



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

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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

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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:	<i>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)</i>
Permittees:	U.S. Department of Energy - Office of River Protection and Washington River Protection Solutions
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](#).

Commenter	Organization
Anonymous	Citizen
Mike Conlan	Citizen
Hanford Challenge	Organization
Columbia Riverkeeper	Organization

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 excessing 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-Assessment⁵. 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.

¹ <https://www.energy.gov/sites/prod/files/2019/01/f58/sa-eis-0391-sa-02-direct-feed-law-2019-01-17.pdf>

² <https://www.federalregister.gov/documents/2019/01/28/2019-00230/amended-record-of-decision-for-the-direct-feed-low-activity-waste-approach-at-the-hanford-site>

³ Letter, Anne Marie White to Distribution, "Streamlining National Environmental Policy Act Reviews through Targets and Delegations," September 17, 2018.

⁴ Letter, Anne Marie White to Mark Gilbertson, "Delegation of Certain National Environmental Policy Act Authorities," September 18, 2019.

⁵ Letter, Mark Gilbertson to Doug Shoop and Brian Vance, "Delegation of Certain National Environmental Policy Act Action Approval Authorities to the Hanford Site," September 27, 2018.

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. 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 IXC's 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,

Washington. Others were listed with expertise in Radiological Control and Industrial Health, Electrical Distribution Systems, Instrumentation and Controls, Container Systems, Mechanical Systems, Ventilation Systems, and Process Support Systems.

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.

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

PUBLIC COMMENT PERIOD

Low-Activity Waste Pretreatment System (LAWPS) Project Proposed Construction and Operation of New Waste Storage and Treatment Unit

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.

PUBLIC COMMENT PERIOD

May 1 to June 30, 2019

GET INVOLVED STAY INFORMED

Public Meeting:

May 29, 2019, 5:30 p.m.
Richland Public Library
955 Northgate Dr.
Richland, WA 99352

Contact Information:

Paula Call, DOE
509 376 2048
Paula.Call@orp.doe.gov
Mandy Jones, Ecology
509 372 7916
Mandy.Jones@ecy.wa.gov

Administrative Record:

https://pdw.hanford.gov/arpir/index.cfm/docDetail?accession_0063754H

Submit Comments:

http://wt.ecology.commentinput.com/?id_J6RbP



THE HANFORD SITE

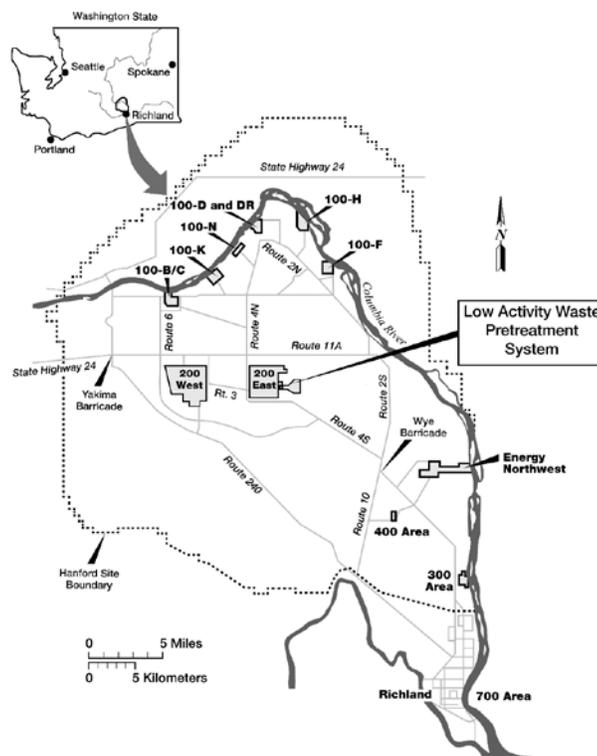
Treatment consists of solids filtration and cesium removal by ion exchange. The Class 3 permit modification request includes the following activities; treatment to remove undissolved solids and radionuclides, tank storage and container storage for waste generated during this process. In support of the 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](mailto: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
<http://wt.ecology.commentinput.com/?id=J6RbP> (preferred)

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.

