approximately 50 of the 56 million gallons of high-level waste in Hanford's tanks as "Waste Incidental to Reprocessing" (WIR) if DOE meets three criteria:

1. remove key radionuclides to the maximum extent technologically and economically practical;
2. vitrify the wastes at a concentration that does not exceed applicable concentration limits for Class C low-level waste; and
3. manage the wastes to meet safety requirements comparable to the performance objectives set out in 10 Code of Federal Regulations (CFR) Part 61.

These criteria are set forth in a letter dated June 9, 1997 from Carl J. Paperiello, NRC Office of Nuclear Material Safety and Safeguards Director, to Jackson Kinzer, USDOE Office of Tank Waste Remediation System Assistant Manager. Based on the treatment and disposal path identified in the 1997 letter, DOE signed onto commitments in the TPA and a subsequent consent decree that require it to implement this established pathway within a certain timeframe. The TPA and consent decree include legally enforceable milestones for the construction of facilities to separate out key radionuclides from tank waste and facilities to vitrify both the high level and low activity fractions of the waste.

Comment O-1-4

There is no reference to a Safety Analysis Report for the proposed actions. "A contractor must establish and maintain a safety basis for a hazard category 1, 2, or 3 DOE nuclear facility because these facilities have the potential for significant radiological consequences. DOE-STD-1027-92 ("Hazard Categorization and Accident Analysis Techniques for compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports," Change Notice 1, September 1997) sets forth the methodology for categorizing a DOE nuclear facility. The hazard categorization must be based on an inventory of all radioactive materials within a nuclear facility." The AVANTech, Inc, APPENDIX B - CALCULATION REVIEW CHECKLIST states that there is, "No Safety Analysis report directly associated with this document". A facility that is designed to process high-level tank waste containing hundreds of thousands of curies of cesium-137 (not to mention
strontium-90, plutonium, and other chemical contaminants) would seem to warrant a Safety Analysis Report. The modification to this permit should not be allowed unless and until there is an approved Safety Analysis Report that supports the operation of TSCR and related actions.

**Response to O-1-4**

Ecology regulates management of dangerous waste under Washington Administrative Code 173-303. Ecology does not have regulatory authority for management of DOE's AEA authority related to Nuclear Safety. If DOE makes decisions that directly affect permitting, Ecology will ensure that necessary details and information are evaluated and appropriately incorporated into the Dangerous Waste Permit.

**Comment O-1-5**

The dangerous waste regulations require a completed design in support of a permit, yet a completed design was not included. Drawings provided are stamped "for permitting purposes" which means that they are not final designs. The design, safety basis, and design verification should be complete before there is any construction or procurement.

**Response to O-1-5**

On July 3, 2019, (19-NWP-103) Ecology determined that the permit application was incomplete and required the Permittees to submit additional information in order to call the application complete. On October 31, 2019, (19-ECD-0079) the Permittees submitted updated documentation and finalized drawings in order to support Ecology's review of the application. Ecology has worked with the Permittees to address existing technical deficiencies and will host the draft permit for public comment starting on June 22, 2020. During this time the public can review the draft permit and supporting documentation which will include the updated and revised documents and drawings.

**Comment O-1-6**

DOE does not have a satisfactory disposition path for the cesium ion columns. There is no credible plan to vitrify these columns at the Waste Treatment Plant, and it is unclear how DOE would go about doing so. Therefore the columns will become orphan waste with no disposition path, stored above-ground at the Hanford tank farms. This exposes the highly-radioactive columns to any number of threats, including terrorist attacks, earthquakes, and the like, which have not been analyzed under the National Environmental Policy Act. Thus, this proposal seems premature and Ecology should defer approving this modification until these questions are sufficiently answered.

**Response to O-1-6**

Ecology has worked with the Permittees to draft permit conditions and TPA milestones that are specific to the proper management and disposal of the Ion Exchange Columns (IXCs) to ensure that an orphan waste is not generated by this Operating Unit Group. The current, agreed to final disposition pathway for the IXC media is to remove it and process it through the High Level Waste Facility at the Waste Treatment and Immobilization Plant as the last campaign for that facility.
Comment O-1-7

Hanford Challenge is concerned that DOE has failed to offer a life-cycle analysis of worker exposure to high-levels of gamma radiation resulting from the storage and maintenance of the cesium ion columns for Ion Exchange Storage Pad Operations, and if such columns eventually get vitrified at HLW.

Response to O-1-7

The radiation protection program has calculated life-cycle radiological exposures to employees. The IXCs are self-shielded and occupational dose rates will be maintained in accordance with as low as reasonably achievable (ALARA) principles.

