



## Response to Comments

### LERF and 200 Area ETF Construction of LERF Basin 41 - Class 3 modification

July 10 to Sept. 8, 2020

By Amena Mayenna

For the **Nuclear Waste Program**

Washington State Department of Ecology

Richland, Washington

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## Contact Information

Amena Mayenna, Environmental Engineer

Nuclear Waste Program

3100 Port of Benton Blvd

Richland, WA 99354

Phone: 509-372-7950

Email: [Hanford@ecy.wa.gov](mailto:Hanford@ecy.wa.gov)

**Website**<sup>1</sup>: [Washington State Department of Ecology](#)

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<sup>1</sup> [www.ecology.wa.gov/contact](http://www.ecology.wa.gov/contact)

# Department of Ecology's Regional Offices

## Map of Counties Served



<b>Southwest Region</b> 360-407-6300	<b>Northwest Region</b> 425-649-7000	<b>Central Region</b> 509-575-2490	<b>Eastern Region</b> 509-329-3400
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Region	Counties served	Mailing Address	Phone
<b>Southwest</b>	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, Wahkiakum	PO Box 47775 Olympia, WA 98504	360-407-6300
<b>Northwest</b>	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom	3190 160th Ave SE Bellevue, WA 98008	425-649-7000
<b>Central</b>	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima	1250 W Alder St Union Gap, WA 98903	509-575-2490
<b>Eastern</b>	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	4601 N Monroe Spokane, WA 99205	509-329-3400
<b>Headquarters</b>	Across Washington	PO Box 46700 Olympia, WA 98504	360-407-6000

# Response to Comments LERF and 200 Area ETF Construction of LERF Basin 41 - Class 3 modification

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DEPARTMENT OF  
**ECOLOGY**  
State of Washington

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## Introduction

The Washington State Department of Ecology’s Nuclear Waste Program (Ecology) oversees management of 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.)

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	LERF and 200 Area ETF Construction of LERF Basin 41 – Class 3 modification, July 10 to Sept. 8, 2020
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 3, Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility (Permit)</i>
Permittees	U.S. Department of Energy
Original Issuance date	January 28, 1998

To see more information related to the Hanford Site and nuclear waste in Washington, please visit our webpage, [Hanford Cleanup](#)<sup>2</sup>.

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<sup>2</sup> <https://www.ecology.wa.gov/Hanford>

## Reasons for issuing the permit

The proposed Class 3 permit modification affects the Liquid Effluent Retention Facility (LERF) and the 200 Area Effluent Treatment Facility (ETF) portion of the Permit. The changes to the Permit will:

- Add a new basin (Basin 41) at the 200 Area LERF.
- Add primary waste transfer line from the Waste Treatment and Immobilization Plant's Effluent Management Facility to the LERF Basin 41, and authorize connection of that transfer line to the LERF Basin 41.

Energy is making these upgrades in order to support direct-feed low-activity waste operations.

## Public involvement actions

The U.S. Department of Energy encouraged public comment on the proposed LERF and 200 Area ETF Class 3 Permit Modification during a 60-day public comment period held July 10 through Sept. 8, 2020.

The following actions were taken to notify the public:

- Mailed a public notice announcing the comment period to 1,152 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/advertisement in the Tri-City Herald on July 10, 2020.
- Emailed a notice announcing the start of the comment period to the Hanford-Info email list, which has 1,337 recipients.
- Posted the comment period notice on the Washington Department of Ecology – Hanford's Facebook and Twitter pages.

USDOE held a virtual public meeting on Aug. 18, 2020, at 5:30 p.m. on WebEx. Thirty-two members of the public attended, and no comments were collected.

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

- Focus sheet
- Transmittal letter
- Statement of Basis for the proposed LERF/ETF Permit Modification
- Draft LERF/ETF Permit Modification

The following public notices for this comment period are in [Appendix A](#) of this document:

- Focus sheet
- Classified advertisement in the Tri-City Herald
- Notices sent to the Hanford-Info email list
- Notices posted on the Washington Department of Ecology – Hanford's Facebook and Twitter pages

## List of Commenters

The table below lists the names of organizations or individuals who submitted a comment on the [unit name] Permit modification. The comments and responses are in [Attachment 1](#).

Commenter	Organization
Mike Conlan	Citizen
Nancy Kroening	Citizen
Linda Greene	Citizen
Peter von Christierson	Citizen
Michael Harding	Citizen
Nancy Arbuckle	Citizen
Amy Hagopian, PhD	University of Washington
Jim Thomas	Citizen
Tom Carpenter	Hanford Challenge
Gerry Pollet	Heart of America Northwest



# Attachment 1: Comments and Responses

## **Description of comments:**

Ecology accepted comments from July 10 through Sept. 8, 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**

*Thank you for your comment.*

1. *Ecology is working to ensure that long-term storage, treatment, and disposal of the waste is protective of human health and the environment.*
2. *The proposed permit changes are not to allow additional nuclear waste into the Hanford Facility, but to better manage the waste already present.*
3. *Single-shell tanks (SSTs) are not in the scope of this comment period. Ecology does agree that the tanks pose a threat. Ecology believes a better approach to replacing the SSTs is to remove the waste from the SSTs and placing it in the compliant double-shell tanks (DSTs) to prepare for eventual treatment in the Waste Treatment Plant that is now being built.*
4. *The LERF and 200 Area ETF maintains a groundwater monitoring program in which groundwater is sampled to detect for releases from the facility. Monitoring is performed on a quarterly and semiannually basis. This monitoring program helps prevent migration of contaminated groundwater into the Columbia River.*
5. *When completed the Waste Treatment and Immobilization Plant will have the treatment capability to vitrify tank waste.*

## **I-2: NANCY KROENING**

### **Comment I-2-1**

My Primary Question is why do they keep building more facilities that will have to be treated and demolished in the future? I thought we were trying to treat and get rid of wastes and contaminated buildings. The reasons for the construction were not provided.

Thank you very much for the opportunity to ask this very important question and hopefully get an answer.

### **Response to I-2-1**

*Ecology is working to ensure that long-term storage, treatment, and disposal of the waste is protective of human health and the environment. During DFLAW, the LERF will start receiving waste from the WTP. The LERF Basin 41 would be constructed to provide additional capacity to*

*manage this WTP waste volume. Closure by removal or decontamination based on the requirements of WAC 173-303-610(2), will eliminate future maintenance and will be protective of human health and the environment by removing or reducing chemical contamination at LERF and 200 Area ETF to levels that are below concern with respect to human health and the environment.*

### **I-3: LINDA GREENE**

#### **Comment I-3-1**

Thank you for the opportunity to provide public comment on the related comment periods for the effluent transfer lines and LERF's Basin 41. I am writing because I care about protecting future generations and the environment from Hanford's contamination. I care about worker, public, and environmental safety and believe in transparency and accountability.

Thank you for considering my comments:

**Require Protective Leak Inspections:** Ensure that the timing and rigor of leak detection inspections are not decreased by the permit modification.

**Plan for Infrastructure Upgrades:** Ensure planning for all necessary infrastructure upgrades, including the three existing LERF basins which have a 20-year design life that expired in 2015.

**Include Plans for Avoidable Problems:** Ensure that DOE takes action to avoid startup issues at the Effluent Treatment Facility that takes into consideration unknowns such as what the future Waste Treatment Plant effluent may contain.

Ensure measures are taken to avoid impacts to ongoing and future site cleanup activities.

**Information Before Approval:** Ensure that additional information about leak detection, expired design life, infrastructure upgrades, and WTP effluent characterization are answered and this information is shared with the public prior to approving these permit modifications.

**Prioritize Safety:** Make sure requirements are in place to protect workers and the environment from the radioactive waste and toxic chemical vapors that may be present in the waste that will be moved through the new transfer lines and stored in the basins.

**Increase Transparency:** Share the details of the proposed actions AND any problems underpinning that action and the timeline for fixing problems.

**Share the Big Picture:** When you are soliciting input on anything that deals with treating tank waste, share the big picture of where the facility or action fits with immobilizing Hanford's high-level tank waste in glass. For example long-term plans for implementing additional upgrades to fix and replace additional aging infrastructure that is part of tank waste management, storage and treatment.

Sincerely, Linda Greene

### **Response to I-3-1**

*Please see the responses for I-3-2 to I-3-8.*

### **Comment I-3-2**

Thank you for the opportunity to provide public comment on the related comment periods for the effluent transfer lines and LERF's Basin 41. I am writing because I care about protecting future generations and the environment from Hanford's contamination. I care about worker, public, and environmental safety and believe in transparency and accountability.

Thank you for considering my comments:

Require Protective Leak Inspections: Ensure that the timing and rigor of leak detection inspections are not decreased by the permit modification.

### **Response to I-3-2**

*Ecology shares similar concerns with the public as to the adequacy of leak detection systems for the 4"-WTP-001-M17 transfer line. As a result, Ecology has drafted permit conditions with this permit modification. The draft permit conditions were drafted in response to public comments and require USDOE to upgrade the leak detection systems for this line prior to use. This upgrade will require a permit modification and the public will have an opportunity to review the permit changes and any relevant documentation.*

### **Comment I-3-3**

Plan for Infrastructure Upgrades: Ensure planning for all necessary infrastructure upgrades, including the three existing LERF basins which have a 20-year design life that expired in 2015.

Include Plans for Avoidable Problems: Ensure that DOE takes action to avoid startup issues at the Effluent Treatment Facility that takes into consideration unknowns such as what the future Waste Treatment Plant effluent may contain.

Ensure measures are taken to avoid impacts to ongoing and future site cleanup activities.

### **Response to I-3-3**

*Plan for Infrastructure Upgrades: Infrastructure upgrades are outside the scope of this Permit modification. The operational life expectancy for the three existing Liquid Effluent Retention Facility (LERF) basins have been extended with the replacement of materials and equipment.*

*Include Plans for Avoidable Problems: Ecology is working to ensure that long-term storage, treatment, and disposal of the waste is protective of human health and the environment.*

### **Comment I-3-4**

Information Before Approval: Ensure that additional information about leak detection, expired design life, infrastructure upgrades, and WTP effluent characterization are answered and this information is shared with the public prior to approving these permit modifications.

**Response to I-3-4**

*When the permit modification for the leak detection upgrades goes out for public review, Ecology will ensure all relevant documentation is included.*

**Comment I-3-5**

Prioritize Safety: Make sure requirements are in place to protect workers and the environment from the radioactive waste and toxic chemical vapors that may be present in the waste that will be moved through the new transfer lines and stored in the basins.

