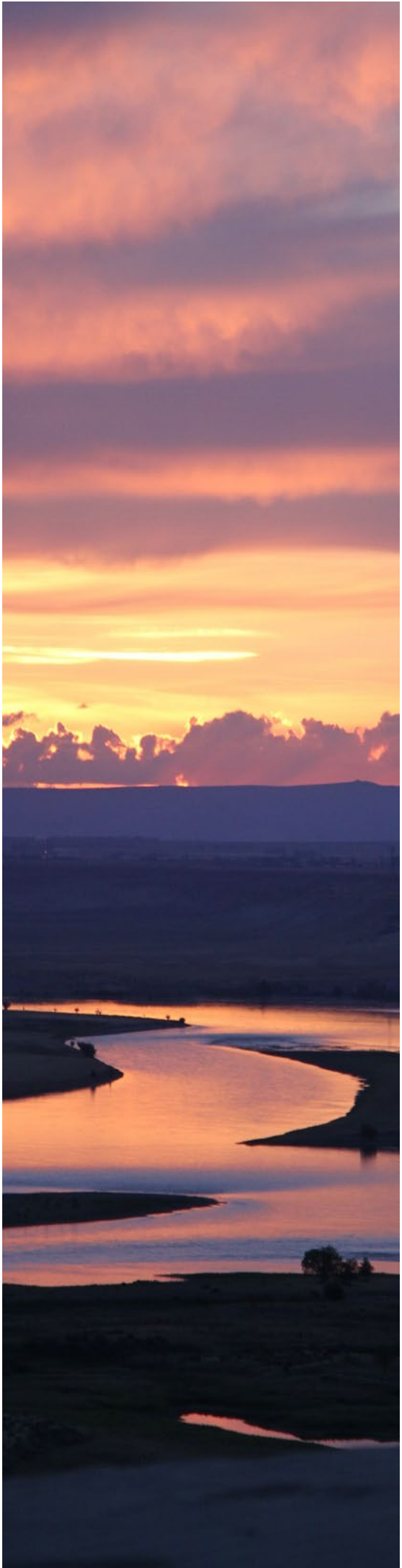

DEPARTMENT OF ECOLOGY
State of Washington

Response to Comments

Waste Treatment and Immobilization Plant Risk Assessment Permit Modification (8C.2020.2D)

February 24 – April 9, 2020

Summary of a public comment period and responses to comments

August 2020

Publication no. 20-05-023

Publication and Contact Information

This publication is available on the Department of Ecology's (Ecology) website at https://fortress.wa.gov/ecy/publications/SummaryPages/2005023.html

For more information, contact:

Mandy Jones, Permit Coordinator
Nuclear Waste Program
3100 Port of Benton Boulevard
Richland, WA 99354
Phone: 509-372-7950

Email: Hanford@ecy.wa.gov

Washington State Department of Ecology – www.ecology.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).

The Department of Ecology is committed to providing people with disabilities access to information and services by meeting or exceeding the requirements of the Americans with Disabilities Act (ADA), Section 504 and 508 of the Rehabilitation Act, and Washington State Policy #188.

To request an ADA accommodation, contact Ecology by phone at 509-372-7950 or email at Daina.McFadden@ecy.wa.gov. For Washington Relay Service or TTY call 711 or 877-833-6341. Visit Ecology's website for more information.

Response to Comments

Waste Treatment and Immobilization Plant
Risk Assessment Permit Modification
(8C.2020.2D)

February 24 – April 9, 2020

Nuclear Waste Program
Washington State Department of Ecology
Richland, Washington

This page is purposely left blank.

Table of contents

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, Ecology holds a public comment period to allow the public to review the change and provide formal feedback. (See Washington Administrative Code [WAC] 173-303-830 for types of permit changes.)

This response to comments is issued to address comments received during a public comment period Ecology held February 24 through April 9, 2020, for an agency-initiated modification.

The response to comments is the last step before issuing the final permit, and its purpose 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 and any related public hearings.

This Response to Comments is prepared for:

Comment period:	Waste Treatment and Immobilization Plant Risk Assessment Permit Modification (8C.2020.2D), February 24 – April 9, 2020
Permit:	*Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit for the Treatment, Storage, and Disposal of Dangerous Waste, Part III, Operating Unit Group 10 (WA7890008967),Waste Treatment and Immobilization Plant*
Permittee(s):	United States Department of Energy - Office of River Protection and Bechtel National Inc.
Original issuance date:	September 27, 1994
Effective date:	September 4, 2020

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 issuing the permit

This permit modification will add two documents to Operating Unit Group 10, Waste Treatment and Immobilization Plant (WTP Permit), Part III of the Hanford Site-wide Permit. Those documents are:

- Pre-Demonstration Test Risk Assessment for the Hanford Tank Waste Treatment and Immobilization Plant

- Risk Assessment Work Plan for the Direct Feed Low-Activity Waste (DFLAW) Configuration

The modification will also add revisions to documents already incorporated in the WTP Permit.

- Emissions Study for the Hanford Tank Waste Treatment and Immobilization Plant
- Cell Emissions Estimate
- Chemical Parameters and Toxicological Inputs for the Environmental Risk Assessment for the Hanford Tank Waste Treatment and Immobilization Plant
- Hanford Tank Waste Treatment and Immobilization Plant Risk Assessment Air Quality Modeling Protocol

These documents support revisions to Appendix 6.2, "Risk Assessment Work Plan," and Appendix 6.3, "Pre-Demonstration Test Risk Assessment Report," as required by Interim Compliance Schedule Item number EMF-9 and WTP Unit specific permit conditions III.10.C.11.a and III.10.C.11.b.

The Pre-Demonstration Test Risk Assessment will provide an estimate of human health and ecological receptor risk based on engineering estimates of emissions from WTP units. The Final Risk Assessment will be conducted following collection of data from performance demonstration testing of WTP units, where estimated emission rates will be supplemented with the actual emissions results of the demonstration tests.

The U.S. Department of Energy and Ecology have long discussed how best to assess the cumulative impacts of contamination sources across the Central Plateau. Ecology expects that a cumulative risk assessment will be developed that combines the impacts or results from the operations of the DFLAW Configuration and the future operations of Baseline Configuration.

Public involvement actions

Ecology encouraged public comment on the Waste Treatment and Immobilization Plant Risk Assessment Permit Modification (8C.2020.2D), during a 45-day public comment period held February 24 through April 9, 2020.