Comment O-1-8

DOE lacks an adequate basis for proceeding with this project under the National Environmental Policy Act (NEPA), despite its representations to the contrary. DOE is proposing to conduct new operations and activities that cannot be said to have been sufficiently covered in its Supplemental Analysis. The Department of Ecology should insist on DOE's preparation of a Supplemental EIS in order to conform with legal requirements. Significant new circumstances exist that should require a complete and publicly reviewed Supplemental EIS.

Response to O-1-8

Ecology cooperated with USDOE in the preparation of the Tank Closure Waste Management Environmental Impact Statement, which included the evaluation of the waste streams that will be managed under the DFLAW configuration, and thereby looked comprehensively at the management, treatment, and disposal of Hanford tank waste and solid waste. As USDOE makes proposals that are "different than, those analyzed in the existing documentation" (WAC 197-11-600), Ecology may still use the existing NEPA documentation and other information if Ecology reviews it and finds them to be adequate for Ecology's purposes.

Comment O-1-9

LAW Vulnerabilities: The public notice and Fact Sheet announcing this comment period states, "The Permit establishes requirements to ensure waste management activities are protective of human health and the environment." Further, "LAWPS will pretreat tank supernatant waste for subsequent transfer to the WTP LAW Facility for vitrification."

DOE has yet to show that it has completed all necessary actions to resolve the hundreds of serious safety and design issues at the Low Activity Waste facility raised in a 2014 draft review, entitled, "Low-Activity Waste Facility Design and Operability Review and Recommendations."

The report, which was publicized in the national media (including the Washington Post and the Los Angeles Times, states,"The review teams identified 362 significant design vulnerabilities that could limit LAW Facility functionality and operability for which mitigation is highly recommended prior to the start of radioactive operations and in many cases, prior to the start of commissioning. Unless resolved in a timely manner, these vulnerabilities are expected to result in unacceptable risk to the overall project mission." [emphasis added]

The authors of the draft report included 37 top experts on a wide range of engineering and scientific topics. Team leaders included the Federal Project Director for Special Projects at the Waste Treatment and Immobilization Plant (WTP) in Richland, Washington, and the WTP Design and Operability Manager for Washington River Protection, Solutions in Richland,

The report identified "eight key programmatic deficiencies are as follows:

1. Inadequate Discipline in Design Execution and Control
2. Inadequate and Incomplete Control System Design Requirements
3. Inadequate Analysis or Understanding of Production Capability
4. Inadequate Implementation of As Low As Reasonably Achievable (ALARA) Principles
5. Transfer of Scope and Risk to the Commissioning Phase
6. Inadequate Definition and Implementation of Design Requirements for Waste Management
7. Inadequate Consideration of Industrial Safety and Hygiene Requirements
8. Inadequate Consideration of Success of Operations and Maintenance Activities"

"If left unresolved, the design vulnerabilities, coupled with the programmatic design process weaknesses, would likely continue to have a compounding impact on the functionality of individual LAW systems and the LAW Facility as a whole to the extent that the facility is unlikely to achieve operational status within the anticipated timescale or achieve an acceptable throughput," said the report. The team, for example, found that an O-ring designed to seal 1,250-degree gases would fail at 250 degrees. It also found a number of ventilation problems, potentially allowing radioactivity to migrate into safe areas of the plant. The experts warned that the plant's design would increase the difficulty of decontamination, if it ever became necessary.

Response to O-1-9

The Low-Activity Waste Facility Design and Operability Review and Recommendations was related to the WTP Low Activity Waste Facility, which is not part of this operating unit group and this permit modification. This comment is outside of the scope of this permit modification. Please reference Ecology Publication no. 20-05-005 for Ecology's response on comments related to the Low Activity Waste Facility Design and Operability Review.

O-1: COLUMBIA RIVERKEEPER

Comment O-2-1

The proposed permit modification allows for the removal and concentration of cesium, but what happens to the removed cesium? Does it return into other tanks or will it be disposed of in a different manner? The Fact Sheet provided does not say. Energy needs to have a plan for how to deal with the removed cesium prior to removal.

Response to O-2-1

Ecology has worked with the Permittees to draft permit conditions and TPA milestones that are specific to the proper management and disposal of the Ion Exchange Columns (IXCs) to ensure that an orphan waste is not generated by this Operating Unit Group. The current, agreed to final disposition pathway for the IXC media is to remove it and process it through the High Level Waste Facility at the Waste Treatment Plant as the last campaign for that facility.
Comment O-2-2
The proposed permit modification states that "an Independent Qualified Registered Professional Engineering (IQRPE) design assessment report remains under development to provide an independent technical evaluation of the LAWPS tank system design. Submittal of this IQRPE report will occur, upon completion and at a later date. Ecology should have this information upfront before permitting this modification. Why has Energy failed to provide this information? If major questions arise from the report, will the public get an opportunity to weigh-in?"