Hanford Public Information Repositories

<p>Portland State University Government Information Branford Price Millar Library 1875 SW Park Avenue Portland, OR 97207-1151 Attn: Claudia Irla (503) 725-4542 E-Mail: westonc@pdx.edu</p> <p>Map: www.pdx.edu/map.html</p>	<p>University of Washington Suzzallo Library Government Publications Dept. Box 352900 Seattle, WA 98195-2900 Attn: Hilary Reinert (206) 685-3130 E-Mail: cass@uw.edu; reinerth@uw.edu</p> <p>Map: www.tinyurl.com/m8ebj</p>	<p>U.S. Department of Energy Public Reading Room Washington State University, Tri- Cities Consolidated Information Ctr., Rm. 101-L 2770 University Drive Richland, WA 99352 Attn: Janice Scarano (509) 372-7443 E-Mail: doe.reading.room@pnnl.gov</p> <p>Map: www.tricity.wsu.edu/campusmaps/campusmap.pdf</p>	<p>Gonzaga University Foley Center Library East 502 Boone Avenue Spokane, WA 99258 Attn: John Spencer (509) 313-6110 E-Mail: spencer@gonzaga.edu</p> <p>Map: www.tinyurl.com/2c6bpm</p>	<p>Ecology Nuclear Waste Program Resource Center 3100 Port of Benton Blvd. Richland, WA 99354 Attn: Valarie Peery 509-372-7950 E-Mail: Hanford@ecy.wa.gov</p> <p>Online: http://www.ecy.wa.gov/programs/nwp/commentperiods.htm</p>
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Administrative Record and Public Information Repository:

Address: 2440 Stevens Center Place, Room 1101, Richland, WA. **Attn:** Heather Childers
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

Budget office finds caveats to 'Medicare for All'

Congressional budget experts said Wednesday that moving to a government-run health care system like "Medicare for All" could be complicated and potentially disruptive for Americans.

The report from the nonpartisan Congressional Budget Office was a high-level look at the pros and cons of changing the current mix of public and private health care financing to a system paid for entirely by the government. One unintended consequence could be increased wait times and reduced access to care if there are not enough providers to meet an expected increased demand for services.

— ASSOCIATED PRESS

US businesses hiring; 275,000 jobs in April

U.S. companies in April added the most jobs in 9 months, a sign that hiring remains strong amid solid economic growth.

Payroll processor ADP said Wednesday that businesses hired 275,000 people last month, up from just 151,000 in March. That's a much higher number than economists forecast for Friday's government jobs report.

Current projections call for the Labor Department to report 181,000 new jobs, according to data provider FactSet.

Hiring was driven partly by a big gain in construction, ADP said, where 49,000 jobs were added.

— ASSOCIATED PRESS

US, China hold new round of tariff war talks

American and Chinese trade negotiators met Wednesday for talks on their bruising tariff war after Treasury Secretary Steven Mnuchin said the U.S. side might be moving toward a decision on whether to make a deal with Beijing.

Wednesday's atmosphere appeared amicable. Mnuchin and U.S. Trade Representative Robert Lighthizer, along with China's economic czar, Vice Premier Liu He, smiled for photos and shook hands after their one-day meeting.

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

— ASSOCIATED PRESS

UK sentences Assange to less than 1 year

A British judge sentenced WikiLeaks founder Julian Assange on Wednesday to 50 weeks in prison for skipping bail seven years ago and hiding in the Ecuadorian Embassy in London.

Judge Deborah Taylor appeared unimpressed by Assange's apology and his lawyer's argument that he sought refuge in the embassy because he feared being taken from Sweden, where he faced sexual misconduct allegations, to the U.S.

Assange faces a court hearing Thursday on the U.S. extradition request. He's accused of conspiring to break into a Pentagon computer system.

— ASSOCIATED PRESS



AP file photo

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 crest in Washington and Oregon through August.

Forecast calls for busy wildfire season along West Coast

BY NICHOLAS K. GERANIOS
Associated Press

SPOKANE, WASH.

Most of the country can expect a normal wildfire season, but residents along the West Coast of the United States should be ready for another busy season, the National Interagency Fire Center said Wednesday.

California experienced its deadliest and largest wildfires in the past two years, including a fire in the northern part of the state last year that destroyed the town of Paradise, killing more than 80 people. It was the nation's worst death toll from a wildfire in a century.

The Boise, Idaho-based center said a heavy crop of grasses and fine fuels has developed across California and should elevate fire potential as it dries through the summer.