We took the following actions to notify the public:

- Mailed a public notice announcing the comment period to 1,191 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 notice in the *Tri-City Herald* on February 23, 2020.
- Emailed a notice announcing the start of the comment period to the Hanford-Info email list, which has 1,350 recipients.
- Posted the comment period as an event on the Washington Department of Ecology – Hanford Facebook page.

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
- Statement of Basis for the proposed WTP Risk Assessment Permit Modification (8C.2020.2D)
- Draft WTP Risk Assessment Permit Modification (8C.2020.2D)

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

- Public notice (focus 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 and Twitter pages

List of Commenters

The table below lists the names of organizations or individuals who submitted a comment on the Waste Treatment and Immobilization Plant Risk Assessment Permit modification. The comments and responses are in Attachment 1.

Commenter	Organization
Mike Conlan	Citizen
Anonymous Citizen	Citizen
Hanford Challenge	Organization

Attachment 1: Comments and responses

Description of comments:

Ecology accepted comments from February 24 through April 9, 2020. 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
5. Glassification!

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 approval of the Preliminary Risk Assessment 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 WTP Permit. Prevention of groundwater and surface water impacts are addressed in operations associated with other units. The approval of the WTP Risk Assessment is a necessary step towards operations of the Waste Treatment Plant.

I-2: ANONYMOUS

Comment I-2-1

The Focus sheet page 1 says this review includes a draft Preliminary Risk Assessment. The statement of basis document (SOB) does not say "draft" for the Preliminary Risk Assessment. Which is correct?

Response to I-2-1

The term "draft" was inadvertently left off of the Statement of Basis. The review included a draft Preliminary Risk Assessment, we apologize for that oversight.

Comment I-2-2

Permit Conditions should prohibit transfer of any EMF liquid or ETF brine waste to the City of Richland for solidification prior to shipping back to IDF for storage or disposal. These wastes can contain considerable tritium or carbon-14 and the destination of the technetium-99 is uncertain.

Response to I-2-2

Permit conditions which address shipment of waste between unit groups on the Hanford site are part of a unit groups' waste acceptance criteria and are not part of the risk assessment. The City of Richland publicly owned treatment works (POTW) does not accept radiological waste.

Comment I-2-3

Ecology should insist on an updated solid waste acceptance criteria for IDF before allowing DFLAW operation. In the Emissions Study, 24590-WTP-ES-PE-001, Rev 1, Table 2-2 shows there is 0 concentration of ammonia in the DFLAW feed used to create "bounding" results. Yet the 242-A Evaporator Waste Analysis Plan has identified ammonia-in the evaporator condensate, which means the ammonia came from the tank waste. In addition, ammonia at up to 0.04 Molar was identified in the DFLAW waste acceptance criteria per letter 15-WTP-0023. And Double Shell Tank Ventilation systems are regulated for ammonia release. Is there more ammonia therefore in the Table 2-6 abated emissions for DFLAW than the reported 2.56 grams per second (221 kg/day)? Is all of this ammonia from the slip stream from the off-gas treatment system? What is the ppm concentration of ammonia projected in the DFLAW stacks? Does it exceed health criteria? Similarly, document 24590-WTP-RPT-ENV-l 8-001, Pre-Demonstration Risk Assessment for the Hanford Tank Waste Treatment and Immobilization Plant, has a Q concentration of ammonia in the DFLAW feed on page A-5. Ecology should ask for a justification of 0. Most detection limits are not even that low. Note that permit condition III.10.C.3.e.ii requires the feed to be analyzed for ammonia. What if it's not 0? Will the feed not be accepted because the contribution of ammonia from the tank waste feed was not analyzed in the emissions report? As a result, Ecology should question other feed assumptions for chemicals in the DFLAW feed. Are other species similarly undercounted? I saw that the Emissions Study for the Hanford Tank Waste Treatment and Immobilization Plant, 24590-WTP-ES-PE-17-001, Rev 1 is not identified as a draft or preliminary document, yet it references in Section 6, project calculation, 24590-WTP-M4C-V20T-00001, Rev B, Emissions Estimate for DFLAW and Integrated WTP Configurations. Revision B of a project calculation is not a final document, and it may have assumptions that have not been verified. Ecology should ask for a QA review of the impacts of using an incomplete calculation, and require that unverified assumptions be included in the emissions report. Document 24590-WTP-ES-PE-17-001 references a subcontractor test report 24590-101-TSA-W000-0009-166-00001, Rev B, Final Report - Regulatory Off-Gas Emissions Testing on the DM1200 Melter System Using HLW and LAW Simulants. This document is very dated and it predates the DFLAW configuration. Many off-gas system changes have been made since then. Ecology should ask for a QA review of the impacts of using an outdated test document. Was the emissions testing prototypic? Did it include the complete treatment train? Include the EMF? The recycle from the EMF?

Response to I-2-3

The IDF permit was out for it's first public comment between December 16, 2019 and February 14, 2020. Ecology is currently performing the technical deficiency review and working with the permittees to develop a draft permit to support IDF Operations. Review of the facility's waste acceptance criteria is part of that process.

In response to your question on the Emissions Study:

(1) For the risk modelling, increased emissions were modeled. An additional factor of 1.45 is applied to the emission estimate of 2.56 g/s to account for process upsets (3.71E+00 g/s, Table A-10 of 24590-WTP-RPT-ENV-18-001). In addition, to that was added a very small contribution (1.90E-06 g/s) from process cell emissions (Table A-10 of 24590-WTP-RPT-ENV-18-001).

(2) Most of the ammonia in the stack is from ammonia slip, i.e. excess ammonia added to the selective catalytic reducer (SCR). The 2.56 grams per second is 20% excess ammonia to the SCR which is approximately 10 times what would be expected. This was done to provide a conservative quantity for the risk assessment. Most of the ammonia in feed/EMF recycles, plus the ammonia created in the melter from sugar reaction with nitrates is removed in the submerged bed scrubber (SBS), sent to the evaporator and from the evaporator to EMF. Ammonia leaving the SBS, would result in less ammonia added to the SCR and it would not increase the LAW emissions. The emission rate of 2.56 g/s in Table 8-16 would not change. The 0.04 M limit was set for hydrogen generation, which has a separate limit in the acceptance criteria.

(3) *LAW Emissions were modeled at 3.71 g/s; EMF Emissions were modeled at 1.51E-08 g/s. The corresponding exposure point concentration (EPC) for inhalation (current scenario only, and dominate exposure route) was 3.0E-05 mg/m3 for the standard human exposure scenarios. The highest inhalation EPC was to the Hanford Worker; 8.7E-05 mg/m3. Relative to EPA Regional Screening value for reference concentration (0.5 mg/m3, https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables), the corresponding hazard quotients are 6.0E-05 and 1.7E-04, respectively, well below levels of potential concern.*

The focus of this draft Preliminary Risk Assessment (PRA) is impacts from LAW melter off-gas emissions to the environment which are conservatively bound in the emissions model, as noted in the response to the previous comment, and fully bound any potential contribution of ammonia that may be attributed to the waste feed.