Response to O-2-2
On July 3, 2019, (19-NWP-103) Ecology determined that the permit application was incomplete and required the Permittees to submit additional information in order to call the application complete. On October 31, 2019, (19-ECD-0079) the Permittees submitted updated documentation and finalized drawings in order to support Ecology's review of the application. Ecology has worked with the Permittees to address existing technical deficiencies and will host the draft permit for public comment starting on June 22, 2020. During this time the public can review the draft permit and supporting documentation which will include the updated and revised documents and drawings.

Comment O-2-3
Lastly, does a Supplemental Environmental Policy Act (SEPA) analysis exist to support this proposal and, if not, please explain why? I urge Ecology to answer the questions from tribal nations, the State of Oregon, and the public before proceeding. The Fact Sheet Accompanying this proposed permit modification contains significant gaps. Ecology must address and consider the above questions prior to approving Energy's request for a permit modification.

Response to O-2-3
Ecology cooperated with USDOE in the preparation of the Tank Closure Waste Management Environmental Impact Statement, which included the evaluation of the waste streams that will be managed under the Direct Feed LAW configuration, and thereby looked comprehensively at the management, treatment, and disposal of Hanford tank waste and solid waste. As USDOE makes proposals that are "different than, those analyzed in the existing documentation" (WAC 197-11-600), Ecology may still use the existing NEPA documentation and other information if Ecology reviews it and finds them to be adequate for Ecology's purposes.
Response to Comments
Low-Activity Waste Pretreatment System (LAWPS) Project

Appendix A: Copies of all public notices

Public notices for this comment period:

- Public notice (fact sheet)
- Classified advertisement in the *Tri-City Herald*
- Notice sent to the Hanford-Info email list
- Event posted on Washington Department of Ecology – Hanford’s Facebook page
The U.S. Department of Energy (DOE) Office of River Protection (ORP) and Washington River Protection Solutions (WRPS) are holding a 60-day public comment period on a proposed modification to the Hanford Facility Dangerous Waste Permit (Permit). This proposed permit modification would add a new LAWPS Operating Unit Group to begin pretreating Double-Shell Tank waste for subsequent vitrification at the Waste Treatment and Immobilization Plant (WTP) Low-Activity Waste (LAW) Facility.

PUBLIC COMMENT PERIOD
May 1 to June 30, 2019

Background
The Hanford Site is located in southeastern Washington along the Columbia River. The 560 square-mile site was created in 1943 as part of the Manhattan Project to produce plutonium for the nation’s defense program. Today, waste management and environmental cleanup are the main missions at Hanford.

The DOE-ORP and WRPS, as co-Permittees, are requesting a Class 3 Modification to the Hanford Facility Dangerous Waste Permit to add LAWPS [Operating Unit Group (OUG)1]. The LAWPS project will remove cesium and filter solids from the waste. The planned cesium removal system would be deployed in phases. Phase One would employ a Tank-Side Cesium Removal (TSCR) unit. Phase Two would either use a permanent cesium removal capability (LAWPS) or an additional TSCR unit to support full operation of the LAW Facility. This application covers construction activities needed to support the Phase One portion of the project. Phase two will be submitted at a later date.

Overview
The Permit establishes requirements to ensure waste management activities are protective of human health and the environment. DOE is proposing a Class 3 permit modification pursuant to Washington Administrative Code WAC 173-303-830, which requires a 60-day public review process that includes a public meeting, a newspaper advertisement announcing the meeting, and a fact sheet.

Summary of Changes
The purpose of the modification is to add a LAWPS OUG to the Permit. LAWPS will pretreat tank supernatant waste for subsequent transfer to the WTP LAW Facility for vitrification.
Treatment consists of solids filtration and cesium removal by ion exchange. The Class 3 permit modification request includes the following activities; treatment to remove undissolved solids and radionuclides, tank storage and container storage for waste generated during this process. In support of the modification request, a Dangerous Waste Part B Permit Application for the new OUG has been submitted to Washington State Department of Ecology (Ecology) for approval to construct and operate the LAWPS.

Primary elements of the application include the following:
- Seismic and traffic evaluations
- Part A Form
- Waste Analysis Plan
- Process Information
- Security Requirements
- Preparedness and Prevention
- Personnel Training
- Closure Plan
- Inspection Plan
- Contingency Plan
- Supporting design media (specifications, calculations, reports, and engineering drawings).
- Supplemental Information (provided for context of the application, but not for public comment).

https://pdw.hanford.gov/arpir/index.cfm/docDetail?accession=0063753H

An Independent Qualified Registered Professional Engineering (IQRPE) design assessment report is under development to provide an independent technical evaluation of the LAWPS tank system design. The completed IQRPE report will be submitted to Ecology at a later date.
A 60-day public comment period is scheduled to begin May 1 and continue through June 30, 2019. A public meeting will be held May 29, 2019, at 5:30 p.m. at the Richland Public Library, 955 Northgate Dr., Richland, WA 99352.