The terms "normal" or "above normal" refer to a

formula that involves drought, precipitation and fuel conditions in each region, projected on a 10-year average, said Jennifer Smith of the fire center.

The Pacific Northwest has entered a period of moderate drought, which could mean an early fire season in the Cascade Range and the Okanogan region. The potential for significant wildfires is above normal west of the Cascade crest in Washington and Oregon through August, the report said.

Some high-elevation portions of the Great Basin and the central Rocky Mountains could experience below-normal wildfire potential, the agency said. It also said that below average fire activity continued in April across the nation, thanks to moist conditions from the winter.

"Precipitation received was above average across the northwestern quarter

of the nation and across a majority of the east," the agency said.

While the wildfire season might be delayed in higher, timbered elevations of the Northwest because of a slower melt of the snowpack, "an exception to this could be along the Canadian border in Washington, Idaho and western Montana," the agency said. That's because those areas have a below-average snowpack and are suffering from moderate drought.

"These areas can expect an average start to the season with a potential for above normal activity," the agency said.

In the southwest, below normal fire potential was expected across northern Arizona, northern New Mexico and west Texas in May and June, the report said. Above normal fire potential was expected in southern Arizona in those months.

Pacific Northwest tribal fishing bill clears US House

BY GILLIAN FLACCUS
Associated Press

PORTLAND, ORE.

Pacific Northwest tribes fighting to get the U.S. government to fully compensate them for the loss of dozens of homes and traditional fishing encampments to flooding caused by hydroelectric dams rejoiced Tuesday after federal legislation to address their cause cleared a first hurdle.

A key bill that cleared the U.S. House on Monday would provide \$11 million for improvements at alternative fishing sites created by the U.S. government after several massive dams built on the Columbia River caused flooding that destroyed tribal fishing sites beginning in the 1930s.

Over the years, the government has created 31 so-called "in lieu" fishing sites to compensate the tribes, but demand is high and several hundred tribal members now live year-round at camps that were intended to be seasonal, said Charles Hudson, director of government affairs with the Columbia River Inter-Tribal Fish Commission.

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

The commission has identified 18 sites that need particular attention in both Oregon and Washington, including a site called Lone Pine near The Dalles, Oregon, and another called Cooks on the Washington side of the river.

FROM PAGE 2A

SCHOOLS

case budget projection was circulated on social media, but the district is not alone in starting to talk about its budget projections and a \$5.8 million drop in property tax revenue.

Pasco officials are predicting a \$5 million decline in revenue, while costs are expected to rise by \$7.5 million. Kennewick was looking at a \$5 million to \$7 million shortfall in its proposed budget.

In Pasco, Fiscal Services Director Kevin Hebdon is studying where changes to K-3 class size requirements, special education funding and employee benefit costs will leave the district, Edinger said. He hopes to have a clearer picture during the coming weeks.

All of the districts also are trying to manage the increased cost of medical

insurance, which now covers more school employees, including part-timers.

Now any employee that works for 630 hours a year, including nurses, coaches and substitute teachers, is guaranteed full medical benefits.

Pasco and Kennewick are working to determine what their additional medical costs will be.

In Richland, that means paying \$12,000 a year in medical coverage for any employee who works an average of 17.5 hours a week. They estimate an additional cost of \$1.5 million to \$2 million.

Richland had initially planned a Thursday meeting to talk about the budget, but that is delayed until May 21.

Cameron Probert:
509-582-1402

Delivery robot rules become law

OLYMPIA,

Only on sidewalks and crosswalks, only with human oversight, and always with functioning brakes — those are some of the new rules for personal delivery robots in Washington state.

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

ting out a framework for a technology growing in popularity, after lawmakers wrestled with whether they should be treated as automobiles, pedestrians, or something else entirely.

Companies including Amazon have rolled out robot delivery programs. The online retail giant began testing cooler-sized six-wheeled robots in Snohomish County, north of Seattle, before lawmakers had passed the state's rules.

— ASSOCIATED PRESS



THE HANFORD SITE

Learn About a Proposal to Construct and Operate a Low-Activity Waste Pretreatment System

PUBLIC COMMENT PERIOD: May 1 to June 30, 2019

The U.S. Department of Energy (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 requesting approval from the State of Washington Department of Ecology (Ecology) to add a new operating unit for the Low Activity Waste Pretreatment System. The operating unit would use a Tank-Side Cesium Removal unit to pretreat tank waste for subsequent transfer to the Waste Treatment Plant Low-Activity Waste facility for vitrification.