As noted above, since the ammonia slip dominates the emission, having minor quantities of ammonia in the feed would not cause it to be rejected.

Calculation 24590-WTP-M4C-V20T-00001 is an estimate and is not used for design, it therefore does not need to be confirmed.

The DM 1200 is considered prototypic of the of the LAW melter off gas through the TCO/SCR. The report was not used for caustic scrubber information. There have been no changes to the main off gas equipment since the report referenced in the comment was issued. The DFLAW configuration does not change the off gas system. The SBS and wet electrostatic precipitator (WESP) fluid that are evaporated and return to LAW from EMF were also evaporated and returned from Pretreatment, therefore EMF should not affect the LAW emissions/PRA.

Comment I-2-4

The Statement of Basis document cites a "phased (stepped) approach" to permit the WTP TSD Unit. I would appreciate if Ecology would provide the regulatory basis and decision document that allows this, since construction has been occurring without benefit of a final design. WAC

173-303-806 requires a final design as part of a permit 180 days before physical construction is expected to begin. The phased approach to permitting has been costly and wasteful, and it did not save the time or money promised in 2002, or 2007, or any time after that. Can you provide the details of the phased permitting agreement?

Response to I-2-4

Ecology uses a phased permitting approach for the WTP Permit, which allows the permittees to submit design information to incorporate into the Permit before a complete design is available, subject to Ecology's review and approval authority over future, more detailed design submittals. This permitting process is described in the "Fact Sheet for the Hanford Facility Resource Conservation and Recovery Act Draft Permit for the Treatment, Storage, and Disposal of Dangerous Waste" (Fact Sheet). (Ecology publication 01-05-005, dated September 2002.)

Comment I-2-5

Permit Conditions are silent on the LAWPS/TSCR used ion exchange columns, which will involve unknown, expensive disposal and additional worker risk and exposure. Ecology should prohibit operation of the DFLAW configuration until DOE has identified a funded pathway, covered by NEPA, for disposal of the loaded ion exchange columns that will be created in order to feed the plant. We should not be piling up new orphan wastes and new unfunded costs just to look like DOE is treating something.

Response to I-2-5

The LAWPS permit modification and permit conditions are not part of the risk assessment modification and are outside of the scope of this public comment period.

Comment I-2-6

Recent reports associated with the LAWPS/TSCR feed project for the DFLAW configuration include DNFSB's February 21, 2020 Hanford Weekly Report, which notes that "the contractor is moving ahead with plans to change their [Tank Side Cesium Removal Project] strategy for controlling flammable gas hazards in expended [loaded] ion exchange (IX) columns. Their previous strategy mitigated the hazard by restricting access to the spent IX column storage pad during periods when weather might reduce or stop the natural ventilation flow that is expected to remove flammable gases from the spent IX media. The revised strategy will credit the ion exchange columns as an engineered control to contain hydrogen detonations." Ecology should ask whether the TSCR design has sufficient safety underpinning to be constructed - including the storage pad. Per the Notice of Construction in 19-ECD-0074 , the columns are passively vented. If hydrogen deflagrates and the columns "contain the detonation," what happens to the cesium inside? Will the deflagration not produce projectiles, but instead release radioactive material to the air? The design appears immature at this point.

Response to I-2-6

The LAWPS permit modification and permit conditions are not part of the risk assessment modification and are outside of the scope of this public comment period.

Comment I-2-7

In letter 20-ECD-0010, the DOE Office of River Protection requested three temporary authorizations to begin construction of LAWPS/TSCR facilities. ORP noted that Ecology

established a policy to not issue temporary authorizations without having a draft permit available (which follows public review). ORP requested Ecology to ignore this policy because construction forces will be idled, there could be an 8 week delay, it could cost $500,000 a month, and there would be a day for day slip in the LAWPS/TSCR schedule. ORP claimed to have written their own "permit conditions" to replace ones not available in a draft permit, but no such section is included in letter 20-ECD-0010. The TPA Monthly Report for February 2019 indicated that ORP was informed on January 29, 2020, that Ecology was not going to issue the temporary authorizations to allow pouring of the concrete pad for the tank-side cesium removal unit, the ion exchange column storage pad, and installation of the transfer lines until the draft Resource Conservation and Recovery Act permit was completed. Why wait so long to complain? WAC-173-303-830 accepts justifications for a Temporary Authorization when the temporary authorization is necessary to achieve one of the following objectives before action is likely to be taken on a modification request: (I) To facilitate timely implementation of closure or corrective action activities; (II) To allow treatment or storage in tanks, containers, or in containment buildings in accordance with 40 C.F.R. Part 268; (III) To prevent disruption of ongoing waste management activities; IV) To enable the permittee to respond to sudden changes in the types or quantities of the wastes managed under the facility permit; or (V) To facilitate other changes to protect human health and the environment. ORP' s justifications do not appear to be valid. There has been no confidence or validity to DOE schedule projections since 2007. Even now, there has been an unfavorable schedule variance of $3.4 Million for defective LAW refractory, and a 4 week delay to waste feed delivery technology, as described on page 37 of the February 2020 TPA Monthly Report. Delay to ensure the permitting is correct is not a dire situation, especially since the hydrogen safety issue is not resolved. Waiting for a draft permit will not impact timely implementation as a result. Allowing construction now, without a safety basis, will not protect human health or the environment.

Response to I-2-7

The draft permit for the LAWPS Operating Unit Group is currently out for public comment, but is not part of the risk assessment modification and is outside of the scope for this public comment period. When originally requested, Ecology did not approve the request for temporary authorizations based on Ecology's Nuclear Waste Program policy position, detailed in letter 20-NWP-068. In the future Ecology will continue to evaluate the justification and regulatory basis of each TA requests from the permittees as needed.

O-1: HANFORD CHALLENGE

Comment O-1-1

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 definition 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 requires permanent isolation.