To request disability accommodation, please contact Jennifer Colborn, Jennifer_M_Colborn@rl.gov, 509-376-5840 at least 10 working days prior to the event.

All comments must be submitted by June 30, 2019, in writing, by mail, or by email (preferred) to:

Mandy Jones  
Washington State Department of Ecology  
3100 Port of Benton Boulevard  
Richland, WA 99354  

At the conclusion of the public comment period, Ecology will address public comments and prepare a Response to Comment document.

Copies of the proposed modification and supporting documentation will be available during the public comment period online at http://pdw.hanford.gov/arpir/index.cfm/viewDoc?accession=xxxxxxx, on Ecology’s website at http://www.ecy.wa.gov/programs/nwp/commentperiods.htm, and at the Hanford Public Information Repositories listed below.

<table>
<thead>
<tr>
<th>Hanford Public Information Repositories</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Portland State University</strong></td>
</tr>
<tr>
<td>Government Information</td>
</tr>
<tr>
<td>Branford Price Millar Library</td>
</tr>
<tr>
<td>1875 SW Park Avenue</td>
</tr>
<tr>
<td>Portland, OR 97207-1151</td>
</tr>
<tr>
<td>Attn: Claudia Irla</td>
</tr>
<tr>
<td>(503) 725-4542</td>
</tr>
<tr>
<td>E-Mail: <a href="mailto:westonc@pdx.edu">westonc@pdx.edu</a></td>
</tr>
<tr>
<td>Map: <a href="http://www.pdx.edu/map.html">www.pdx.edu/map.html</a></td>
</tr>
<tr>
<td><strong>University of Washington</strong></td>
</tr>
<tr>
<td>Suzzallo Library</td>
</tr>
<tr>
<td>Government Publications Dept.</td>
</tr>
<tr>
<td>Box 352900</td>
</tr>
<tr>
<td>Seattle, WA 98195-2900</td>
</tr>
<tr>
<td>Attn: Hilary Reinert</td>
</tr>
<tr>
<td>(206) 685-3130</td>
</tr>
<tr>
<td>E-Mail: <a href="mailto:cass@uw.edu">cass@uw.edu</a>; <a href="mailto:reinerth@uw.edu">reinerth@uw.edu</a></td>
</tr>
<tr>
<td><strong>U.S. Department of Energy</strong></td>
</tr>
<tr>
<td>Public Reading Room</td>
</tr>
<tr>
<td>Washington State University, Tri-Cities</td>
</tr>
<tr>
<td>Consolidated Information Ctr., Rm. 101-L</td>
</tr>
<tr>
<td>2770 University Drive</td>
</tr>
<tr>
<td>Richland, WA 99352</td>
</tr>
<tr>
<td>Attn: Janice Scarano</td>
</tr>
<tr>
<td>(509) 372-7443</td>
</tr>
<tr>
<td>E-Mail: <a href="mailto:doe.reading.room@pnnl.gov">doe.reading.room@pnnl.gov</a></td>
</tr>
<tr>
<td><strong>Gonzaga University</strong></td>
</tr>
<tr>
<td>Foley Center Library</td>
</tr>
<tr>
<td>East 502 Boone Avenue</td>
</tr>
<tr>
<td>Spokane, WA 99258</td>
</tr>
<tr>
<td>Attn: John Spencer</td>
</tr>
<tr>
<td>(509) 313-6110</td>
</tr>
<tr>
<td>E-Mail: <a href="mailto:spencer@gonzaga.edu">spencer@gonzaga.edu</a></td>
</tr>
<tr>
<td><strong>Ecology Nuclear Waste</strong></td>
</tr>
<tr>
<td>Program Resource Center</td>
</tr>
<tr>
<td>3100 Port of Benton Blvd.</td>
</tr>
<tr>
<td>Richland, WA 93354</td>
</tr>
<tr>
<td>Attn: Valarie Peery</td>
</tr>
<tr>
<td>509-372-7950</td>
</tr>
<tr>
<td>E-Mail: <a href="mailto:Hanford@ecy.wa.gov">Hanford@ecy.wa.gov</a></td>
</tr>
<tr>
<td><strong>Administrative Record and Public Information Repository:</strong></td>
</tr>
<tr>
<td><strong>Address:</strong> 2440 Stevens Center Place, Room 1101, Richland, WA.  <strong>Attn:</strong> Heather Childers</td>
</tr>
</tbody>
</table>
| **Phone:** 509-376-2530 **E-Mail:** heather_m_childers@rl.gov  **Web site:** www2.hanford.gov/arpir/
Public Involvement Opportunity

We want to hear from you on the proposed changes to the Hanford Dangerous Waste Permit for the addition of the LAWPS OUG to the Permit.