**Response to I-3-5**

*USDOE manages the safety onsite and has a rigid work package development which requires all adherence for worker safety requirements.*

**Comment I-3-6**

Increase Transparency: Share the details of the proposed actions AND any problems underpinning that action and the timeline for fixing problems.

**Response to I-3-6**

*Ecology agrees that transparency is important and we strive to ensure the public has access to adequate information to be able to make informed comments on the proposed permitting activities.*

**Comment I-3-7**

Share the Big Picture: When you are soliciting input on anything that deals with treating tank waste, share the big picture of where the facility or action fits with immobilizing Hanford's high-level tank waste in glass. For example long-term plans for implementing additional upgrades to fix and replace additional aging infrastructure that is part of tank waste management, storage and treatment.

**Response to I-3-7**

*Ecology recognizes the interconnectedness of work performed at the Hanford Site and we try to convey this larger picture in our public documents. We will also ensure "big-picture" ideas are appropriately addressed in Ecology documents and we encourage USDOE's to address these ideas in their documents and presentations during public meetings.*

*To try to connect the two similar decisions together, the LERF-ETF Basin 41 public comment period will be held concurrently with the 242-A Evaporator permit modification that addresses leak detection. Ecology strives to find opportunities for public review of decisions that are similar or connected through treatment, storage or disposal to make it easier for members of the public to see the big picture.*

## **I-4: PETER VON CHRISTIERSON**

### **Comment I-4-1**

Require Protective Leak Inspections: Ensure that the timing and rigor of leak detection inspections are not decreased by the permit modification.

Plan for Infrastructure Upgrades: Ensure planning for all necessary infrastructure upgrades, including the three existing LERF basins which have a 20-year design life that expired in 2015.

Include Plans for Avoidable Problems: Ensure that DOE takes action to avoid startup issues at the Effluent Treatment Facility that takes into consideration unknowns such as what the future Waste Treatment Plant effluent may contain. Ensure measures are taken to avoid impacts to ongoing and future site cleanup activities.

Information Before Approval: Ensure that additional information about leak detection, expired design life, infrastructure upgrades, and WTP effluent characterization are answered and this information is shared with the public prior to approving these permit modifications.

Prioritize Safety: Make sure requirements are in place to protect workers and the environment from the radioactive waste and toxic chemical vapors that may be present in the waste that will be moved through the new transfer lines and stored in the basins.

Increase Transparency: Share the details of the proposed actions AND any problems underpinning that action and the timeline for fixing problems.

Share the Big Picture: When you are soliciting input on anything that deals with treating tank waste, share the big picture of where the facility or action fits with immobilizing Hanford's high-level tank waste in glass. For example long-term plans for implementing additional upgrades to fix and replace additional aging infrastructure that is part of tank waste management, storage and treatment.

Sincerely, Peter von Christierson

### ***Response to I-4-1***

*Please see the responses for I-4-2 to I-4-8.*

### **Comment I-4-2**

Require Protective Leak Inspections: Ensure that the timing and rigor of leak detection inspections are not decreased by the permit modification.

**Response to I-4-2**

*Ecology shares similar concerns with the public as to the adequacy of leak detection systems for the 4"-WTP-001-M17 transfer line. As a result, Ecology has drafted permit conditions with this permit modification. The draft permit conditions were drafted in response to public comments and require USDOE to upgrade the leak detection systems for this line prior to use. This upgrade will require a permit modification and the public will have an opportunity to review the permit changes and any relevant documentation.*

**Comment I-4-3**

Plan for Infrastructure Upgrades: Ensure planning for all necessary infrastructure upgrades, including the three existing LERF basins which have a 20-year design life that expired in 2015.

**Response to I-4-3**

*Infrastructure upgrades are outside the scope of this Permit modification. The operational life expectancy for the three existing LERF basins has been extended with the replacement of materials and equipment.*

**Comment I-4-4**

Include Plans for Avoidable Problems: Ensure that DOE takes action to avoid startup issues at the Effluent Treatment Facility that takes into consideration unknowns such as what the future Waste Treatment Plant effluent may contain. Ensure measures are taken to avoid impacts to ongoing and future site cleanup activities.

**Response to I-4-4**

*Ecology is working to ensure that long-term storage, treatment, and disposal of the waste is protective of human health and the environment through the Direct Feed Low-Activity Waste cleanup activities.*

**Comment I-4-5**

Information Before Approval: Ensure that additional information about leak detection, expired design life, infrastructure upgrades, and WTP effluent characterization are answered and this information is shared with the public prior to approving these permit modifications.

**Response to I-4-5**

*When the permit modification for leak detection upgrades goes out for public review, Ecology will ensure all relevant documentation is included. WTP construction and operations is included in a separate operating unit group in the Hanford Site-wide Permit and is not a part of this permit modification.*

**Comment I-4-6**

Prioritize Safety: Make sure requirements are in place to protect workers and the environment from the radioactive waste and toxic chemical vapors that may be present in the waste that will be moved through the new transfer lines and stored in the basins.

### **Response to I-4-6**

*USDOE manages the safety onsite and has a rigid work package development which requires all adherence for worker safety requirements.*

### **Comment I-4-7**

Increase Transparency: Share the details of the proposed actions AND any problems underpinning that action and the timeline for fixing problems.

### **Response to I-4-7**

*Ecology agrees that transparency is important and we strive to ensure the public has access to adequate information to be able to make informed comments on the proposed permitting activities.*

### **Comment I-4-8**

Share the Big Picture: When you are soliciting input on anything that deals with treating tank waste, share the big picture of where the facility or action fits with immobilizing Hanford's high-level tank waste in glass. For example long-term plans for implementing additional upgrades to fix and replace additional aging infrastructure that is part of tank waste management, storage and treatment.

### **Response to I-4-8**

*Ecology recognizes the interconnectedness of work performed at the Hanford Site and we try to convey this larger picture in our public documents. We will also ensure "big-picture" ideas are appropriately addressed in Ecology documents and we encourage USDOE's to address these ideas in their documents and presentations during public meetings.*

*To try to connect the two similar decisions together, the LERF-ETF Basin 41 public comment period will be held concurrently with the 242-A Evaporator permit modification that addresses leak detection. Ecology strives to find opportunities for public review of decisions that are similar or connected through treatment, storage or disposal to make it easier for members of the public to see the big picture.*

## **I-5: MICHAEL HARDING**

### **Comment I-5-1**

To Whom It May Concern regarding LERF and 200 Area ETF Construction of LERF Basin 41 - Class 3 modification

DOE should take into consideration unknowns such as what the future Waste Treatment Plant effluent may contain.

An upgrade of the three existing LERF basins (which have a twenty year design life that expired in 2015) is due, is it not?



It would be advisable to ensure that leak detection inspections are not lessened by the permit modification.

DOE should also take measures to avoid impacts to ongoing and future site clean up activities by implementing a poorly considered permit modification.

As far as public relations are concerned, information about leak detection, expired design life, infrastructure upgrades, and Waste Treatment Plant effluent should be provided and shared with the public prior to asking for public comment on permit modifications.

The safety of Hanford workers should be a priority. Naturally, that idea extends to protecting the environment from the radioactive waste and toxic chemical vapors that are often present in the waste that will be moved through the new transfer lines and stored in the basins.

Any anticipated problems or likely complications associated with proposed actions (and the timeline for fixing such problems) must be shared with the general public.

Providing for an accurate public understanding of how Hanford's high-level tank waste glassification project is designed would force the DOE to grapple with the complexity of the task fully so that it could share details with the general public without glossing over problems not yet solved.

Long term plans for implementing additional upgrades to deal with aging infrastructure must be made with a devotion to accuracy and clarity both in design and in disseminating and clearly sharing that design with the public sphere.

***Response to I-5-1***

*Please see the responses for I-5-2 to I-5-10.*

**Comment I-5-2**

DOE should take into consideration unknowns such as what the future Waste Treatment Plant effluent may contain.

***Response to I-5-2***

*Addendum B, Waste Analysis Plan for LERF and 200 Area ETF, requires the generator (i.e., DFLAW) to meet the waste acceptance criteria for LERF and 200 Area ETF. As such, the waste is also ensured to be compatible with equipment at the facility. This modification is not proposing any changes to the waste acceptance criteria. DOE submitted RPP-RPT-62215, LERF Basin 41 Material Compatibility with Wastewater, to show compatibility of the new Basin 41 construction with the constituents in the influent. This included chemical compatibility limits and radiological concerns.*

**Comment I-5-3**

An upgrade of the three existing LERF basins (which have a twenty year design life that expired in 2015) is due, is it not?

**Response to I-5-3**

*The operational life expectancy for the three existing Liquid Effluent Retention Facility (LERF) basins has been extended with the replacement of materials and equipment.*

**Comment I-5-4**

It would be advisable to ensure that leak detection inspections are not lessened by the permit modification.

**Response to I-5-4**

*Ecology shares similar concerns with the public as to the adequacy of leak detection systems for the 4"-WTP-001-M17 transfer line. As a result, Ecology has drafted permit conditions with this permit modification. The draft permit conditions were drafted in response to public comments and require USDOE to upgrade the leak detection systems for this line prior to use. This upgrade will require a permit modification and the public will have an opportunity to review the permit changes and any relevant documentation.*

**Comment I-5-5**

DOE should also take measures to avoid impacts to ongoing and future site clean up activities by implementing a poorly considered permit modification.

**Response to I-5-5**

*This comment is out of scope for this modification.*

**Comment I-5-6**

As far as public relations are concerned, information about leak detection, expired design life, infrastructure upgrades, and Waste Treatment Plant effluent should be provided and shared with the public prior to asking for public comment on permit modifications.

**Response to I-5-6**

*Ecology shares similar concerns with the public as to the adequacy of leak detection systems for the 4"-WTP-001-M17 transfer line. As a result, Ecology has drafted permit conditions with this permit modification. The draft permit conditions were drafted in response to public comments and require USDOE to upgrade the leak detection systems for this line prior to use. This upgrade will require a permit modification and the public will have an opportunity to review the permit changes and any relevant documentation.*

*Infrastructure upgrades are outside the scope of this Permit modification. The operational life expectancy for the three existing LERF basins has been extended with the replacement of materials and equipment.*

**Comment I-5-7**

The safety of Hanford workers should be a priority. Naturally, that idea extends to protecting the environment from the radioactive waste and toxic chemical vapors that are often present in the waste that will be moved through the new transfer lines and stored in the basins.