Thus, the NWPA defines HLW by its source ,Äì "the highly radioactive material resulting from the reprocessing of spent nuclear fuel",Äì 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 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. The DOE intends to rely on a discredited DOE Order, 435.1, to relabel some of the Hanford tank waste as "low level waste." However, a federal district court issued a decision in 2002 that found that the tank wastes at Hanford fall within the definition of high level radioactive waste. The Department's assertion that it can exempt waste streams based on technical and economic constraints, the court found, "directly conflicts with" the Act's definition of high-level radioactive waste. The District Court also found that Congress has spoken clearly on the subject and that DOE Order 435.1 directly conflicts with the NWPA's definition of HLW (citing Chevron v. NRDC, 467 U.S. 837, 842 (1984)).

Response to O-1-1

Between 1993 and 1997, DOE and 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.

(3) Manage the wastes to meet safety requirements comparable to the performance objectives set out in 10 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-1-2

Low Activity Waste Facility (LAW) Vulnerabilities: The Statement of Basis provided by the Department of Ecology for this permit cycle states, "The Preliminary Risk Assessment will provide an estimate of human health and ecological receptor risk based on engineering estimates of emissions from WTP units." Yet the information provided fails to take into account numerous safety-significant vulnerabilities identified by DOE itself. For instance, the 2015 Low Activity Waste Design and Operability Report identified approximately 362 "vulnerabilities" that were expected to result in unacceptable risk to the overall project mission.

The DOE's Office of River Protection (ORP) prepared a set of closure letters from 2015 to 2018 (per the attached table, which contains some excerpts). The "verified closure" letters often kick the issue down the road to startup and commissioning, or reject the issues all together based on future promises or because the FPD accepted the risk on the behalf of workers, taxpayers, and the environment. The attached table shows that these letters referred to commissioning at least 111 times. The accepted risks were apparently not used to add time for schedule margin or to add contingency for cost overruns.

The risk is demonstrated further in the discrepancy between DOE statements and the objective schedule evidence. ORP management expressed a lackadaisical attitude towards making any corrections per page 15 of the February 7, 2019 TPA PMM Meeting Minutes. In these minutes DOE indicated they were happy with the current Bechtel team, happy with the chronic delays ,Äì and they were not working on them.

On June 14, 2019, DOE replied to the Department of Ecology (in Letter 19-ORP-0004) that the DFLAW treatment facility is on schedule to meet the startup milestone for the LAW facility. The ORP Field Office Manager further insisted (on page 4) that schedules change "through no fault" of DOE. As a result, it appears the DOE has no interest in looking for the root causes of the delays, or the root causes associated with the failed fast track design-build/phased permitting decision.

In short, DOE has yet to show that it has completed all necessary actions to actually resolve the hundreds of serious safety and design issues at the Low Activity Waste facility raised in a 2014 . 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.

Excerpts from the 2014 draft report that raise serious, and possible unresolved safety and design concerns that put public and worker health and safety at risk can be found in detail in Attachment XX of this Response to Comment Document

Response to O-1-2

Ecology performed a technical review of USDOE's Risk Assessment submittal. In the review, Ecology readdressed the open action items that were discussed in the review of the 2015 WTP Permit modification to incorporate final design information and allow installation of the Low-Activity Waste HEPA Preheaters, Melter Offgas Caustic Scrubber and Thermal Catalytic Oxidizer.

Ecology continues to communicate with Energy to ensure that these items noted in LAW Design and Operability Report, Table B-1, "Crosswalk of System Vulnerabilities to Vulnerability Category", are appropriately managed.

In particular, Ecology is focused on the categories of "Newly Identified", "Contract Change Required", and "Validity Requires Further Review" for dangerous waste permit affecting equipment and systems.

It is Ecology's intention to further review with Energy each of these items to determine current status and further need for updates and closure.

Finally, the Permittees have initiated a certification process according to WAC 173-303-810(14)(a)(i) and Permit Condition III.10.C.2.a. The certification process uses system requirements verification matrixes to ensure that systems and equipment are constructed in accordance to approved designs and permit requirements. Ecology has been involved in this vertification process. Currently, the LAB facility review is reaching completion and the LAW facility is in review.

The review of the LAW Design and Operability Report will continue until the commissioning phase of the low activity waste treatment facility to ensure that any items that may take

significant effort can be closed, and to ensure that any new issues can also be brought to appropriate closure.

Comment O-1-3

Tank Side Cesium Removal (TSCR) Project: In a February 2020 Defense Nuclear Facilities Safety Board (DNFSB) field report, the DNFSB indicated that there are hydrogen hazards for storing the TSCR spent ion exchange columns that were not envisioned in the Tank Closure & Waste Management EIS. The Notice of Construction permit for air emission says that the Cesium Ion IX columns are passively vented to the atmosphere, to prevent buildup of pressure inside the columns. However, weather conditions could cause the passive venting circulation to fail, and the hydrogen gas to build up. If the hydrogen deflagrates, there will likely be a release of radio-cesium and other isotopes to the air, presenting a hazard to workers, the public and the environment. Where is this scenario described, consequences calculated, and compensatory steps taken to prevent hydrogen deflagration and radioactive release?

Response to O-1-3

The LAWPS permit modification and permit conditions are not part of the risk assessment modification and are outside of the scope of this public comment period. The draft permit for the LAWPS Operating Unit Group is currently out for public comment.

Comment O-1-4

The Department of Energy has not identified with specificity how the spent cesium ion IX columns will be disposed of, creating an orphan waste scenario. To fail to have a detailed and robust plan to remediate an estimated 10 megacuries of radio-cesium stored in the open air for decades is unacceptable. Eventual disposal will also involve additional worker risk and exposure. Operation of DFLAW should not be allowed until DOE has identified a NEPA-compliant funded pathway for disposal of the loaded ion exchange columns that will be created in order to feed the plant.

Response to O-1-4

Ecology is in agreement that we do not want to allow work to proceed that would create any orphaned waste. The LAWPS permit modification and permit conditions are not part of the risk assessment modification and are outside of the scope of this public comment period. The draft permit for the LAWPS Operating Unit Group is currently out for public comment.

Comment O-1-5

The Low Activity Waste facility Stack Discharge (SDJ) System does not include monitoring for ammonia, despite that fact that ammonia is present in the waste and ammonia is also added to the waste off-gas stream in the NOx destruction equipment. There is always excess ammonia in the discharge from selective catalytic reduction, and an upset could make this a large concentration. Ammonia is a highly hazardous chemical. An ammonia monitor must be required as a condition of operation. Similarly, it is not clear that there is monitoring for radionuclides, including tritium, carbon-14, and Alpha/Beta/Gamma emissions from the LAW Stack. There also appears to be no mention of monitoring for the EMF stack, despite the fact that ammonia-bearing waste is processed at EMF. DFLAW cannot operate without the EMF.