Comment Period: May 1 to June 30, 2019
Public Meeting: May 29, 2019, 5:30 p.m., Richland Public Library


**Forecast calls for busy wildfire season along West Coast**

American and Chinese trade negotiators met Wednesday for talks on their escalating trade war, but whether to make a deal remains unclear.

Wednesday’s atmosphere appeared amicable, Mnuchin and U.S. Trade Representative Robert Lighthizer, along with Chinese Vice Premier Liu He, smiled for photos and exchanged pleasantries during their one-day meeting.

But they said nothing to reporters and no details were announced after the talks at a Chinese government compound.

---

**Pacific Northwest tribal fishing bill clears US House**

Over the years, the government has created new fishing tribunals in response to court rulings in high and several hundred tribal members face fish year-round at camps that were intended to be seasonal, said Charles Hulse, director of government-affairs for the Columbia River Inter-Tribal Fish Commission.

Conditions at some of the larger sites are unsu- terry, with sewer problems, crowding and unsanitary drinking water, he said.

The commission has identified 16 sites that need greater management in both Oregon and Wash-ington—such as Lone Pine near the Palouse, Oregon, and another called Cooks on the Washington side of the river.

---

**Learn about a Proposal to Construct and Operate a Low-Activity Waste Conversion Facility**

The U.S. Department of Energy’s (DOE) Office of River Protection is holding a 60-day public comment period on a proposed modification to the Hanford Facility Dangerous Waste Permit. DOE is proposing an amendment from the State of Washington Department of Ecology (Ecology) to add a new unitary operation for low Actively Managed Waste Ponds System. The operation will use a Tank-Side Cesium Removal unit to treat plant waste to render it inactive, allowing the waste to be sent to a low-active waste disposal facility.

A public meeting on the proposal will be held May 29, 2019, at 5:30 p.m. at the Richland Public Library, 905 Northgate Drive, Richland, WA 99352.

Visit [https://go.usa.gov/xm75Z](https://go.usa.gov/xm75Z) to review details on the proposed changes.

Please submit comments by June 19, 2019, to the State of Washington Department of Ecology, ATTN: Dina McFadden, 3100 Port of Benton Boulevard, Richland, Washington 99352.

[https://ecinfo.deinosaur.com/FindTheHANford.htm](https://ecinfo.deinosaur.com/FindTheHANford.htm)

---

**Delivery rules become law**

Only on sidewalks and streets, not on sidewalks or in private human-overnight, and doing so in front of delivery trucks — those are some of the new rules for parcel delivery robots in Wash-ington state.

Gov. Jay Inslee signed a bill imposing those rules and others, Tuesday, set-

ting up a framework for a service that’s already quite popular, even if lawmakers — or many residents, for that matter, may not always be thrilled about the presence of robots in the community.

---

**UK sentences Assange to less than two years**

A British judge sentenced Wikileaks founder Julian Assange on Wednesday to 50 weeks in prison for skippering but seven years ago and hiding in the Ecuadorian embassy in London. In Julien Assange’s case, his American lawyer appeared unrepentant about his client’s actions and his argument that he should not be extradited to the em- bassy because he feared being returned to Sweden, where he faced sexual misconduct allegations.

The U.S. recently faced a court hearing Thursday on the U.S. extradition request.

He’s accused of conspiring to access a government computer network.

---

**A family watches the Holy Fire burn from the shore of Lake Elsinore in August 2018. The National Interagency Fire Center reports that the potential for significant wildfires is above normal west of the Cascade creen in Washington and Oregon through December.**

---

**Pacific Northwest tribal fishing bill clears US House**

---

**Forecast calls for busy wildfire season along West Coast**

---

**UK sentences Assange to less than two years**

---

**A family watches the Holy Fire burn from the shore of Lake Elsinore in August 2018. The National Interagency Fire Center reports that the potential for significant wildfires is above normal west of the Cascade creen in Washington and Oregon through December.**

---

**Pacific Northwest tribal fishing bill clears US House**

---

**Forecast calls for busy wildfire season along West Coast**

---

**UK sentences Assange to less than two years**

---

**A family watches the Holy Fire burn from the shore of Lake Elsinore in August 2018. The National Interagency Fire Center reports that the potential for significant wildfires is above normal west of the Cascade creen in Washington and Oregon through December.**

---

**Pacific Northwest tribal fishing bill clears US House**

---

**Forecast calls for busy wildfire season along West Coast**

---

**UK sentences Assange to less than two years**
WASHINGTON——House Democrats’ initial report on William Barr followed on Thursday, as Speaker Nancy Pelosi accused the nation’s top law enforcement officer of lying in Congress and the judiciary committee threatened to hold him in contempt if he did not promptly hand over a complete version of the Mueller report.