A public meeting on the proposal will be held May 29, 2019, at 5:30 p.m. at the Richland Public Library, 955 Northgate Drive, Richland, Washington 99352.

Visit <https://go.usa.gov/xmgSZ> to review details on the proposed changes. Please submit comments by June 30, 2019, in writing to State of Washington Department of Ecology, ATTN: Daina McFadden 3100 Port of Benton Boulevard, Richland, Washington 99354, or electronically at <http://wt.ecology.commentinput.com/?id=J6RbP>

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

The permittee's compliance history during the life of the permit being modified is available from the Ecology contact person.

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



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Barr accused of lying and threatened with contempt

BY NICHOLAS FANDOS
New York Times

WASHINGTON

House Democrats' feud with Attorney General William Barr boiled over Thursday, as Speaker Nancy Pelosi accused the nation's top law enforcement officer of lying to Congress and the Judiciary Committee threatened to hold him in contempt if he did not promptly hand over a complete version of Robert Mueller's report.



William Barr

The escalation between the legislative and executive branches of government, a day after Barr mounted an aggressive self-defense in the Senate, was as abrupt and emotionally charged as any in decades.

The Justice Department had ignored a Wednesday deadline to provide an unredacted version of the report by the special counsel and the investigative materials used to compile it. Then, on Thursday morning, Barr failed to appear at a House hearing on Mueller's findings because of a dispute over who would be allowed to ask him questions.

But it was a newly revealed letter from Mueller to the attorney general that most provoked Pelosi's ire.

In the letter, the special counsel took Barr to task for the way that the attorney general had initially summarized his findings, leaving "public confusion about critical aspects of the results of our investigation." The communication appeared to undercut Barr's claims at an April 9 House hearing that he was not aware of any such discontent.

"What is deadly serious



J. SCOTT APPLEWHITE/AP

"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," House Speaker Nancy Pelosi, D-Calif., told reporters on Thursday.

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; Kerri Kupec, a department spokeswoman, 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 not from Mueller's letter or Barr's refusal to appear, but from the Justice Department'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 put the integrity of its investigations at risk.

But Democrats were not 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 Republicans to join Democrats in standing up for the rights of Congress against an ad-

ministration that he said was systematically thwarting its constitutional duty to conduct oversight of the executive branch.

But mostly he trained his ire at the attorney general, who had objected to Nadler's insistence that staff lawyers be allowed to ask questions at the hearing.

"We will have no choice but to move quickly to hold the attorney general in contempt if he stalls or fails to negotiate in good faith," Nadler said. "But the attorney general must make a choice. Every one of us must make the same choice. That choice is now an obligation of our office. The choice is simple: We can stand up to this president in defense of the country and the Constitution we love, or we can let the moment pass us by."

The practical challenge for Nadler and other House committee leaders is figuring out how to effectively respond to an administration that has refused to cooperate on any of its investigations, which they hoped would hold the president accountable without formal impeachment proceedings.

Nadler said he would give Barr "one or two more days" to produce the

full Mueller report before initiating contempt proceedings. Committee Democrats were preparing to make the Justice Department a formal counteroffer and still hoped to stave off another escalation of hostilities.

But with no cooperation in sight, House Democrats could soon have to choose from a handful of paths to raise the pressure.

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 secretive grand jury material.

In a private meeting with members of her leadership team, Pelosi called Barr a "lap dog" for Trump and an "enabler" of his obstruction of justice, according to a congressional aide in the room. But she continued to hold her line against impeachment. "Impeachment is too good for him," she said of Trump, according to the aide.

Democrats are also trying to secure testimony from Mueller. Nadler said Wednesday that they were hoping to hold a hearing with him on May 15 but were still "seeking to firm up the date" with the Justice Department. It is also unclear if Don McGahn, the former White House counsel whom the committee subpoenaed to testify this month, will show up.