Response to O-1-5

Ammonia is identified as a toxic air pollutant in WAC 173-460 and resulting emissions from the LOP/LVP were subsequently assessed prior to Ecology approval of Air Permits DE02NWP-002 and DE16NWP-003. Ambient air impact analysis determined that ammonia emissions during normal operating conditions were less than corresponding first tier acceptable source impact level review requirements. Continuous stack emissions monitoring for ammonia was not required since emissions were below first tier review levels.

Emissions of radionuclides and associated sampling and monitoring requirements from the DFLAW emission units are permitted by the Washington State Department of Health in accordance with WAC 246-247 and are therefore outside the scope of this permit modification.

The EMF Vessel Vent Process System (DVP) removes and treats the gases that fill the headspace of EMF process vessels. The LAW effluent recycle to the EMF is not expected to contain a significant concentration of ammonia. In addition, due to the high vapor content of the EMF offgas, any ammonia present in the vapor would bond with the water to form ammonium hydroxide. The exhaust air is treated through a preheater and HEPA filters prior to moving downstream to tie into the LAW effluent utility building exhaust duct where it is discharged through the EMF stack. The LAW effluent utility building contains the EMF buildings' ventilation (HVAC) system and does not contain equipment that manages dangerous or mixed waste.

Appendix A: Copies of all public notices

Public notices for this comment period:

- Public notice (focus 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 and Twitter pages

Waste Treatment and Immobilization Plant Risk Assessment Permit Modification

Public comment period

February 24 - April 9, 2020

Please submit comments

Electronically (preferred) via:

http://nw.ecology.commentinput.com/?id=F6msi

By U.S. Mail, or hand-delivery:

Daina McFadden
3100 Port of Benton Blvd
Richland WA 99354

Public hearing

A public hearing is not scheduled, but if there is enough interest, we will consider holding one. To request a hearing or for more information, contact:

Daina McFadden
509-372-7950
Hanford@ecy.wa.gov

Special accommodations

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.

Public comment invited

The Washington State Department of Ecology (Ecology) is proposing an agency-initiated permit modification to the Hanford Facility Resource Conservation and Recovery Act Permit, Revision 8C.

The proposed changes affect the dangerous waste portion for the *Treatment, Storage, and Disposal of Dangerous Waste for the Waste Treatment and Immobilization Plant*, located in Part III, Operating Unit Group 10 (Permit).

The Waste Treatment Plant (WTP) is located on the Hanford Site in southeastern Washington. The plant will immobilize in glass (vitrify) 56-million gallons of dangerous radioactive and chemical waste currently stored in 177 underground storage tanks at Hanford.

The permittees are:

U.S. Department of Energy, Office of River Protection
P.O. Box 450
Richland, Washington 99352

Bechtel National, Inc.
2435 Stevens Center Place
Richland, Washington 99354

Ecology invites you to comment on the Preliminary Risk Assessment Permit Modification (8C.2020.2D), February 24 through April 9, 2020.

The proposed changes incorporate the draft Preliminary Risk Assessment and the Risk Assessment Work Plan for the Direct Feed Low-Activity Waste (DFLAW) configuration.

Risk Assessment Work Plan Supplements 2 through 5 would also be updated for incorporation into the Permit.

Background

WTP includes multiple facilities: Analytical Laboratory (Lab), Low-Activity Waste (LAW) Facility, High-Level Waste (HLW) Facility, Pretreatment Facility (PTF), Effluent Management Facility (EMF), and Balance of Facilities (BOF).

WTP will operate in two processing configurations. For near-term operations, WTP will operate in the DFLAW configuration, which requires the Lab, LAW, and EMF to become operational first to process the low-activity waste from tank farms.

In the DFLAW configuration, the waste is pretreated to remove cesium and solids before the waste is sent to the LAW facility. In this configuration, the pretreated waste will bypass the PTF and be fed directly from the tank farms to the LAW facility. The LAW facility is where the low-activity fraction of the waste will be solidified by vitrification.

The liquid effluents generated in the LAW facility and the Lab are transferred and treated at EMF, which will reduce the effluent volume by evaporation. WTP will later operate in the baseline configuration when the PTF and the High-Level Waste Facility become operational.

These draft documents will support revisions to Appendix 6.2, Risk Assessment Work Plan and Appendix 6.3, Pre-Demonstration Test Risk Assessment Report as required by Interim Compliance Schedule Item number EMF-9, and WTP Unit specific permit conditions III.10.C.11.a and III.10.C.11.b.

In 2015, Ecology provided the draft WTP Risk Assessment Work Plan and associated supplements for public review; however, the Direct Feed Low-Activity Waste configuration was not addressed in the document at that time. Since 2015, the WTP Permit has been modified to include the DFLAW configuration.

Proposed Changes

This permit modification will update and add new documents to the WTP portion of the Permit to support the Risk Assessment for the DFLAW configuration. Updates to the documents in Appendix 6.2 of the WTP portion of the Permit are necessary to ensure the DFLAW configuration has been adequately analyzed and reviewed through the Risk Assessment Work Plan.

This permit modification also provides the draft *Pre-Demonstration Test Risk Assessment for the Hanford Tank Waste Treatment and Immobilization Plant* for Ecology review, as required by Permit Condition III.10.C.11.b and Interim Compliance Schedule EMF-9 of the WTP portion of the Permit.

The draft Risk Assessment Work Plan for the Direct Feed Low Activity Waste Configuration and the Pre-Demonstration Test Risk Assessment for the Hanford Tank Waste Treatment and Immobilization Plant use the best available information, approved models, U.S. Environmental Protection Agency combustion risk assessment guidance, and conservative exposure scenarios and assumptions.

The following draft documents will be provided to support this agency-initiated permit modification to the WTP portion of the Permit:

New Documents:

- Pre-Demonstration Test Risk Assessment for the Hanford Tank Waste Treatment and Immobilization Plant

Risk Assessment Work Plan for the Direct Feed Low-Activity Waste Configuration Revised Documents:

- Emissions Study for the Hanford Tank Waste Treatment and Immobilization Plant
- Cell Emissions Estimate
- Chemical Parameters and Toxicological Inputs for the Environmental Risk Assessment for the Hanford Tank Waste Treatment and Immobilization Plant
- Hanford Tank Waste Treatment and Immobilization Plant Risk Assessment Air Quality Modeling Protocol

Reviewing the proposed changes

Ecology invites to you to review and comment on this proposed agency initiated modification to Appendix 6.2, Risk Assessment Work Plan and Appendix 6.3, Pre-Demonstration Test Risk Assessment Report, of the WTP Permit. See Page 1 for comment period dates and information on how to submit comments.