***Response to I-5-7***

*USDOE manages the safety onsite and has a rigid work package development which requires all adherence for worker safety requirements.*

**Comment I-5-8**

Any anticipated problems or likely complications associated with proposed actions (and the timeline for fixing such problems) must be shared with the general public.

***Response to I-5-8***

*This comment is out of scope for this modification.*

**Comment I-5-9**

Providing for an accurate public understanding of how Hanford's high-level tank waste glassification project is designed would force the DOE to grapple with the complexity of the task fully so that it could share details with the general public without glossing over problems not yet solved.

***Response to I-5-9***

*This comment is out of scope for this modification.*

**Comment I-5-10**

Long term plans for implementing additional upgrades to deal with aging infrastructure must be made with a devotion to accuracy and clarity both in design and in disseminating and clearly sharing that design with the public sphere.

***Response to I-5-10***

*Additional upgrades are out of scope of this modification. However, when the upgrades to the leak detection system are made in a future permit modification, Ecology will ensure all relevant documentation is included for public review.*

**I-6: NANCY ARBUCKLE**

**Comment I-6-1**

Thank you for the opportunity to provide public comment on the related comment periods for the effluent transfer lines and LERF's Basin 41. I am writing because I was born in Richland and I care about protecting future generations and the environment from Hanford's contamination. I care about worker, public, and environmental safety and believe in transparency and accountability.

Thank you for considering my comments:

Require Protective Leak Inspections: Ensure that the timing and rigor of leak detection inspections are not decreased by the permit modification.

Plan for Infrastructure Upgrades: Ensure planning for all necessary infrastructure upgrades, including the three existing LERF basins which have a 20-year design life that expired in 2015.

Include Plans for Avoidable Problems: Ensure that DOE takes action to avoid startup issues at the Effluent Treatment Facility that takes into consideration unknowns such as what the future Waste Treatment Plant effluent may contain. Ensure measures are taken to avoid impacts to ongoing and future site cleanup activities.

Information Before Approval: Ensure that additional information about leak detection, expired design life, infrastructure upgrades, and WTP effluent characterization are answered and this information is shared with the public prior to approving these permit modifications.

Prioritize Safety: Make sure requirements are in place to protect workers and the environment from the radioactive waste and toxic chemical vapors that may be present in the waste that will be moved through the new transfer lines and stored in the basins.

Increase Transparency: Share the details of the proposed actions AND any problems underpinning that action and the timeline for fixing problems.

Share the Big Picture: When you are soliciting input on anything that deals with treating tank waste, share the big picture of where the facility or action fits with immobilizing Hanford's high-level tank waste in glass. For example long-term plans for implementing additional upgrades to fix and replace additional aging infrastructure that is part of tank waste management, storage and treatment.

Sincerely, Nancy Arbuckle

#### **Response to I-6-1**

*Please see the responses for I-6-2 to I-6-9*

#### **Comment I-6-2**

Thank you for the opportunity to provide public comment on the related comment periods for the effluent transfer lines and LERF's Basin 41. I am writing because I was born in Richland and I care about protecting future generations and the environment from Hanford's contamination. I care about worker, public, and environmental safety and believe in transparency and accountability.

Thank you for considering my comments.

#### **Response to I-6-2**

*Thank you for your comment.*

#### **Comment I-6-3**

Require Protective Leak Inspections: Ensure that the timing and rigor of leak detection inspections are not decreased by the permit modification.

#### **Response to I-6-3**

*Ecology shares similar concerns with the public as to the adequacy of leak detection systems for the 4"-WTP-001-M17 transfer line. As a result, Ecology has drafted permit conditions with this*

*permit modification. The draft permit conditions were drafted in response to public comments and require USDOE to upgrade the leak detection systems for this line prior to use. This upgrade will require a permit modification and the public will have an opportunity to review the permit changes and any relevant documentation.*

**Comment I-6-4**

Plan for Infrastructure Upgrades: Ensure planning for all necessary infrastructure upgrades, including the three existing LERF basins which have a 20-year design life that expired in 2015.

**Response to I-6-4**

*Infrastructure upgrades are outside the scope of this Permit modification. The operational life expectancy for the three existing Liquid Effluent Retention Facility (LERF) basins has been extended with the replacement of materials and equipment.*

**Comment I-6-5**

Include Plans for Avoidable Problems: Ensure that DOE takes action to avoid startup issues at the Effluent Treatment Facility that takes into consideration unknowns such as what the future Waste Treatment Plant effluent may contain. Ensure measures are taken to avoid impacts to ongoing and future site cleanup activities.

**Response to I-6-5**

*Ecology is working to ensure that long-term storage, treatment, and disposal of the waste is protective of human health and the environment. Addendum B, Waste Analysis Plan for LERF and 200 Area ETF, requires the generator (i.e., DFLAW) to meet the waste acceptance criteria for LERF and 200 Area ETF. As such, the waste is also ensured to be compatible with equipment at the facility. This modification is not proposing any changes to the waste acceptance criteria. DOE submitted RPP-RPT-62215, LERF Basin 41 Material Compatibility with Wastewater, to show compatibility of the new Basin 41 construction with the constituents in the influent. This included chemical compatibility limits and radiological concerns.*

**Comment I-6-6**

Information Before Approval: Ensure that additional information about leak detection, expired design life, infrastructure upgrades, and WTP effluent characterization are answered and this information is shared with the public prior to approving these permit modifications.

**Response to I-6-6**

*Ecology shares similar concerns with the public as to the adequacy of leak detection systems for the 4"-WTP-001-M17 transfer line. As a result, Ecology has drafted permit conditions with this permit modification. The draft permit conditions were drafted in response to public comments and require USDOE to upgrade the leak detection systems for this line prior to use. This upgrade will require a permit modification and the public will have an opportunity to review the permit changes and any relevant documentation.*

*Infrastructure upgrades are outside the scope of this Permit modification. The operational life expectancy for the three existing LERF basins has been extended with the replacement of materials and equipment.*

**Comment I-6-7**

Prioritize Safety: Make sure requirements are in place to protect workers and the environment from the radioactive waste and toxic chemical vapors that may be present in the waste that will be moved through the new transfer lines and stored in the basins.

**Response to I-6-7**

*USDOE manages the safety onsite and has a rigid work package development which requires all adherence for worker safety requirements.*

**Comment I-6-8**

Increase Transparency: Share the details of the proposed actions AND any problems underpinning that action and the timeline for fixing problems.

**Response to I-6-8**

*Ecology agrees that transparency is important and we strive to ensure the public has access to adequate information to be able to make informed comments on the proposed permitting activities.*

**Comment I-6-9**

Share the Big Picture: When you are soliciting input on anything that deals with treating tank waste, share the big picture of where the facility or action fits with immobilizing Hanford's high-level tank waste in glass. For example long-term plans for implementing additional upgrades to fix and replace additional aging infrastructure that is part of tank waste management, storage and treatment.

**Response to I-6-9**

*Ecology recognizes the interconnectedness of work performed at the Hanford Site and we try to convey this larger picture in our public documents. We will also ensure "big-picture" ideas are appropriately addressed in Ecology documents and we encourage USDOE's to address these ideas in their documents and presentations during public meetings.*

*To try to connect the two similar decisions together, the LERF-ETF Basin 41 public comment period will be held concurrently with the 242-A Evaporator permit modification that addresses leak detection. Ecology strives to find opportunities for public review of decisions that are similar or connected through treatment, storage or disposal to make it easier for members of the public to see the big picture.*

## **I-7: AMY HAGOPIAN, PHD**

### **Comment I-7-1**

I'm a public health faculty member at the University of Washington. I teach a unit on Hanford every year to my Master of Public Health students.

Thank you for the opportunity to provide public comment on the effluent transfer lines and LERF's Basin 41.

Please require Protective Leak Inspections. Ensure that the timing and rigor of leak detection inspections are not decreased by the permit modification.

Plan for Infrastructure Upgrades. Ensure planning for all necessary infrastructure upgrades, including the three existing LERF basins which have a 20-year design life that expired in 2015.

Include Plans for Avoidable Problems. Ensure DOE takes action to avoid startup issues at the Effluent Treatment Facility that considers unknowns such as what the future Waste Treatment Plant effluent may contain. Ensure measures are taken to avoid undermining ongoing and future site cleanup activities.

### ***Response to I-7-1***

*Please see the responses for I-7-2 to I-7-5*

### **Comment I-7-2**

I'm a public health faculty member at the University of Washington. I teach a unit on Hanford every year to my Master of Public Health students. Thank you for the opportunity to provide public comment on the effluent transfer lines and LERF's Basin 41.

### ***Response to I-7-2***

*Thank you for your comment.*

### **Comment I-7-3**

Please require Protective Leak Inspections. Ensure that the timing and rigor of leak detection inspections are not decreased by the permit modification.

### ***Response to I-7-3***

*Ecology shares similar concerns with the public as to the adequacy of leak detection systems for the 4"-WTP-001-M17 transfer line. As a result, Ecology has drafted permit conditions with this permit modification. The draft permit conditions were drafted in response to public comments and require USDOE to upgrade the leak detection systems for this line prior to use. This upgrade will require a permit modification and the public will have an opportunity to review the permit changes and any relevant documentation.*

**Comment I-7-4**

Plan for Infrastructure Upgrades. Ensure planning for all necessary infrastructure upgrades, including the three existing LERF basins which have a 20-year design life that expired in 2015.

**Response to I-7-4**

*Infrastructure upgrades are outside the scope of this Permit modification. The operational life expectancy for the three existing Liquid Effluent Retention Facility (LERF) basins has been extended with the replacement of materials and equipment.*

**Comment I-7-5**

Include Plans for Avoidable Problems. Ensure DOE takes action to avoid startup issues at the Effluent Treatment Facility that considers unknowns such as what the future Waste Treatment Plant effluent may contain. Ensure measures are taken to avoid undermining ongoing and future site cleanup activities.