Trump won't nominate Moore for Fed board

BY JIM TANKERSLEY,
MAGGIE HABERMAN AND
EMILY COCHRANE
New York Times

WASHINGTON

President Donald Trump said Thursday that he would not nominate Stephen Moore for a seat on the Federal Reserve board, the second time in a month that concerns over a potential nominee's treatment of women have torpedoed Trump's attempt to place a loyalist at the Fed.

The withdrawal of Moore, a conservative commentator and Trump campaign economic adviser, came after Republican lawmakers criticized his past comments about women, including that they should not earn more than men, along with financial issues stemming from a 2010 divorce. Several senators relayed those concerns to the White House this week and made clear that Moore did not have the votes to clear the Republican-controlled Senate.

"I think it's probably a good thing; I think it's an important thing," said Sen. Lisa Murkowski, R-Alaska, who had expressed reservations about the nomination.

Trump's decision to cut Moore loose appeared to

come as a surprise to his potential nominee, who had spent the morning telling several news media outlets, including The Wall Street Journal, that he would not withdraw and that he retained the full backing of the White House, which was "all in."

This is the second time in recent weeks that one of Trump's Fed picks was forced to withdraw over concerns about his views and attitudes toward women. Herman Cain, a former pizza magnate, bowed out as he battled previous accusations of sexual harassment that ended his 2012 presidential campaign.

It is unclear who — if anyone — Trump will formally nominate for either of the two remaining Fed seats. Among the names being floated by conservative columnists is Judy Shelton, an economist who has advised Trump and has advocated a return to the gold standard.

Trump placed the decision to end the potential nomination squarely in Moore's lap, saying in a tweet early Thursday afternoon that "Steve Moore, a great pro-growth economist and a truly fine person, has decided to withdraw from the Fed process."

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THE HANFORD SITE

Learn About a Proposal to Construct and Operate a Low-Activity Waste Pretreatment System

PUBLIC COMMENT PERIOD: May 1 to June 30, 2019

The U.S. Department of Energy (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 requesting approval from the State of Washington Department of Ecology (Ecology) to add a new operating unit for the Low Activity Waste Pretreatment System. The operating unit would use a Tank-Side Cesium Removal unit to pretreat tank waste for subsequent transfer to the Waste Treatment Plant Low-Activity Waste facility for vitrification.

A public meeting on the proposal will be held May 29, 2019, at 5:30 p.m. at the Richland Public Library, 955 Northgate Drive, Richland, Washington 99352.

Visit <https://go.usa.gov/xmgSZ> to review details on the proposed changes. Please submit comments by June 30, 2019, in writing to State of Washington Department of Ecology, ATTN: Daina McFadden 3100 Port of Benton Boulevard, Richland, Washington 99354, or electronically at <http://wt.ecology.commentinput.com/?id=J6RbP>

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

The permittee's compliance history during the life of the permit being modified is available from the Ecology contact person.

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



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VOICE OF THE MID-COLUMBIA

From: [^TPA](#)
To: HANFORD-INFO@LISTSERV.ECOLOGY.WA.GOV
Subject: Notice of Upcoming Public Comment Period on Proposed Changes to Hanford Dangerous Waste Permit
Date: Monday, April 1, 2019 3:25:49 PM
Attachments: [image003.png](#)

THE HANFORD SITE

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

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.

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From: [^TPA](#)
To: HANFORD-INFO@LISTSERV.ECOLOGY.WA.GOV
Subject: Learn About a Proposal to Construct and Operate a Low-Activity Waste Pretreatment System
Date: Wednesday, May 1, 2019 9:02:29 AM
Attachments: [image002.png](#)
[Fact Sheet for LAWPS Permit Mod FINAL.pdf](#)

THE HANFORD SITE

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

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

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

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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.

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From: [^TPA](#)
To: HANFORD-INFO@LISTSERV.ECOLOGY.WA.GOV
Subject: Reminder! Public Meeting Tonight to Learn About a Proposal to Construct and Operate a Low-Activity Waste Pretreatment System
Date: Wednesday, May 29, 2019 8:17:32 AM
Attachments: [image003.png](#)
[Fact Sheet for LAWPS Permit Mod_FINAL.pdf](#)

THE HANFORD SITE

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

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Washington Department of Ecology - Hanford



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A new public comment period starts today.

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For more information go to the [Hanford.gov](https://www.hanford.gov) Events Calendar:

<https://www.hanford.gov/pageAction.cfm/calendar...>

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to hear
from you**