“We are not going to be intimidated into doing the president’s bidding,” Pelosi said in a speech on the House floor. “We are going to get the facts.”

The exclamation over the legislative and executive branch’s of government, a day after Barr mounted an all-out self-defense in the Senate, was as abrupt and emotionally charged as any in decades. Barr, an ally of President Trump who had ignored a subpoena from the House Judiciary Committee to provide his full report before oversight hearings, testified in a hearing. The House Judiciary Committee voted unanimously to recommend Barr’s contempt of Congress.

Pelosi said on the House floor Thursday that Barr had blocked impeachment proceedings. In language that was more than a hint of contempt, Pelosi said Barr “is failing to fulfill his obligations as attorney general.”

“What is deadly serious about it is the attorney general of the United States of America was not telling the truth to the Congress of the United States,” Pelosi told reporters, “That’s a crime.”

The Justice Department and Republicans on Capitol Hill fired back. Ken Cuccinelli, a department official, called Pelosi’s comments a “baseless attack” that was “reckless, irresponsible and false.”

The calls for Barr to be held in contempt of Congress stem from a justice department report released in March. At the time, the department said that Barr’s decision not to honor the House Judiciary Committee’s subpoena for Mueller’s report without redactions and all the evidence his investigators collected. In a letter to lawmakers, the department said that sharing the information would poison the outcome of its investigation at risk.

But Democrats were not initially ready to accept that answer.

Convening in a nearly empty hearing room, the Judiciary Committee’s chairman, Rep. Jerrold Nadler of New York, called on Wednesday to join Democrats in standing guard against any contempt vote. Barr would have to “be there in court in the next few days” to produce the full Mueller report before initiating contempt proceedings.

Committee Democrats were preparing to make the Justice Department a formal contempt referral, a step that would allow them to state off another contempt entendron.

But, without a cooperation in sight, House Democrats could have to choose from a handful of paths to go forward.

Some lawmakers are arguing for opening an impeachment inquiry of President Donald Trump, effectively turning the House into a grand jury. That would grant the body clearer powers to command information from the executive branch, including investigative grand jury material.

In a private meeting with members of his leadership team, Pelosi called Barr “a complete idiot” for Trump and an “enabler” of his obstruction of justice, according to a congresswoman who was present.

But for now no one can move to hold the attorney general in contempt of the House’s investigation.

Nadler said “But the attorney general must make a choice. Every one of us must make the same choice. This choice is now an office of our leadership. We can’t be an enabler of this.”

The House is making clear that the impeachment inquiry will continue and is preparing to vote on Barr’s contempt of Congress.

“I have no choice but to move quickly to hold the attorney general in contempt of Congress to conduct oversight of the executive branch,” Nadler said.

Pelosi is expected to introduce a contempt resolution to hold Barr in contempt of Congress. Barr would have to “be there in court in the next few days” to produce the full Mueller report before initiating contempt proceedings.

Committee Democrats were preparing to make the Justice Department a formal contempt referral, a step that would allow them to state off another contempt entendron.

But, without a cooperation in sight, House Democrats could have to choose from a handful of paths to go forward.

Some lawmakers are arguing for opening an impeachment inquiry of President Donald Trump, effectively turning the House into a grand jury. That would grant the body clearer powers to command information from the executive branch, including investigative grand jury material.

In a private meeting with members of his leadership team, Pelosi called Barr “a complete idiot” for Trump and an “enabler” of his obstruction of justice, according to a congresswoman who was present.

But for now no one can move to hold the attorney general in contempt of the House’s investigation.

Nadler said “But the attorney general must make a choice. Every one of us must make the same choice. This choice is now an office of our leadership. We can’t be an enabler of this.”

The House is making clear that the impeachment inquiry will continue and is preparing to vote on Barr’s contempt of Congress.

“I have no choice but to move quickly to hold the attorney general in contempt of Congress to conduct oversight of the executive branch,” Nadler said.

Pelosi is expected to introduce a contempt resolution to hold Barr in contempt of Congress. Barr would have to “be there in court in the next few days” to produce the full Mueller report before initiating contempt proceedings.

Committee Democrats were preparing to make the Justice Department a formal contempt referral, a step that would allow them to state off another contempt entendron.

But, without a cooperation in sight, House Democrats could have to choose from a handful of paths to go forward.

Some lawmakers are arguing for opening an impeachment inquiry of President Donald Trump, effectively turning the House into a grand jury. That would grant the body clearer powers to command information from the executive branch, including investigative grand jury material.

In a private meeting with members of his leadership team, Pelosi called Barr “a complete idiot” for Trump and an “enabler” of his obstruction of justice, according to a congresswoman who was present.

But for now no one can move to hold the attorney general in contempt of the House’s investigation.

Nadler said “But the attorney general must make a choice. Every one of us must make the same choice. This choice is now an office of our leadership. We can’t be an enabler of this.”