Copies of the application for the proposed permit and supporting documentation will be available during the public comment period online at Ecology's website at https://www.ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods. The documents will also be available at the Hanford Public Information Repositories listed on the last page.

Ecology will consider and respond to all significant comments received during the public comment period. We will document our responses and issue a response to comments document when we make our final permitting decision.

Figure 1 Effluent Management Facility

DEPARTMENT OF ECOLOGY
State of Washington

Nuclear Waste Program
3100 Port of Benton Blvd
Richland, WA 99354

Hanford's Information Repositories and Document Review Locations

Washington

Richland
Ecology Nuclear Waste Program
Resource Center
3100 Port of Benton Blvd.
Richland, WA 99354
509-372-7950

U.S. Department of Energy
Administrative Record
2440 Stevens Drive, Room 1101
Richland, WA 99354
509-376-2530

Washington State University Tri-Cities
Department of Energy Reading Room
2770 Crimson Way, Room 101L
Richland, WA 99354
509-375-7443

Seattle
University of Washington
Suzzallo Library
P.O. Box 352900
Seattle, WA 98195
206-543-5597

Spokane
Gonzaga University
Foley Center
502 E Boone Avenue
Spokane, WA 99258
509-313-6110

Oregon

Portland
Portland State University
Millar Library
1875 SW Park Avenue
Portland, OR 97207
503-725-4542

CLASSIFIED LEGALS

Legals

Legals & Public Notices

ADVERTISEMENT FOR BIDS
Asotin County Conservation District

The Asotin County Conservation District is requesting bids for the construction of the Cottonwood Fish Passage Project. A contractor is being sought to construct the fish passage project that includes replacement of a culvert.
More detailed information will be provided in the bid package and at the pre-bid meeting which will be held on **March 4, 2020** at the project site located where Cottonwood Creek flows under the Grande Ronde River Road approximately 2.5 miles west of Highway 129. Bidder attendance is strongly encouraged but not mandatory.
Sealed bids will be accepted for the described project **until 4:30 p.m., PST, March 19, 2020.** Bids must be submitted on the prescribed bid form that is included in the bid package and in a **sealed** envelope marked clearly on the outside "Cottonwood Creek Fish Passage Project." All bids must be received at the Asotin County Conservation District office (ACCD), 720 6th Street, Suite B, Clarkston, WA 99403 by the due date and time specified above. Postmarks are not sufficient
Bids will be publicly opened and read aloud at 7:00 p.m. on March 19, 2020 at the **ACCD** office.
The complete bid package is available on the ACCD website atwww.asotincd.org

---

BENTON CLEAN AIR AGENCY
NOTICE OF PUBLIC HEARING

PUBLIC NOTICE IS HEREBY GIVEN that the Board of Directors for Benton Clean Air Agency will hold a Public Hearing during its Regular Board Meeting scheduled for Thursday, March 26, 2020 5:00 p.m., at the Agency office located at 526 South Steptoe Street, Kennewick, Washington, for the purpose of receiving public comment on revisions to Benton Clean Agency's Regulation I. Proposed revisions can be viewed on our website at bentoncleanair.org or a copy of revisions can be picked up at the Agency's office.
Dated at Kennewick, Washington this 19th day of February 2020.
Nancy Aldrich
BoardPresident

"Call for Bids:

The Benton County Mosquito Control District is accepting sealed bids for the following: Two new 2020 ATV's. For more information or to obtain a bid package contact Stephen Ingalls at the District's office located at 4951 Van Giesen Street, West Richland, WA 99353 or by calling (509) 967-2414. All bids **must** be submitted on the bid form provided by the District. Bidding will close, and no further bids will be accepted after 1:00 p.m. on Tuesday, March 17, 2020."

CITY OF RICHLAND
REQUEST FOR QUALIFICATIONS
RFQ No. 20-0031 – 1st Street west of Kingsgate Way Road and Utility Improvements Design
SUBMITTALS DUE: March 10, 2020, 3:00 p.m., EXACTLY, Pacific Local Time

Public notice is hereby given that the City of Richland, Washington has issued the above solicitation for designing improvements to the 1st Street west of Kingsgate Way for road and utilities. Detailed information and the submittal documents are available at www.publicpurchase.com, under City of Richland, Washington designated webpage.
Contact Public Purchase directly if unable to access documents online at support@publicpurchase.com. Online Chat is available from 7:00 a.m. to 4:00 p.m. MT at www.publicpurchase.com top left corner. If unable to reach Public Purchase, contact the City Purchasing Division at 509-942-7710.
The City of Richland in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 USC 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally Assisted Programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises as defined at 49 CFR Part 26 will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color national origin, or sex in consideration for an award.
Published: Friday, February 21, 2020 and Sunday, February 23, 2020 Tri-City Herald
Cathleen Koch
Administrative Services Director

CITY OF RICHLAND, WASHINGTON
CALL FOR BIDS ITB: # 20-0016
WATER TREATMENT PLANT FAÇADE REPLACEMENT – RE-BID – BIDS DUE: MARCH 3, 2020, 2:00 P.M., EXACTLY, PACIFIC LOCAL TIME

Public notice is hereby given that sealed bids will be received for the City of Richland's **Water Treatment Plant Façade Replacement – Re-bid** Project by the City of Richland Purchasing Division staff at 625 Swift Boulevard, Richland, WA until the date and time specified above, at which time bids will be opened and read publicly. This project includes replacement of the City's Water Treatment Plant's (100 Saint Street) existing external 'curtain walls' with new steel stud framed walls including siding, painting, new aluminum framed entrances & storefront, removal (demolition) of select existing exterior walls and minor roof construction, and other incidental work.
A Pre-Bid Meeting / site investigation and walk through is scheduled for Monday, February 24, 2020 at 1:00 p.m.
Full notice and complete details of the solicitation are available from www.PublicPurchase.com. Interested contractors must first register with Public Purchase. There is no charge to register, receive notifications or view and download the documents. Visit the City of Richland website at www.ci.richland.wa.us under Departments/Administrative Services/Purchasing/Public Purchase for information on how to register.
The City of Richland in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 200d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, subtitle A, Office of the Secretary, Part 21, nondiscrimination in federally assisted programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises as defined at 49 CFR Part 26 will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award.
Published:
Sunday, February 16, 2020

CITY OF WEST RICHLAND
SUMMARY OF ORDINANCE 6-20

In accordance with RCW 35A.12.160, the following is a summary of City of West Richland Ord. No. 6-20 adopted on February 18, 2020.
TITLE OF ORDINANCE:
AN ORDINANCE OF THE CITY OF WEST RICHLAND, WASHINGTON RELATING TO WHERE PARKING IS PROHIBITED AT ALL TIMES ON A PORTION OF S. HIGHLANDS BLVD, AMENDING SECTION 10.12.060 OF THE WEST RICHLAND MUNICIPAL CODE
The full text of this ordinance will be mailed free of charge to any person who requests the same from Julie A. Richardson, City Clerk, 3100 Belmont Blvd, Suite 106, West Richland, Washington, 99353, (509) 967-3431.