**Response to I-7-5**

*Ecology is working to ensure that long-term storage, treatment, and disposal of the waste is protective of human health and the environment. Addendum B, Waste Analysis Plan for LERF and 200 Area ETF, requires the generator (i.e., DFLAW) to meet the waste acceptance criteria for LERF and 200 Area ETF. As such, the waste is also ensured to be compatible with equipment at the facility. This modification is not proposing any changes to the waste acceptance criteria. DOE submitted RPP-RPT-62215, LERF Basin 41 Material Compatibility with Wastewater, to show compatibility of the new Basin 41 construction with the constituents in the influent. This included chemical compatibility limits and radiological concerns.*

**I-8: JIM THOMAS****Comment I-8-1**

I appreciate this opportunity to submit comments on the effluent transfer lines. As someone who has studied Hanford's waste issues since 1986, I am very concerned about protecting future generations and the environment. Thank you for considering my comments:

If I understood the information provided at the August 18 public meeting, the PC-5000 will be used as a backup to the WTP primary transfer line. Since the primary line is 4 inches in diameter, then why is the proposed PC-5000 only 3 inches in diameter? This seems that the smaller capacity could cause process backups in the WTP. Ecology should verify that a smaller transfer line will not cause safety or environmental problems before granting this and the LERF permits.

The Department of Ecology should ensure USDOE adequately plans for all necessary infrastructure upgrades, including the three existing LERF basins which have a 20-year design life that expired in 2015.



Ecology should require USDOE to install more robust leak detection. Strict legal compliance with RCRA is insufficient given the sordid history of Hanford's dumping a variety of wastes directly to the soil through the site but especially in the 200 Areas.

Requirements must be made more stringent to protect workers and the environment from the radioactive waste and toxic chemical vapors that may be present in the waste that will be moved through the new transfer lines and stored in the LERF basins.

While I have appreciated this public comment process, the August public meeting was hard to follow at times because there was insufficient attention paid to the big picture of where the facility or action fits with vitrifying Hanford's high-level tank waste. For example, the presentation should have provided the context of the long-term plans for implementing additional upgrades to replace additional aging infrastructure that is part of tank waste management, storage and treatment.

In peace, Jim Thomas

***Response to I-8-1***

*Please see the responses for I-8-2 to I-8-7.*

**Comment I-8-2**

I appreciate this opportunity to submit comments on the effluent transfer lines. As someone who has studied Hanford's waste issues since 1986, I am very concerned about protecting future generations and the environment. Thank you for considering my comments

***Response to I-8-2***

*Thank you for your comment.*

**Comment I-8-3**

If I understood the information provided at the August 18 public meeting, the PC-5000 will be used as a backup to the WTP primary transfer line. Since the primary line is 4 inches in diameter, then why is the proposed PC-5000 only 3 inches in diameter? This seems that the smaller capacity could cause process backups in the WTP. Ecology should verify that a smaller transfer line will not cause safety or environmental problems before granting this and the LERF permits.

***Response to I-8-3***

*The PC-5000 line is an existing permitted line, not proposed. The Basin 41 project proposes to install a section of piping connecting the PC-5000 line to the new Basin 41. This connecting pipe will be the same size as the existing PC-5000 line (3").*

*The 3" backup line will be able to function as a backup line for the transfers from EMF to LERF. This will not cause backups in the WTP.*

*Please see the 242-A Permit Modification for additional information on the PC-5000 line.*

**Comment I-8-4**

The Department of Ecology should ensure USDOE adequately plans for all necessary infrastructure upgrades, including the three existing LERF basins which have a 20-year design life that expired in 2015.

**Response to I-8-4**

*Infrastructure upgrades are outside the scope of this Permit modification. The operational life expectancy for the three existing LERF basins has been extended with the replacement of materials and equipment.*

**Comment I-8-5**

Ecology should require USDOE to install more robust leak detection. Strict legal compliance with RCRA is insufficient given the sordid history of Hanford's dumping a variety of wastes directly to the soil through the site but especially in the 200 Areas.

**Response to I-8-5**

*Ecology shares similar concerns with the public as to the adequacy of leak detection systems for the 4"-WTP-001-M17 transfer line. As a result, Ecology has drafted permit conditions with this permit modification. The draft permit conditions were drafted in response to public comments and require USDOE to upgrade the leak detection systems for this line prior to use. This upgrade will require a permit modification and the public will have an opportunity to review the permit changes and any relevant documentation.*

**Comment I-8-6**

Requirements must be made more stringent to protect workers and the environment from the radioactive waste and toxic chemical vapors that may be present in the waste that will be moved through the new transfer lines and stored in the LERF basins.

**Response to I-8-6**

*USDOE manages the safety onsite and has a rigid work package development which requires all adherence for worker safety requirements.*

**Comment I-8-7**

While I have appreciated this public comment process, the August public meeting was hard to follow at times because there was insufficient attention paid to the big picture of where the facility or action fits with vitrifying Hanford's high-level tank waste. For example, the presentation should have provided the context of the long-term plans for implementing additional upgrades to replace additional aging infrastructure that is part of tank waste management, storage and treatment.

**Response to I-8-7**

*Ecology agrees that big-picture ideas, when appropriate for the decision or issue that is proposed, need to be included in Ecology's public information and DOE's public information. Ecology will work with DOE to propose these topics in the future in public information materials and during public meetings.*

## **O-1: HANFORD CHALLENGE**

### **Comment O-1-1**

Increase Transparency and Clarity in Communications: Permit Modifications are notoriously inaccessible to the public, but this does not need to be the case. In future permit modification public materials like fact sheets and presentations, use plain language to clearly communicate why an action is being taken and how it fits into the bigger picture of ultimate Hanford cleanup goals. For example; long-term plans for implementing additional upgrades to fix and replace aging infrastructure that is part of tank waste management, storage and treatment.

### **Response to O-1-1**

*Ecology agrees that the permit modification should include more information on the reasons for modifying the permit. Ecology will work with USDOE during future modifications to provide our recommendations to ensure this information is included. When the permit modification is Ecology-initiated, we will ensure the public information documents include the larger picture, as appropriate to the decision being proposed.*

### **Comment O-1-2**

Make Relevant Documents Easier to Navigate and Accessible: In the future, please provide a summary of which documents are included in each permit modification package for ease of navigation. Please make sure these materials are available and accessible in an easy to navigate format online.

### **Response to O-1-2**

*Ecology agrees that the information should be clearly displayed. For future modifications that is Ecology-initiated, we will find improvements in organizing and displaying the documents for public review. We will also encourage USDOE to look for improvements to display permit modifications on their webpage. When the permit modification is permittee-initiated, it is our practice to link to the USDOE webpage.*

### **Comment O-1-3**

Include Chemical Vapor Protections: Make sure to include requirements that protect workers from chemical vapor exposures at all facilities and related infrastructure that deal with tank waste. This is a legal requirement under existing environmental, health and safety laws, as well as a commitment made by the DOE and contractors in recent legal resolutions.

### **Response to O-1-3**

*Chemical Vapor Protections are not within the scope of this permit modification. However, USDOE and the contractors have a robust work package development program that considers worker safety as priority.*

### **Comment O-1-4**

Require Protective Leak Inspections: Ensure that the timing and rigor of leak detection inspections are not decreased by the permit modifications for both the basins and transfer lines.

**Response to O-1-4**

*Ecology shares similar concerns with the public as to the adequacy of leak detection systems for the 4"-WTP-001-M17 transfer line. As a result, Ecology has drafted permit conditions with this permit modification. The draft permit conditions were drafted in response to public comments and require USDOE to upgrade the leak detection systems for this line prior to use. This upgrade will require a permit modification and the public will have an opportunity to review the permit changes and any relevant documentation.*

*Ecology will ensure that inspections of the leak detection system is not decreased.*

**Comment O-1-5**

Plan for Additional Infrastructure Upgrades: We appreciate efforts to install new transfer lines to transport the condensed vapors from the evaporated tank waste, and have a backup line for the WTP evaporator. It appears that there are more infrastructure upgrades needed. Ensure planning for all necessary infrastructure upgrades, including the three existing LERF basins which have a 20-year design life that expired in 2015.

**Response to O-1-5**

*Infrastructure upgrades are outside the scope of this permit modification. The operational life expectancy for the three existing Liquid Effluent Retention Facility (LERF) basins has been extended with the replacement of materials and equipment.*

**Comment O-1-6**

Include Plans for Avoidable Problems: Ensure that DOE takes action to avoid startup issues at the Effluent Treatment Facility that takes into consideration unknowns such as what the future Waste Treatment Plant effluent may contain and plans for characterization of that effluent. Ensure measures are taken for safe startup of the ETF so this waste may be safely treated onsite.

**Response to O-1-6**

*Addendum B, Waste Analysis Plan for LERF and 200 Area ETF, requires the generator (i.e., DFLAW) to meet the waste acceptance criteria for LERF and 200 Area ETF. As such, the waste is also ensured to be compatible with equipment at the facility. This modification is not proposing any changes to the waste acceptance criteria. DOE submitted RPP-RPT-62215, LERF Basin 41 Material Compatibility with Wastewater, to show compatibility of the new Basin 41 construction with the constituents in the influent. This included chemical compatibility limits and radiological concerns.*

**Comment O-1-7**

Information Before Approval: Ensure that additional information about leak detection, expired design life, infrastructure upgrades, and WTP effluent characterization are answered and this information is shared with the public prior to approving these permit modifications.

### **Response to O-1-7**

*Ecology shares similar concerns with the public as to the adequacy of leak detection systems for the 4"-WTP-001-M17 transfer line. As a result, Ecology has drafted permit conditions with this permit modification. The draft permit conditions were drafted in response to public comments and require USDOE to upgrade the leak detection systems for this line prior to use. This upgrade will require a permit modification and the public will have an opportunity to review the permit changes and any relevant documentation.*

*Infrastructure upgrades are outside the scope of this permit modification. The operational life expectancy for the three existing LERF basins has been extended with the replacement of materials and equipment.*

*Addendum B, Waste Analysis Plan for LERF and 200 Area ETF, requires the generator (i.e., DFLAW) to meet the waste acceptance criteria for LERF and 200 Area ETF. As such, the waste is also ensured to be compatible with equipment at the facility. This modification is not proposing any changes to the waste acceptance criteria. DOE submitted RPP-RPT-62215, LERF Basin 41 Material Compatibility with Wastewater, to show compatibility of the new Basin 41 construction with the constituents in the influent. This included chemical compatibility limits and radiological concerns.*

## **O-2: HEART OF AMERICA NORTHWEST**

### **Comment O-2-1**

Heart of America Northwest comments on LERF and 200 Area ETF permit are attached. Please note that these are also submitted for the concurrent comment period on 242-A and pipelines to LERF. Heart of America Northwest urges that the permit not be issued without SEPA review and without significant requirements regarding leak detection.