The House is making clear that the impeachment inquiry will continue and is preparing to vote on Barr’s contempt of Congress.

“I have no choice but to move quickly to hold the attorney general in contempt of Congress to conduct oversight of the executive branch,” Nadler said.

Pelosi is expected to introduce a contempt resolution to hold Barr in contempt of Congress. Barr would have to “be there in court in the next few days” to produce the full Mueller report before initiating contempt proceedings.

Committee Democrats were preparing to make the Justice Department a formal contempt referral, a step that would allow them to state off another contempt entendron.

But, without a cooperation in sight, House Democrats could have to choose from a handful of paths to go forward.

Some lawmakers are arguing for opening an impeachment inquiry of President Donald Trump, effectively turning the House into a grand jury. That would grant the body clearer powers to command information from the executive branch, including investigative grand jury material.

In a private meeting with members of his leadership team, Pelosi called Barr “a complete idiot” for Trump and an “enabler” of his obstruction of justice, according to a congresswoman who was present.

But for now no one can move to hold the attorney general in contempt of the House’s investigation.

Nadler said “But the attorney general must make a choice. Every one of us must make the same choice. This choice is now an office of our leadership. We can’t be an enabler of this.”

The House is making clear that the impeachment inquiry will continue and is preparing to vote on Barr’s contempt of Congress.

“I have no choice but to move quickly to hold the attorney general in contempt of Congress to conduct oversight of the executive branch,” Nadler said.

Pelosi is expected to introduce a contempt resolution to hold Barr in contempt of Congress. Barr would have to “be there in court in the next few days” to produce the full Mueller report before initiating contempt proceedings.

Committee Democrats were preparing to make the Justice Department a formal contempt referral, a step that would allow them to state off another contempt entendron.

But, without a cooperation in sight, House Democrats could have to choose from a handful of paths to go forward.

Some lawmakers are arguing for opening an impeachment inquiry of President Donald Trump, effectively turning the House into a grand jury. That would grant the body clearer powers to command information from the executive branch, including investigative grand jury material.

In a private meeting with members of his leadership team, Pelosi called Barr “a complete idiot” for Trump and an “enabler” of his obstruction of justice, according to a congresswoman who was present.

But for now no one can move to hold the attorney general in contempt of the House’s investigation.

Nadler said “But the attorney general must make a choice. Every one of us must make the same choice. This choice is now an office of our leadership. We can’t be an enabler of this.”

The House is making clear that the impeachment inquiry will continue and is preparing to vote on Barr’s contempt of Congress.

“I have no choice but to move quickly to hold the attorney general in contempt of Congress to conduct oversight of the executive branch,” Nadler said.

Pelosi is expected to introduce a contempt resolution to hold Barr in contempt of Congress. Barr would have to “be there in court in the next few days” to produce the full Mueller report before initiating contempt proceedings.

Committee Democrats were preparing to make the Justice Department a formal contempt referral, a step that would allow them to state off another contempt entendron.

But, without a cooperation in sight, House Democrats could have to choose from a handful of paths to go forward.

Some lawmakers are arguing for opening an impeachment inquiry of President Donald Trump, effectively turning the House into a grand jury. That would grant the body clearer powers to command information from the executive branch, including investigative grand jury material.

In a private meeting with members of his leadership team, Pelosi called Barr “a complete idiot” for Trump and an “enabler” of his obstruction of justice, according to a congresswoman who was present.

But for now no one can move to hold the attorney general in contempt of the House’s investigation.

Nadler said “But the attorney general must make a choice. Every one of us must make the same choice. This choice is now an office of our leadership. We can’t be an enabler of this.”

The House is making clear that the impeachment inquiry will continue and is preparing to vote on Barr’s contempt of Congress.

“I have no choice but to move quickly to hold the attorney general in contempt of Congress to conduct oversight of the executive branch,” Nadler said.
Notice of Upcoming Public Comment Period on Proposed Changes to the Hanford Dangerous Waste Permit

The US Department of Energy (DOE) Office of River Protection (ORP) is planning a 60-day public comment period to support a requested Class 3 permit modification to the Hanford Dangerous Waste Permit. This modification is requesting approval from the Washington State Department of Ecology (Ecology) to add a new operating unit for the Low Activity Waste Pretreatment System (LAWPS). This operating unit will pretreat (remove cesium and filter out solid particles) double-shell tank waste for subsequent vitrification in the Waste Treatment and Immobilization Plant Low-Activity Waste (LAW) Facility.

The planned cesium removal system would be deployed in phases. Phase One would employ a Tank-Side Cesium Removal (TSCR) unit. Phase Two would either use a permanent cesium removal capability, LAWPS or an additional TSCR unit to support full operation of the LAW Facility. This application will cover construction activities needed to support the Phase One portion of the project.