Knutzen Engineering, Paul Knutzen, 5401 Ridgeline Dr Kennewick, WA 99338, is seeking coverage under the Washington State Department of Ecology's Construction Stormwater NPDES and State Waste Discharge General Permit.
The proposed project, Kamiakin High School, is located at 600 N Arthur St in Kennewick in Benton county.
This project involves 17 acres of soil disturbance for construction activities.
All discharges and runoff go to ground water.
Any persons desiring to present their views to the Washington State Department of Ecology regarding this Application, or interested in Ecology's action on this Application, may notify Ecology in writing no later than 30 days of the last date of publication of this notice. Ecology reviews public comments and considers whether discharges from this project would cause a measurable change in receiving water quality, and, if so, whether the project is necessary and in the overriding public interest according to Tier II anti-degradation requirements under WAC 173-201A-320.
Comments can be submitted to:
Department of Ecology
Attn: Water Quality Program, Construction Stormwater
P.O. Box 47696, Olympia, WA 98504-7696

PORT OF BENTON
NOTICE OF ACCEPTANCE OF WORK

RICHLAND AIRPORT HELICOPTER PARKING APRON AND PROSSER AIRPORT SOUTH EAST HANGAR TAXILANE & ELECTRONIC GATE PROJECT
Notice is hereby given that the Port of Benton accepts the work done by Selland Construction, Inc., for the scope of work on the Richland Airport Helicopter Parking Apron and Prosser Airport South East Hangar Taxilane & Electronic Gate in Richland and Prosser, Washington. Any laborer, mechanic, sub-contractor, material man or person claiming to have supplied material, provisions or goods for the prosecution of such work or the making of such improvements who has not been paid should present to and file with the Bond of Commissioners a notice in accordance with RCW 39.08.030 and within the time set fourth therein.
/s/ Joe Walker, Airport Manager, Port of Benton

PORT OF BENTON
NOTICE OF SPECIAL COMMISSION MEETING

PUBLIC NOTICE IS HEREBY GIVEN that the Port of Benton Commission will hold a Special Meeting on Wednesday, February 26, 2020, at 8:30 a.m., at the Port of Benton Commission Meeting Room, 3250 Port of Benton Boulevard, Richland, Washington. The purpose of this meeting will be to Award the Fermi Power Relocation Project bid, to Award the 2019 Freight Rail Assistance Program (FRAP) and Freight Rail Investment Bank Program (FRIB) Railroad Rehabilitation Project, to approve Resolution 20-06, accepting work completed by Central Paving, LLC for the 2019 Yearly Port-Wide Maintenance Project, discussion of potential amendment to lease agreement for Chukar Cherries Company, 320 Wine Country Road, Prosser, discussion of proposed Resolution 20-07 in support of dams within the Federal Columbia-Snake River System and to hold a short Executive Session relating to potential litigation.

Dated at Richland, Washington on February 20, 2020.

/s/ Roy D. Keck
Commission Secretary

PORT OF BENTON
REQUEST FOR QUALIFICATIONS
1,341-acre Storm Water Study
SUBMITTALS DUE: March 5th, 2020, 3:00 p.m., EXACTLY, Pacific Local Time
Public notice is hereby given that the Port of Benton, Washington has issued the above solicitation to perform a Storm Water Study for the Port of Benton/City of Richland's 1,341 Acre Industrial Development.
For questions, contact the Port of Benton's contract Port Engineer, Roger Wright, P.E., at 509-375-3565 or roger@rgwenterprises.com.
The Port of Benton in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 USC 2000d to 2000d-4 and Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally Assisted Programs of the Department of Transportation issued pursuant to such Act, hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises as defined at 49 CFR Part 26 will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color national origin, or sex in consideration for an award.
For Project Overview, please go to portofbenton.com; Business, Bid Opportunities
Published:
Sunday, February 16 & 23, 2020 Tri-City Herald

Waste Treatment and Immobilization Plant Risk Assessment Permit Modification

The Washington State Department of Ecology (Ecology) is proposing an agency-initiated permit modification to the Hanford Facility Resource Conservation and Recovery Act Permit, Revision 8C. The proposed changes affect the dangerous waste portion for the Treatment, Storage, and Disposal of Dangerous Waste for the Waste Treatment and Immobilization Plant, located in Part III, Operating Unit Group 10 (Permit).
The Waste Treatment Plant (WTP) is located on the Hanford Site in southeastern Washington. The plant will immobilize in glass (vitrify) 56-million gallons of dangerous radioactive and chemical waste currently stored in 177 underground storage tanks at Hanford.
The permittees are: U.S. Department of Energy, Office of River Protection P.O. Box 450 Richland, Washington 99352 Bechtel National, Inc., 2435 Stevens Center Place, Richland, Washington 99354
Ecology invites you to comment on the Preliminary Risk Assessment Permit Modification (8C.2020.2D), **February 24 through April 9, 2020.** The proposed changes incorporate the draft Preliminary Risk Assessment and the Risk Assessment Work Plan for the Direct Feed Low-Activity Waste (DFLAW) configuration. Risk Assessment Work Plan Supplements 2 through 5 would also be updated for incorporation into the Permit.
This permit modification will update and add new documents to the WTP portion of the Permit to support the Risk Assessment for the DFLAW configuration. Updates to the documents in Appendix 6.2 of the WTP portion of the Permit are necessary to ensure the DFLAW configuration has been adequately analyzed and reviewed through the Risk Assessment Work Plan.
This permit modification also provides the draft Pre-Demonstration Test Risk Assessment for the Hanford Tank Waste Treatment and Immobilization Plant for Ecology review, as required by Permit Condition III.10.C.11.b and Interim Compliance Schedule EMF-9 of the WTP portion of the Permit.
The draft Risk Assessment Work Plan for the Direct Feed Low Activity Waste Configuration and the Pre- Demonstration Test Risk Assessment for the Hanford Tank Waste Treatment and Immobilization Plant use the best available information, approved models, U.S. Environmental Protection Agency combustion risk assessment guidance, and conservative exposure scenarios and assumptions.
Ecology invites to you to review and comment on this proposed agency initiated modification to Appendix 6.2, Risk Assessment Work Plan and Appendix 6.3, Pre-Demonstration Test Risk Assessment Report, of the WTP Permit. See below for comment period dates and information on how to submit comments.
Copies of the application for the proposed permit and supporting documentation will be available during the public comment period online at Ecology's website at https://www.ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods. The documents will also be available at the Hanford Public Information Repositories.
Ecology will consider and respond to all significant comments received during the public comment period. We will document our responses and issue a response to comments document when we make our final permitting decision.
Public comment period
February 24 -April 9, 2020
Please submit comments
Electronically (preferred) via: http://nw.ecology.commentinput.com/?id=F6msi By U.S. Mail, or hand-delivery: Daina McFadden 3100 Port of Benton Blvd Richland WA 99354
Public hearing
A public hearing is not scheduled, but if there is enough interest, we will consider holding one. To request a hearing or for more information, contact:
Daina McFadden 509-372-7950
Hanford@ecy.wa.gov
Special accommodations
To request ADA accommodation including materials in a format for the visually inpaired, 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.