We want to start our comments with a note of appreciation that the comment periods and workshops for these two integrally related permit modifications were integrated. Because the projects are literally interlinked, having one combined workshop and

comment period allowed public to review and comment based on presentations that showed the relationship of the projects, e.g., how the pipelines proposed in one modification (ETF) would bring waste to the new proposed LERF Basin 41. It also enabled the agencies to conduct just one outreach program for both modifications. We hope that the TPA agencies will integrate closely related permit modification comment periods in this manner in the future.

Transfer lines shown to the new Basin 41 from 242-A and LERF are 5000 and 2,380 feet respectively, far more than a mile. Yet, the only leak detection will be at the end of the lines.

LERF Basin 41 was dug out in 1990. Now USDOE proposes to add clay and geotextile liners for a 7.2 million gallon basin. Is this the design that would be chosen if the basin was not already dug out (which was done before USDOE acknowledged that RCRA hazardous waste law permitting applied)? The permit lacks groundwater monitoring provisions.

### **Response to O-2-1**

*Thank you so much for your comments on the coordination of public comment periods with similar decisions or issues. Ecology will hold the second portion of the LERF-ETF Basin 41 Class 3 permit modification concurrently with the 242-A Class 3 permit modification that addresses leak detection. Ecology shares similar concerns with the public as to the adequacy of leak detection systems for the 4"-WTP-001-M17 transfer line. As a result, Ecology has drafted permit conditions with this permit modification. The draft permit conditions were drafted in response to public comments and require USDOE to upgrade the leak detection system for this line prior to use. This upgrade will require a permit modification and the public will have an opportunity to review the permit changes and any relevant documentation.*

*The design for the new surface impoundment using the existing excavation was developed to be compliant with current regulatory requirements and is subject to current regulatory permitting. No designs were developed for alternate locations or different postulated existing conditions. Ecology signed a SEPA Determination of Non-Significance for LERF in 1990. The SEPA checklist anticipated 4 basins with a total capacity of 10 million gallons, so the addition of a new basin isn't something Ecology needed to analyze impacts for.*

*The LERF maintains a groundwater monitoring program in which groundwater is sampled to detect for releases from the facility. Monitoring is performed on a quarterly and semiannually basis. This monitoring program helps prevent migration of contaminated groundwater into the Columbia River. Permit Condition III.3.R.4 requires the Permittees to provide an updated Liquid Effluent Retention Facility Engineering Evaluation report and update as applicable the Addendum D, Groundwater Monitoring Plan prior to receipt of Waste Treatment and WTP waste into the LERF.*

*Permit Condition III.3.R.5 requires the Permittees to install a new groundwater well, representative of the groundwater flow around the LERF Basin 41, and deemed operational and added to the Permit via a Class 2 permit modification. The Class 2 permit modification shall include an updated Addendum D, Groundwater Monitoring Plan, as required by Permit Condition III.3.R.4 prior to receipt of waste water into LERF Basin 41.*

### **Comment O-2-2**

While integrating the two comment periods was a strong positive public involvement step, there are serious shortcomings in the public comment process for the permit modifications, including a failure to follow SEPA:

Ecology's main website for comment periods failed to list this comment period and provide links for commenting or materials: <https://ecology.wa.gov/Events/Search/Listing> (viewed Sept 6, 2020 and to confirm Sept. 8, 2020). Ecology's Nuclear Waste Program website did have the link to the fact sheet and comment submission form.

### **Response to O-2-2**

*The first portion of a Class 3 permit modification is permittee-initiated and would not include a SEPA determination. A SEPA determination would only be provided for Ecology-initiated permit*

*modifications. For the second portion of the Class 3 permit modification for the LERF-ETF Basin, Ecology is providing the following information in support of SEPA:*

*The U.S. Department of Energy submitted a SEPA checklist (dated January 15, 1990) for the construction of four basins at the LERF. Three of those basins are in operation, and this current permit modification authorizes the fourth basin. Ecology made a March 15, 1990 SEPA determination to authorize construction and operation of LERF. A copy of that determination is available upon request to Ecology. Ecology is also relying on the environmental analysis in the Tank Closure and Waste Management (TC&WM) Environmental Impact Statement (EIS) for the current reclassified permit modification. Ecology previously issued a Determination of Significance/Notice of Adoption for the TC&WM EIS environmental analysis of Liquid Waste Processing Facilities (SEPA #202000342 )*

*The Fact Sheet listed a comment submission website and a site to view the permit modification administrative record. Permit modifications out of Ecology's Nuclear Waste Program follow this process.*

### **Comment O-2-3**

The two page fact sheet is devoid of any meaningful information regarding the wastes, quantities, potential impacts, and alternatives. There is no RCRA technical fact sheet provided in any link, nor in either of the permit documents (totaling over 2,000 pages).

### **Response to O-2-3**

*USDOE wrote a public information document, in which they term it a fact sheet in support of the Class 3 permit modification. The first portion of a Class 3 permit modification is permittee-initiated and Ecology is not the lead to develop a technical fact sheet under WAC 173-303-830. In the second portion of a Class 3 permit modification, in WAC 173-303-840, Ecology is responsible to develop a technical fact sheet. Since the first portion of a Class 3 permit modification is permittee-initiated, Ecology's responsibilities are to review the formal draft permit modification for completeness and to perform a technical review. Once Ecology makes a completeness determination and provides a technical review and any deficiencies are provided from the permittees, Ecology will begin to draft a permit to prepare for the second portion of the Class 3 permit modification. At that time, a technical fact sheet is developed and shared for public review.*

### **Comment O-2-4**

Most importantly, Ecology's website and notice did not provide any SEPA documentation to accompany the permit proposal. Building a brand new 7.8 million gallon capacity basin and over a mile of pipelines for waste effluents from High Level Nuclear Waste Tanks and process condensate from the 242-A Evaporator. The public is legally entitled to review the SEPA documentation regarding whether there are potential significant impacts to the environment or human health and whether there are alternatives that would reduce or eliminate potential impacts at the same time the public reviews and comments on the permit. We raised the need to have SEPA documentation (which may have included a threshold determination, Mitigated Determination of Non-Significance or adoption of prior NEPA and SEPA reviews of potential

impacts) in our comments on the initial draft during phase one of the permit modification process. We were told then that SEPA review and documentation would occur and be presented for the final permit modification. The potential for significant impacts is clear from the scale of the proposed projects. However, the applicant (USDOE) and Ecology have failed to provide any SEPA documentation analyzing impacts or showing why they believe there will be no impacts due to adopted mitigation measures.

#### **Response to O-2-4**

*The U.S. Department of Energy submitted a SEPA checklist (dated January 15, 1990) for the construction of four basins at the LERF. Three of those basins are in operation, and this current permit modification authorizes the fourth basin. Ecology made a March 15, 1990 SEPA determination to authorize construction and operation of LERF. A copy of that determination is available upon request to Ecology. Ecology is also relying on the environmental analysis in the Tank Closure and Waste Management (TC&WM) Environmental Impact Statement (EIS) for the current reclassified permit modification. Ecology previously issued a Determination of Significance/Notice of Adoption for the TC&WM EIS environmental analysis of Liquid Waste Processing Facilities (SEPA #202000342).*

#### **Comment O-2-5**

The agencies' fact sheet has one link for documentation regarding the permit, which is to the administrative record for the submission of the 524 page permit for the 242-A Evaporator permit modification, July 8, 2020 (20-ECD-0032), and the link for the 1532 page permit modification submittal for the LERF and 100 Area ETF: <https://pdw.hanford.gov/document/AR-03744>. There are no other links or documents provided for review.

#### **Response to O-2-5**

*Ecology has also raised concerns that the permit modification did not include all the supporting documentation as expected and agreed to in the informal review. Ecology provided comments to the permittees in the technical review in which additional information was requested and provided by the permittees for the second portion of the Class 3 permit modification. In addition, Ecology is proposing additional permit conditions requiring upgrades to the leak detection system for the draft permit modification. Ecology will ensure all relevant documents are included with that future permit modification.*

#### **Comment O-2-6**

Basin 41 was designed and dug out in 1990. It will have two geotextile liners and a bentonite clay - soil mixture base and a "floating" cover. There are no SEPA or NEPA analyses of alternatives, especially for the danger level of these wastes and potential for long term release, or of mitigation measures such as limiting the time for use of the basins. Nor are there analyses of potential impacts from leaks in the pipelines and tanks (or alternative measures to detect and respond to leaks) which the permits would allow to be added.

The potential for leaks is more than hypothetical, and their potential impacts are significant. Ecology acknowledged this at the August 18, 2020 public meeting, in response to a question and comment from Heart of America NW's Gerry Pollet. Indeed, the 242-A Evaporator has not



been operating for two years due to corrosion of a transfer line. This was not disclosed in any materials. Yet there is no SEPA (or NEPA) document to review regarding the potential for leakage, the potential impacts from leakage, or of mitigation measures needed to detect and respond to them promptly.

**Response to O-2-6**

*The U.S. Department of Energy submitted a SEPA checklist (dated January 15, 1990) for the construction of four basins at the LERF. Three of those basins are in operation, and this current permit modification authorizes the fourth basin. Ecology made a March 15, 1990 SEPA determination to authorize construction and operation of LERF. A copy of that determination is available upon request to Ecology. Ecology is also relying on the environmental analysis in the Tank Closure and Waste Management (TC&WM) Environmental Impact Statement (EIS) for the current reclassified permit modification. Ecology previously issued a Determination of Significance/Notice of Adoption for the TC&WM EIS environmental analysis of Liquid Waste Processing Facilities (SEPA #202000342).*

**Comment O-2-7**

Ecology disclosed, in response to a question from Gerry Pollet during the meeting, that a report on leak detection capability was being prepared and was under review as of the August 18, 2020 public meeting on the permits. Heart of America NW's Gerry Pollet requested that the agencies provide the report and place a link to it on the comment page to enable informed public comment. This might have alleviated the failure to prepare any SEPA documentation regarding leak potential and impacts. However, the report was never provided or placed on the website for this comment period.

**Response to O-2-7**

*The leak detection demonstration was provided after the permit modification went out for public review, so the public did not have a chance to review the demonstration. However, Ecology is inserting new permit conditions with this approval requiring upgrades to the leak detection system for the WTP-EMF primary transfer line (4"-WTP-002-M17) . These upgrades will require a subsequent permit modification and Ecology will ensure all relevant information is provided for public review.*

*A SEPA determination would not be provided with a permittee-initiated permit modification.*

**Comment O-2-8**

The only cure is a "do-over." If Ecology does not follow its own requirements to ensure that Ecology officials have SEPA documentation to review accompanying the permit proposal, then why should any other agency? If the public does not have SEPA documentation for this proposal from Ecology, why would other agencies ensure that their permit proposals are accompanied by the agency's SEPA Determinations or EIS?