The public comment period is May 1-June 30, 2019 with a public meeting May 29, 2019.

Copies of the proposed modification and supporting documentation will be available during the public comment period at the Hanford Administrative Record Public Information Repository located at 2440 Stevens Drive, Richland, WA, and online at http://pdw.hanford.gov/arpir/.

Additional information on the proposed permit modification will be available on Ecology’s website, the Hanford Public Information Repositories, and other document review locations when the public comment period begins.

Questions? Please contact Paula Call, DOE, at paula.call@orp.doe.gov or Mandy Jones, Ecology, at Mandy.Jones@ecy.wa.gov.
Public Comment Period Begins on Proposed Changes to the Hanford Dangerous Waste Permit

Public comment period May 1 - June 30, public meeting May 29

The Department of Energy (DOE) Office of River Protection is holding a 60-day public comment period to support a Class 3 modification to the Hanford Dangerous Waste Permit. This modification is requesting approval from the Washington State Department of Ecology (Ecology) to add a new operating unit for the Low Activity Waste Pretreatment System (LAWPS). This operating unit will pretreat (remove cesium and filter out solid particles) double-shell tank waste for subsequent vitrification in the Hanford Tank Waste Treatment and Immobilization Plant Low-activity Waste (LAW) Facility.

The planned cesium removal system would be deployed in phases. Phase One would employ a Tank-Side Cesium Removal (TSCR) unit. Phase Two would either use a permanent cesium removal capability, LAWPS Facility or an additional TSCR unit to support full operation of the LAW Facility. This proposed modification will cover construction activities and operations needed to support the Phase One portion of the project.

A public meeting will be held May 29, at 5:30 p.m., at the Richland Public Library, 955 Northgate Drive, Richland, Washington 99352. If you are unable to attend in person you can participate via webinar https://attendee.gotowebinar.com/register/5820068387111693837, ID# 531-472-235.

Please see the attached summary fact sheet, the Hanford.gov Events Calendar, the Administrative Record and the Public Information Repositories for documentation.

Please submit any comments in writing by June 30 to:
Washington State Department of Ecology
3100 Port of Benton Boulevard
Richland, WA 99354
or electronically at http://wt.ecology.commentinput.com/?id=J6RbP

Questions? Please contact DOE’s Paula Call at paula.call@orp.doe.gov, (509) 376-2048
or Ecology’s Daina McFadden at hanford@ecy.wa.gov, (509) 372-7950.

To request disability accommodation, please contact Jennifer Colborn, jennifer_m_colborn@rl.gov,
509-376-5840, in our external affairs office at least 10 working days prior to the event.
DOE makes every effort to honor disability accommodation requests.

Visit us on the web and follow our news and social media.

Subscribe or Unsubscribe
Public Comment Period Begins on Proposed Changes to the Hanford Dangerous Waste Permit

Public comment period May 1 - June 30, public meeting May 29

The Department of Energy (DOE) Office of River Protection is holding a 60-day public comment period to support a Class 3 modification to the Hanford Dangerous Waste Permit. This modification is requesting approval from the Washington State Department of Ecology (Ecology) to add a new operating unit for the Low Activity Waste Pretreatment System (LAWPS). This operating unit will pretreat (remove cesium and filter out solid particles) double-shell tank waste for subsequent vitrification in the Hanford Tank Waste Treatment and Immobilization Plant Low-activity Waste (LAW) Facility.

The planned cesium removal system would be deployed in phases. Phase One would employ a Tank-Side Cesium Removal (TSCR) unit. Phase Two would either use a permanent cesium removal capability, LAWPS Facility or an additional TSCR unit to support full operation of the LAW Facility. This proposed modification will cover construction activities and operations needed to support the Phase One portion of the project.

A public meeting will be held tonight, May 29, 5:30 p.m., at the Richland Public Library, 955 Northgate Drive, Richland, Washington 99352. If you are unable to attend in person you can participate via webinar https://attendee.gotowebinar.com/register/5820068387111693837, ID# 531-472-235.

Please see the attached summary fact sheet, the Hanford.gov Events Calendar, the Administrative Record and the Public Information Repositories for documentation.

Please submit any comments in writing by June 30 to:
A new public comment period starts today.

The DOE is holding a 60-day public comment period to support a Class 3 modification to the Hanford Dangerous Waste Permit.

This modification is requesting approval from Ecology to add a new operating unit for the Low Activity Waste Pretreatment System (LAWPS). This operating unit will pretreat (remove cesium and filter out solid particles) double-shell tank waste for subsequent vitrification in the Hanford Tank Waste Treatment and Immobilization Plant Low-activity Waste (LAW) Facility.

For more information go to the Hanford.gov Events Calendar:
https://www.hanford.gov/pageAction.cfm/calendar...