From: McFadden, Daina (ECY)
To: HANFORD-INFO@LISTSERV.ECOLOGY.WA.GOV
Subject: 30-day notice of upcoming comment period
Date: Friday, January 24, 2020 12:55:48 PM

WTP Risk Assessment 30-Day Advance Notice

The Washington State Department of Ecology is providing notification of a 45-day public comment period starting mid/late February 2020. This comment period will address proposed modifications in the Dangerous Waste Portion for the *Treatment, Storage, and Disposal of Dangerous Waste for the Waste Treatment and Immobilization Plant*, located in Part III, Operating Unit Group 10 (Permit). The Permittees are U.S. Department of Energy, Office of River Protection and Bechtel National, Inc. The Waste Treatment and Immobilization Plant is located on the Hanford Site in southeastern Washington.

What Changes are Being Proposed?

The proposed modification incorporates the draft Preliminary Risk Assessment and the Risk Assessment Work Plan for the Direct Feed Low-Activity Waste (DFLAW) configuration. The modification also proposes to update the Risk Assessment Work Plan Supplements 2 through 5 for incorporation into the permit.

Public Hearing

A public hearing is not scheduled, but if there is enough interest, we will consider holding one. To request a hearing or for more information, contact:

Daina McFadden
Hanford@ecy.wa.gov
509-372-7950

Ecology logo

From: McFadden, Daina (ECY)
To: HANFORD-INFO@LISTSERV.ECOLOGY.WA.GOV
Subject: WTP Risk Assessment public comment period starts today
Date: Monday, February 24, 2020 9:09:44 AM

Waste Treatment and Immobilization Plant Risk Assessment permit modification public comment Period notification

The Washington State Department of Ecology is providing notification of a 45-day public comment period starting **February 24 through April 9, 2020**. This comment period will address proposed modifications to the *Dangerous Waste Portion for the Treatment, Storage, and Disposal of Dangerous Waste for the Waste Treatment and Immobilization Plant*, located in Part III, Operating Unit Group 10 (Permit). The Permittees are U.S. Department of Energy, Office of River Protection and Bechtel National, Inc. The Waste Treatment and Immobilization Plant (WTP) is located on the Hanford Site in southeastern Washington.

What Changes are Being Proposed?

The proposed changes incorporate the draft Preliminary Risk Assessment and the Risk Assessment Work Plan for the Direct-Feed Low-Activity Waste (DFLAW) configuration. Risk Assessment Work Plan Supplements 2 through 5 would also be updated for incorporation into the Permit.

This permit modification will update and add new documents to the WTP portion of the Permit to support the Risk Assessment for the DFLAW configuration. Updates to the documents in Appendix 6.2 of the WTP portion of the Permit are necessary to ensure the DFLAW configuration has been adequately analyzed and reviewed through the Risk Assessment Work Plan.

This permit modification also provides the draft *Pre-Demonstration Test Risk Assessment for the Hanford Tank Waste Treatment and Immobilization Plant* for Ecology review, as required by Permit Condition III.10.C.11.b and Interim Compliance Schedule EMF-9 of the WTP portion of the Permit. The draft Risk Assessment Work Plan for the Direct Feed Low Activity Waste Configuration and the Pre- Demonstration Test Risk Assessment for the Hanford Tank Waste Treatment and Immobilization Plant use the best available information, approved models, U.S. Environmental Protection Agency combustion risk assessment guidance, and conservative exposure scenarios and assumptions.

Reviewing the proposed changes

Ecology invites to you to review and comment on this proposed agency initiated modification to Appendix 6.2, Risk Assessment Work Plan and Appendix 6.3, Pre-Demonstration Test Risk Assessment Report, of the WTP Permit. Copies of the

application for the proposed permit and supporting documentation will be available during the public comment period online at Ecology's public comment period page. The documents will also be available at the Hanford Public Information Repositories. Ecology will consider and respond to all significant comments received during the public comment period. We will document our responses and issue a response to comments document when we make our final permitting decision.

How to Comment

Ecology invites you to review and comment on this proposed WTP Risk Assessment permit modification. Copies of the proposed modification are located in the Administrative Record and Information Repositories. In addition, the proposed modification is online on Ecology's public comment period page.

Please submit comments by **April 9, 2020**.
Electronically (preferred) or by mail or hand-delivery to:
Daina McFadden
3100 Port of Benton Blvd
Richland WA 99354
Fax 509-372-7971

Public Hearing

A public hearing is not scheduled, but if there is enough interest, we will consider holding one. To request a hearing or for more information, contact:
Daina McFadden
Hanford@ecy.wa.gov
509-372-7950

Ecology logo

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

Subscribe or Unsubscribe

Washington Department of Ecology - Hanford
Published by Ryan Ecology Miller [?] · 4 hrs ·

Send us your thoughts! A new public comment held by our agency began today, on a Waste Treatment and Immobilization Plant Risk Assessment permit modification.

Check out the details and get your comments in here:
https://ecology.wa.gov/…/Nuclear-was…/Public-comment-periods

44 People Reached
3 Engagements
Boost Post

1

Like Comment Share

Ecology - Hanford @ecyHanford · 4h
Send us your thoughts! A new public comment held by our agency began today, on a Waste Treatment and Immobilization Plant Risk Assessment permit modification. Check out the details and get your comments in here: ecology.wa.gov/Waste-Toxics/N... #Hanford #Comment #Input #Washington

You and 6 others

1 4