Ecology can not simply ignore SEPA for a major RCRA permit modification to open up a 7 million gallon basin, over a mile of high level waste pipelines and numerous tanks.

### **Response to O-2-8**

*The first portion of a Class 3 permit modification is permittee-initiated and would not include a SEPA determination. A SEPA determination would only be provided for Ecology-initiated permit modifications. For the second portion of the Class 3 permit modification for the LERF-ETF Basin, Ecology is providing the following information in support of SEPA:*

*The U.S. Department of Energy submitted a SEPA checklist (dated January 15, 1990) for the construction of four basins at the LERF. Three of those basins are in operation, and this current permit modification authorizes the fourth basin. Ecology made a March 15, 1990 SEPA determination to authorize construction and operation of LERF. A copy of that determination is available upon request to Ecology. Ecology is also relying on the environmental analysis in the Tank Closure and Waste Management (TC&WM) Environmental Impact Statement (EIS) for the current reclassified permit modification. Ecology previously issued a Determination of Significance/Notice of Adoption for the TC&WM EIS environmental analysis of Liquid Waste Processing Facilities (SEPA #202000342 )*

### **Comment O-2-9**

#### **Leak Detection Requirements are Inadequate and Do Not Meet Legal Requirements:**

Pipeline PC-5000 will be 5,000 feet - over nine tenths of a mile (.95 mile). The line to transfer process condensate from the Waste Treatment Plant will be 2,380 feet. Yet, USDOE proposes to have just ONE single electronic leak detection point at the end of the pipelines at the Basins. See Permit Sections 4.1.2.1, 4.1.37.3.3, 4.1.51. Ironically, USDOE proposes to remove the words “single point” for detection capability and replace it with “end of line” leak detection. The semantic change is solely to avoid embarrassment of having a permit that allows for “single point” of detection at the end of 5,000 feet of piping.

A leak in the secondary piping (encasement) would render the entire end of line detection point irrelevant. If waste leaks through the primary line, there is a significant chance that: a) it will not flow most of a mile through the secondary pipe to the end point (the waste is not water); and, b) that there will also be a leak in the secondary pipe.

However, the entire leak detection system depends on waste flowing for as much as nine tenths of a mile through the secondary piping to the end point detection.

The capability of the single endpoint electronic leak detection (and visual sight glass backup) is woefully inadequate. At the August 18 meeting, the agencies responded to us that the leak detection limit is 1.5 gals per hour to be captured at end point to be reported in 24 hours. Thus, leaks of up to 36 gallons a day would be allowed to go without discovery or notification. Leakage of these wastes at such large quantities would violate the relevant CERCLA and HWMA leak reporting requirements.

Section III.4.c.4.a provides for visual inspection just once a day at the LERF catch basin if electronic detection is inoperable. If there is any evidence of leakage, the visual inspections should be at least once every eight hour shift. However, transfers should be halted pursuant to a new permit condition if there is any credible evidence of a release or leakage.

Ecology and the public both need to consider a SEPA analysis of alternatives to mitigate the potential for leakage, including installation of additional electronic leak detection systems (using liquid detection and radiation and chemical vapor monitoring). Ecology should not approve the permit until additional leak monitoring and detection capability is determined and added to the permit.

Section III.4.c.4.b of the proposed 242-A permit provides that USDOE would not need to notify Ecology of failure or inoperability of leak detection capability for transfers to LERF Basins 41 or 43 for 90 (ninety) days.

**This must be rejected. The permit should specify that USDOE must immediately notify Ecology when it has information that the leak detection equipment may be inoperable.**

**The permit should specify that no transfers may occur while leak detection is inoperable.**

The permit should also specify that if there is doubt regarding its functionality (e.g., minimum detection or that waste may be leaking) then increased visual inspection of the line as well as the alternative visual leak detection site must occur at least every 8 hours.

The relevant legal requirements for permitting and waste transfer via pipeline require operable leak detection. Going 90 days without even notifying Ecology that the single end point electronic detection is inoperable makes a travesty of the legal requirements.

The permit must set much lower minimum detection limits (hourly, daily, and weekly) and require reporting leaks immediately. Ecology should not be waiving the minimum standard for detection of releases in 24 hours. USDOE proposes (III.4.2.1) to replace a meaningful standard with detection "at earliest possible time." This is meaningless as a permit condition and does not meet legal requirements.

USDOE seeks to have 90 days to demonstrate that it will meet an alternative standard. USDOE has had years to prepare this permit. The permit should set a firm enforceable standard that the public can review and have confidence in the required release detection capability and reporting.

WAC 173-303-64(4)(b) "Containment of Releases" and (4)(c)(ii) require that secondary containment must detect failures of either primary or secondary containment within twenty four (24) hours or earliest practicable time only "if existing detection technologies or site conditions will not allow detection of a release within 24 hours."

Site conditions do not preclude detection of releases within 24 hours.

Detection technologies are readily available to meet the requirement to detect releases in the primary or secondary containment at far lower minimum detection limits than the 1.5 gallons an hour currently proposed.

Indeed, because the wastes being transferred are radioactive, it is (ironically) easier to detect releases using several different technologies. As we comment earlier, additional electronic detection points may easily be added to the pipelines.

Permit section III.4.c.1 does not even include the relevant WAC language providing for an alternative to detection of failure and release within 24 hours ONLY IF the detection

technologies do not exist or site conditions preclude detection. Rather the proposed permit language simply cuts off the full language of the WAC and proposes to waive the standard.

The IQRPE (Meir) at 2.2 states that two leak detection systems for the encasement drain piping systems will be used rather than the one end point actually in the permit.

USDOE seeks approval of a permit with a waiver of the requirements for secondary containment and to notify Ecology of releases from primary or secondary containment within 24 hours. See III.J.2 for transfer lines WTP's EMF to LERF.

This should be rejected. USDOE should be required to meet the 24 hour notification, if not have real time notification required due to the nature of these wastes, the length of the pipelines, etc. If this alternative were available for this facility and transfer lines, Ecology would have to grant the same waiver anywhere in Washington. USDOE, the permit applicant, has a record of failing to notify Ecology in a timely manner of releases. Consideration of the permittee's prior noncompliance for notifications is also highly relevant.

To qualify for the variance requested, WAC 173-303-640(4)(i)(D) requires disclosure and consideration of the characteristics and contents of the wastes in the transfer lines and storage facilities/vaults. USDOE has failed to disclose the waste quantities, characteristics, concentrations for secondary wastes from DFLAW which will be concentrated in EMF and then transferred in the pipelines and units subject to this permit modification. In order to qualify, USDOE must disclose, and Ecology consider, the maximum dangerous waste and radioactive constituent concentrations.

#### **Response to O-2-9**

*Ecology shares the same concern about the adequacy of the leak detection system. Ecology approved the low-point leak detection system in the previous modification, but required USDOE submit a leak demonstration report. USDOE provided the leak demonstration report and Ecology provided comments that the report failed to consider existing detection technologies or site conditions. Ecology believes upgrades to the leak detection systems are feasible and that site conditions do not preclude these upgrades. As a result, Ecology is including permit conditions to require the permittees to provide a leak detection system which has the capacity to detect a leak earlier. These upgrades will require a subsequent permit modification. The public will have a chance to review those upgrades during the public comment review for that modification.*

*See 242-A permit modification regarding permit condition III.4.C.4.b.*

*When Ecology processes the permit modification for leak detection system upgrades, Ecology will consider changing the notification required under permit condition III.3.J.4.b.*

*The permit allows for visual inspection of the sight glass if the electronic system is inoperable.*

#### **Comment O-2-10**

**The sumps and vaults in the proposed permit do not have 100% containment capacity as required by Washington's HWMA and RCRA:**

This is a serious shortcoming for the highly radioactive and dangerous wastes generated and being transferred from DFLAW.

USDOE contends that an internal building floor with no berming is containment for the sump or vaults. This does not meet the RCRA / HWMA requirements and poses a grave risk of worker exposure to dangerous wastes as well as the potential for ultimate escape and release to the environment. Allowing waste to spread over a large area of sealed concrete floor is not containment. This is compounded by use of older equipment and not requiring automatic backflow detection and overflow prevention. Instead the sump relies on visual observation.

**Response to O-2-10**

*The aqueous waste generated from Direct Feed Low-Activity Waste (DFLAW) is process condensate from evaporator overheads.*

*Secondary containment requirements for the tank systems at the 200 Area Effluent Treatment Facility meet the WAC 173-303-640(4)(b), and the container storage areas meet WAC 173-303-630(7) containment requirements. These containment systems have adequate capacity to prevent a release to the environment. The Permit has appropriate controls and practices in place to prevent spills and overflows from the tanks or containment systems.*

*Daily visual inspections are conducted for the above ground portions of the tank systems to detect for corrosion and releases of waste in accordance with WAC 173-303-640(7). Tank system instrument monitoring is also provided for overflow and leak detection as described in Addendum I, Inspection Requirements.*

**Comment O-2-11**

**Reliance on Visual Inspection of sumps, tanks, and collection points and only 1 Electronic Detection is Inadequate and Should be Rejected:**

WAC 173-303-640 (4)(e) requires secondary containment for 100% of the volume of a tank or vault with dangerous waste.

Tank CA-1 has a capacity of 35,600 gallons and Tank C-100 a capacity of 17,800 gallons. There are 33,400 gallons of waste which may be stored in 330 gallon "totes." None of these are being required to meet the legal standard for 100% secondary containment.

The WAC also requires that the system protect against formation of vapors. The wastes include ammonia, VOCs and other hazardous vapor emitting wastes. There are no provisions to control and protect workers from formation and release of vapors in event of a leak or release.

Tank CA-1 is located over the operator platform. In event of a release, vapors are likely to prevent operator access or to result in serious injury and illness. The permit must have provisions to ensure that hazardous vapors do not form from releases. As with containment, USDOE callously assumes that interior spaces will perform as containment despite the obvious serious health hazard if the floors and operator accessible vaults are used as containment.

The lack of 100% containment for the sumps, sump pumps and other collection points and tanks is exacerbated by the legally inadequate proposed reliance on visual inspection (with apparently one point of electronic leak detection). Sump tank 59ATK-3 will only have a "sight

glass to indicate level” and manual pump for overflow protection, instead of automatic cutoff. Reliance on proper following of protocols for visual inspections is particularly inappropriate in event of other upset conditions in the facilities which may interfere with visual inspections, simple operator inattention, and due to a history of the Hanford site contractors even ignoring results of alarms for overflows and leaks (e.g., Tank AY-102). A recording of any overflow or release event is vitally important for permitting and to ensure that a release is reported in a timely manner.

Reliance on a written report following visual inspection is not acceptable. USDOE has failed to specify in the permit how releases will be contained. Rather, USDOE relies on the entire building floor and walls as containment, which would prevent the workforce from entering and carrying out other essential activities or immediate repairs. The failure to address vapors would mean that the workers in the vicinity of a release or re-entering the space would face serious exposure and illness.

Only one tank will also have a manual override instead of all tanks in the event of equipment malfunction. This opens additional routes of potential release. The permit should require manual overrides as well as electronic release notifications and routine inspections.

#### **Response to O-2-11**

*Ecology approved the low-point leak detection system in a previous modification for LERF-ETF, but required USDOE submit a leak demonstration report. USDOE provided the leak demonstration report and Ecology provided comments that the report failed to consider existing detection technologies or site conditions. Ecology believes upgrades to the leak detection systems are feasible and that site conditions do not preclude these upgrades. As a result, Ecology is including permit conditions to require the permittees to provide a leak detection system which has the capacity to detect a leak earlier. These upgrades will need to be permitted prior to waste transfers through the WTP transfer lines.*

*Please see 242-A Permit Modification regarding Tank CA-1.*

#### **Comment O-2-12**

##### **A Groundwater Monitoring Plan is Required and Should be Part of the Permit Now, Not Added Later:**

The LERF permit proposes to add Addendum O for groundwater monitoring at a later date to be determined. As we have shown above, there are significant concerns over the nature of the wastes and potential for leakage from basins or pipelines. Whether appropriate groundwater monitoring requirements will be part of the permit must be answered now to determine if other permit provisions are adequate.

New constituents from DFLAW need to be added to the groundwater monitoring plan along with new wells. Permitting a massive basin without groundwater monitoring is simply not permissible. The considerations of where groundwater monitoring wells are

needed may determine other design elements. This includes fundamentals of whether the dike built in 1990 and plan for soil/bentonite and geotextile are adequate when considering potential migration routes for groundwater monitoring.

“Procedures to Prevent Hazards,” is another required permit element which should be part of this permit at this time, rather than also be deferred to a date to be determined.

**Response to O-2-12**

*LERF maintains a groundwater monitoring program in which groundwater is sampled to detect for releases from the facility. Monitoring is performed on a quarterly and semiannually basis. This monitoring program helps prevent migration of contaminated groundwater into the Columbia River.*

*Permit Condition III.3.R.4 requires the Permittees to provide an updated Liquid Effluent Retention Facility Engineering Evaluation report and update as applicable the Addendum D, Groundwater Monitoring Plan prior to receipt of Waste Treatment and Immobilization Plant (WTP) waste into the LERF.*

*Permit Condition III.3.R.5 requires the Permittees to install a new groundwater well, representative of the groundwater flow around the LERF Basin 41, and deemed operational and added to the Permit via a Class 2 permit modification. The Class 2 permit modification shall include an updated Addendum D, Groundwater Monitoring Plan, as required by Permit Condition III.3.R.4 prior to receipt of waste water into LERF Basin 41.*

*Addendum F "Preparedness and Prevention" was part of the application material that went out for public comment and describes preventative measures.*

**Comment O-2-13**

**Ecology should add a firm closure date for the LERF basins** - which have a life of 30 years (Meir IQRPE), a fifteen year assessment for the newest basin, and five year assessments for the decades old basins. Groundwater monitoring conditions must be part of this permit to have a meaningful system to ensure that there will be evaluation of fitness for use.

**Response to O-2-13**

*WAC 173-303-650, requires design and installation assessment be performed for the structural aspects of the surface impoundment dike. The operational life expectancy for the three existing Liquid Effluent Retention Facility (LERF) basins has been extended with the replacement of materials and equipment. At closure, all the LERF basins will be closed in accordance with the requirements of WAC 173-303-650(6)(a)(i). All equipment, structures, and other material associated with closure of LERF will be decontaminated or removed in accordance with WAC 173-303-610(2).*

*The LERF maintains a groundwater monitoring program in which groundwater is sampled to detect for releases from the facility. Monitoring is performed on a quarterly and semiannually basis. This monitoring program helps prevent migration of contaminated groundwater into the Columbia River.*

*Permit Condition III.3.R.4 requires the Permittees to provide an updated Liquid Effluent Retention Facility Engineering Evaluation report and update as applicable the Addendum D, Groundwater Monitoring Plan prior to receipt of Waste Treatment and Immobilization Plant (WTP) waste into the LERF.*

*Permit Condition III.3.R.5 requires the Permittees to install a new groundwater well, representative of the groundwater flow around the LERF Basin 41, and deemed operational and added to the Permit via a Class 2 permit modification. The Class 2 permit modification shall include an updated Addendum D, Groundwater Monitoring Plan, as required by Permit Condition III.3.R.4 prior to receipt of waste water into LERF Basin 41..*

**Comment O-2-14**

Please disclose the constituents and concentrations in "brine" which was referred to in presentations on October 9 and is the term added to the permit describing wastes to be permitted, e.g., regarding 2025-E containerized wastes to be permitted and stored in addition to dry powder wastes (see, for example, page A.6). Please provide annual quantities and total amounts allowed to be stored. "Brine" sounds as if it is a saltwater solution. Indeed, that is its dictionary definition. "Brine" is not a defined term pursuant to the dangerous waste rules in WAC 173-303-040. Without disclosure of the contents in the permit and fact sheet, USDOE cannot use this term and Ecology cannot have an undefined term with no limitations and description on dangerous waste constituents. Use of the term "brine" is misleading and not permissible without describing the specific constituents. Without these disclosures, it is not possible to comment on adequacy of the permit conditions for storage in a facility which is currently permitted only for storage of dry powder.

**Response to O-2-14**

*The brine concentrations for hazardous chemicals are managed by the waste acceptance process. Prior to wastewater acceptance at LERF and 200 Area ETF, a generator must provide a waste profile with supporting knowledge, data, and documentation. A completed and adequate waste profile is evaluated against the LERF and 200 Area ETF waste acceptance criteria provided in Addendum B, Waste Analysis Plan, to determine whether an aqueous waste stream is treatable. Depending on the source of the treatment campaign, powder or brine generated from the secondary treatment train may require additional treatment (grout) to meet RCRA Land disposal Restrictions (LDRs), and waste acceptance criteria for the RCRA disposal facility [e.g., Integrated Disposal Facility (IDF)].*

*A review of the current wastes being treated at ETF shows that organic constituents are only present in the brine in trace amounts because they are removed by the Main Treatment Train and the Evaporator. All of the RCRA hazardous inorganic constituents are likely to be present at concentrations below 0.1 weight percent. The most prevalent constituents at this time are fluoride, barium, chromium, nickel, and vanadium. Addendum A, Part A Form provides an estimated annual quantity of waste for container storage and treatment. The ETF process operates at a brine production ratio range of 0.015 (gallon brine/gallon feed) to 0.001 (gallon brine/gallon feed) depending on many factors that are evaluated for each process campaign. WTP DFLAW feed is expected to run toward the higher end of the brine ratio.*



### **O-3: HEART OF AMERICA NORTHWEST**

#### **Comment O-3-1**

Heart of America Northwest comments on LERF and 200 Area ETF permit are attached. Please note that these are also submitted for the concurrent comment period on 242-A and pipelines to LERF. Heart of America Northwest urges that the permit not be issued without SEPA review and without significant requirements regarding leak detection.

#### ***Response to O-3-1***

*Thank you for your comment. Please see the responses for O-2-1 to O-2-14.*

## Appendix A. Copies of All Public Notices

Public notices for this comment period:

- Focus sheet
- Classified advertisement in the Tri-City Herald
- Notices sent to the Hanford-Info email list
- Notices posted on Washington Department of Ecology-Hanford's Facebook and Twitter pages



**Comment Period**

July 10 – Sept. 8, 2020

**Virtual Public Meeting**

Aug. 18, 5:30 p.m.  
(see page 3 for details)

**Send comments by  
Sept. 8 to**

<http://nw.ecology.commentinpu.com/?id=hZQTs>

**Administrative Record:**

<https://pdw.hanford.gov/document/AR-03744>

**Contact Information**

Dana Gribble  
(509) 961-5609  
Dana\_C\_Gribble@rl.gov

Daina McFadden, Ecology  
(509) 372-7950  
Hanford@ecy.wa.gov



The U.S. Department of Energy (DOE) is providing notice of a 60-day public comment period on a proposed Class 3 modification to the Hanford Dangerous Waste Permit. This proposed permit modification would allow construction of a new basin (Basin 41) at the Liquid Effluent Retention Facility (LERF), and provide additional tank and container storage and treatment capacity at the LERF and 200 Area Effluent Treatment Facility (ETF).

**Background**

The Hanford Site is located in southeastern Washington state along the Columbia River. The 580-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 and its contractor Washington River Protection Solutions are requesting a Class 3 modification to the LERF and 200 Area ETF operating unit group of the Hanford Dangerous Waste Permit. The LERF and 200 Area ETF are mixed-waste treatment and storage units that treat liquid effluents from operating Hanford cleanup facilities, such as the 242-A Evaporator, and the Waste Treatment and Immobilization Plant’s Effluent Management Facility when it is operational to support treating tank waste using the Direct-Feed Low-Activity Waste approach (see map).



# Class 3 Permit Modification for Construction of Basin 41 at the Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility

## Overview

The Hanford Dangerous Waste Permit establishes requirements to ensure that waste management activities protect human health and the environment.

DOE is proposing a Class 3 permit modification pursuant to [WAC 173-303-830](#), which requires a 60-day comment period, a public meeting, a newspaper notice, and a mailing list notice. This fact sheet is the mailing notice.

## Summary of Changes

If approved, the modification would allow DOE to construct Basin 41 at the LERF, and provide additional tank and container storage and treatment capacity at the LERF and 200 Area ETF.

## Permit Chapters Affected by this Modification

- Permit Conditions
- Addendum A, Part A Form
- Addendum B, Waste Analysis Plan
- Addendum C, Process Information
- Addendum F, Preparedness and Prevention
- Addendum I, Inspection Requirements
- Addendum J, Contingency Plan



The LERF and 200 Area ETF are monitored closely by the operations staff in the 200 Area ETF control room.



Outside the 200 Area ETF building.



# Class 3 Permit Modification for Construction of Basin 41 at the Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility

## Public Involvement

**A 60-day public comment period will begin July 10, 2020, and continue through Sept. 8.** A virtual public meeting will be held Aug. 18, at 5:30 p.m. PT, and will include two separate meetings with brief presentations. The first presentation will introduce the 242-A Evaporator facility modification for connecting the PC-5000 transfer line to Basin 41. The second presentation will introduce the LERF and 200 Area ETF modification for the construction of Basin 41. These two topics are being combined in response to recommendations made by the public to combine topics when it makes sense to do so.

You can view the presentation, hear the speakers and ask your questions. To participate via GoToWebinar, please follow the instructions below:

Visual (presentation only):

Click the GoToWebinar link: <https://attendee.gotowebinar.com/register/2848563455984023821>;

ID #: 903-104-371

Audio:

1. Dial +1 509-372-3087 (local) or +1 800-664-0771 (long distance)
2. Enter Conference ID: 1333#

All comments must be submitted by Sept. 8, in writing by mail or electronically (preferred) to:

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

<http://nw.ecology.commentinput.com/?id=hZQTs> (preferred)

At the conclusion of the public comment period, the Washington State Department of Ecology will address public comments and conduct a 45-day public comment period before issuing a final permit.

Copies of the proposed plan and supporting documentation will be available online during the public comment period in the Administrative Record at <https://pdw.hanford.gov/document/AR-03744>. Hanford Public Information Repository locations are listed at <https://go.usa.gov/xVDTS>.

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

*Please contact Dana Gribble, [Dana\\_C\\_Gribble@rl.gov](mailto:Dana_C_Gribble@rl.gov), (509) 961-5609 at least 10 working days prior to the event to request disability accommodation. DOE makes every effort to honor disability accommodation requests.*



Dana Gribble  
P.O. Box 450, H6-60  
Richland, WA 99352

Daina McFadden, Ecology  
3100 Port of Benton Boulevard  
Richland, WA 99354



**Class 3 Permit Modification for Construction of Basin 41  
at the Liquid Effluent Retention Facility and  
200 Area Effluent Treatment Facility**

**Public Involvement Opportunity**

**We want to hear from you.**



**Comment Period:**

**July 10 – Sept. 8, 2020**

**Public Meeting: Aug. 18, 5:30 p.m. (see page 3 for details)**

**Class 3 Permit Modification Fact Sheet**  
U.S. Department of Energy  
P.O. Box 450, H6-60  
Richland, WA 99352



**From:** [^TPA](#)  
**To:** [HANFORD-INFO@LISTSERV.ECOLOGY.WA.GOV](mailto:HANFORD-INFO@LISTSERV.ECOLOGY.WA.GOV)  
**Subject:** Notice of Upcoming Public Comment Period on Proposed Changes to the Hanford Dangerous Waste Permit  
**Date:** Monday, May 4, 2020 8:08:09 AM  
**Attachments:** [image001.png](#)

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*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 U.S. Department of Energy is holding a 60-day public comment period on a proposed Class 3 permit modification to the Hanford Dangerous Waste Permit. This proposed permit modification is required to construct a new basin (Basin 41) at the Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility.

**The comment period is expected to begin in June, with a public meeting in July.**

The proposed modification and supporting documentation will be available online during the public comment period at the Hanford [events calendar](#), the Hanford [Administrative Record](#), and at the Hanford [Public Information Repositories](#).

A summary fact sheet and details of the public meeting will be provided when the comment period begins.

Questions? Please contact Jennifer Colborn, Mission Support Alliance, at [Jennifer\\_M\\_colborn@rl.gov](mailto:Jennifer_M_colborn@rl.gov), or Daina McFadden, Washington State Department of Ecology, at [Hanford@ecy.wa.gov](mailto:Hanford@ecy.wa.gov).

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**From:** [^TPA](#)  
**To:** [HANFORD-INFO@LISTSERV.ECOLOGY.WA.GOV](mailto:HANFORD-INFO@LISTSERV.ECOLOGY.WA.GOV)  
**Subject:** Learn about two public comment periods to build a new Basin 41 and a transfer line to the 242-A evaporator at Hanford  
**Date:** Friday, July 10, 2020 7:13:41 AM  
**Attachments:** [image001.png](#)  
[LERF-ETF\\_Fact+Sheet\\_Class+3+Basin+41\\_6.30.20+FINAL.pdf](#)  
[242-A+Evaporator\\_Fact+Sheet\\_connect+Basin+41\\_6.30.20+FINAL.pdf](#)

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## THE HANFORD SITE

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

### **Notice of two Related Concurrent Public Comment Periods and a Combined Public Meeting on Proposed Changes to the Hanford Dangerous Waste Permit**

#### **1. Construction of Liquid Effluent Retention Facility Basin 41**

The U.S. Department of Energy (DOE) is providing notice of a 60-day public comment period on a proposed Class 3 modification to the Hanford Dangerous Waste Permit. This proposed Class 3 permit modification is required to construct a new basin (Basin 41) at the Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility.

The proposed Class 3 permit modification and supporting documentation is available online during the 60-day public comment period at the Hanford [events calendar](#), the Hanford [Administrative Record](#), and at the Hanford [Public Information Repositories](#).

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#### **2. Connection of the 242-A Evaporator Facility PC-5000 Transfer line to Basin 41**

The U.S. Department of Energy (DOE) is providing notice of a 60-day public comment period on a proposed Class 2 modification to the Hanford Dangerous Waste Permit. This proposed Class 2 permit modification is required to connect the 242-A Evaporator Facility PC-5000 transfer line to the Liquid Effluent Retention Facility Basin 41.

The proposed Class 2 modification and supporting documentation is available online during the 60-day public comment period at the Hanford [events calendar](#), the Hanford [Administrative Record](#), and at the Hanford [Public Information Repositories](#).

**The comment periods runs July 10 through Sept. 8, 2020.**

**One combined virtual public meeting is scheduled Aug. 18 at 5:30 p.m.**

Visual (presentation only):

Click the GoToWebinar link:

<https://attendee.gotowebinar.com/register/2848563455984023821>;

ID #: 903-104-371

Audio:

1. Dial +1 509-372-3087 (local) or +1 800-664-0771 (long distance)

2. Enter Conference ID: 1333#

Please see both summary fact sheets on the comment periods attached.

Questions? Please contact Dana Gribble, Mission Support Alliance, at [dana\\_c\\_gribble@rl.gov](mailto:dana_c_gribble@rl.gov),

or Daina McFadden, Washington State Department of Ecology, at [Hanford@ecy.wa.gov](mailto:Hanford@ecy.wa.gov).

*To request disability accommodation, please contact Dana Gribble,  
Dana\_C\_Gribble@rl.gov, (509) 961-5609, at least 10 working days prior to the  
event.*

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**To:** [HANFORD-INFO@LISTSERV.ECOLOGY.WA.GOV](mailto:HANFORD-INFO@LISTSERV.ECOLOGY.WA.GOV)  
**Subject:** Update about two public comment periods to build a new Basin 41 and a transfer line to the 242-A evaporator at Hanford  
**Date:** Tuesday, July 21, 2020 3:42:35 PM  
**Attachments:** [image001.png](#)  
[LERF-ETF\\_Fact+Sheet\\_Class+3+Basin+41\\_6.30.20+FINAL.pdf](#)  
[242-A+Evaporator\\_Fact+Sheet\\_connect+Basin+41\\_6.30.20+FINAL.pdf](#)

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## THE HANFORD SITE

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

**Notice of two Related Concurrent Public Comment Periods and a Combined Public Meeting on Proposed Changes to the Hanford Dangerous Waste Permit**  
**Supporting information was added to the 242-A Evaporator administrative record link (details below)**

### **1. Construction of Liquid Effluent Retention Facility Basin 41**

The U.S. Department of Energy (DOE) is providing notice of a 60-day public comment period on a proposed Class 3 modification to the Hanford Dangerous Waste Permit. This proposed Class 3 permit modification is required to construct a new basin (Basin 41) at the Liquid Effluent Retention Facility and 200 Area Effluent Treatment Facility.

The proposed Class 3 permit modification and supporting documentation is available online during the 60-day public comment period at the Hanford [events calendar](#), the Hanford [Administrative Record](#), and at the Hanford [Public Information Repositories](#).

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### **2. Connection of the 242-A Evaporator PC-5000 Transfer line to Basin 41**

The U.S. Department of Energy (DOE) is providing notice of a 60-day public comment period on a proposed Class 2 modification to the Hanford Dangerous Waste Permit. This proposed Class 2 permit modification is required to connect the 242-A Evaporator PC-5000 transfer line to the Liquid Effluent Retention Facility Basin 41.

**The Independent Qualified Registered Professional Engineer Design Assessment for LERF Basin 41 was included in the administrative record for the LERF ETF Class 3 modification noted above. On July 20, the same report was added to the administrative record link for the 242-A Evaporator permit modification for reviewers' convenience. It is located at the end of Attachment 4, Supporting Information.**

The proposed Class 2 modification and supporting documentation is available online during the 60-day public comment period at the Hanford [events calendar](#), the Hanford [Administrative Record](#), and at the Hanford [Public Information Repositories](#).

**The comment periods runs July 10 through Sept. 8, 2020.**

**One combined virtual public meeting is scheduled Aug. 18 at 5:30 p.m.**

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Questions? Please contact Dana Gribble, Mission Support Alliance, at [dana\\_c\\_gribble@rl.gov](mailto:dana_c_gribble@rl.gov), or Daina McFadden, Washington State Department of Ecology, at [Hanford@ecy.wa.gov](mailto:Hanford@ecy.wa.gov).

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**Ecology - Hanford** @ecyHanford · 4h

Two concurrent #Hanford public comment periods held by @HanfordSite/ @RiverProtection (@ENERGY) began today, and will run through Sept. 8.

Check out the details here: [ecology.wa.gov/Waste-Toxics/N...](https://ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods) @EcologyWA @EPANorthwest @EPA



🗨️ 2 ❤️ 2 📌 📺



**Washington Department of Ecology - Hanford**

4 hrs · 🌐

Two concurrent Hanford public comment periods held by the U.S. Department of Energy began today, and will run through Sept. 8.

Check out the details and submit your comments here:  
<https://ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-comment-periods>



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