Response to Comments

Proposed Class 2 Permit Modification for the Waste Encapsulation and Storage Facility

July 6 – Sept. 4, 2022

DEPARTMENT OF ECOLOGY
State of Washington

For the **Nuclear Waste Program**

Washington State Department of Ecology

Richland, Washington

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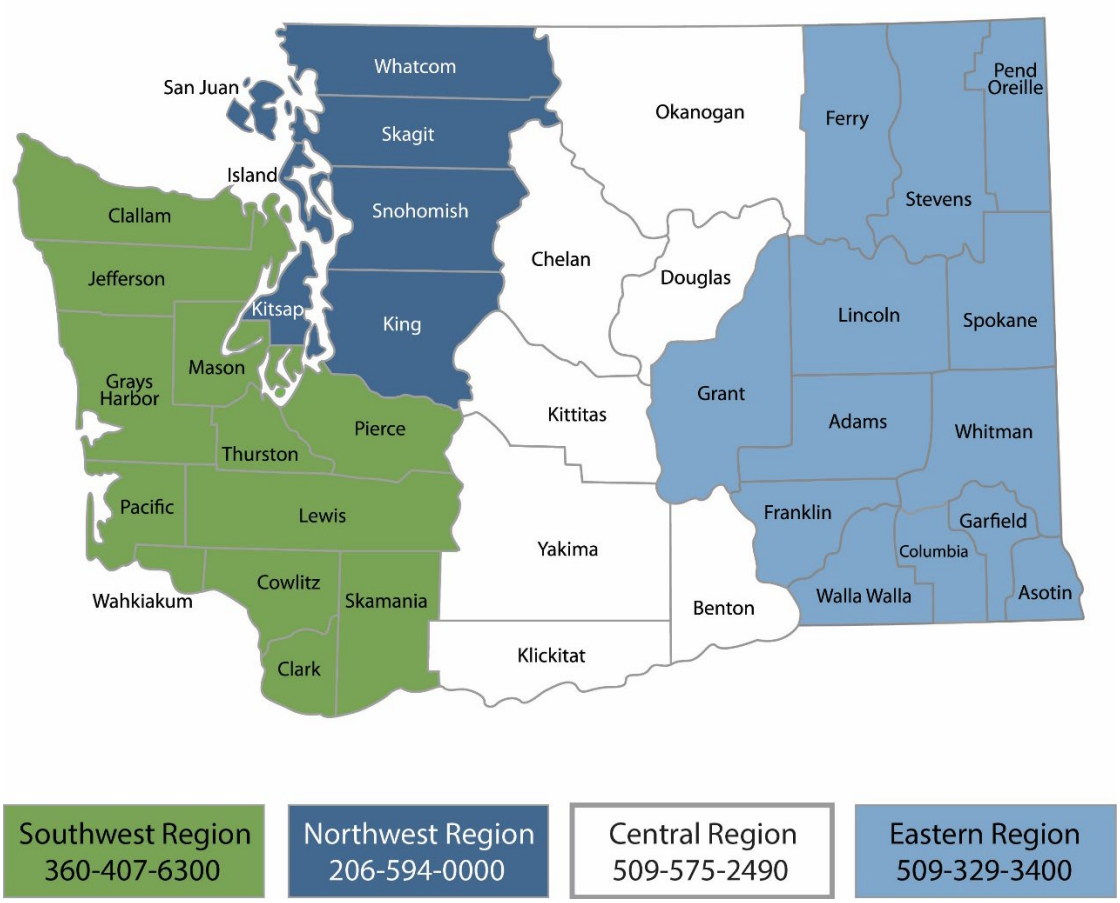
[1] https://apps.ecology.wa.gov/publications/summarypages/2205022.html
[2] www.ecology.wa.gov/contact

Department of Ecology's Regional Offices

Map of Counties Served



Region	Counties Served	Mailing Address	Phone
Southwest	Clallam, Clark, Cowlitz, Grays Harbor, Jefferson, Mason, Lewis, Pacific, Pierce, Skamania, Thurston, Wahkiakum	PO Box 47775 Olympia, WA 98504	360-407-6300
Northwest	Island, King, Kitsap, San Juan, Skagit, Snohomish, Whatcom	PO Box 330316 Shoreline, WA 98133	206-594-0000
Central	Benton, Chelan, Douglas, Kittitas, Klickitat, Okanogan, Yakima	1250 W Alder St Union Gap, WA 98903	509-575-2490
Eastern	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Spokane, Stevens, Walla Walla, Whitman	4601 N Monroe Spokane, WA 99205	509-329-3400
Headquarters	Across Washington	PO Box 46700 Olympia, WA 98504	360-407-6000

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Table of Contents

Introduction

The Washington State Department of Ecology's Nuclear Waste Program (Ecology) manages dangerous waste within the state by writing permits to regulate its treatment, storage, and disposal. When a new permit or a significant modification to an existing permit is proposed, Ecology holds a public comment period to allow the public to review the change and provide formal feedback. (See Washington Administrative Code [WAC] 173-303-830 for types of permit changes.)

The Response to Comments is the last step before issuing the final permit, and its purpose is to:

- Specify which changes, 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	Proposed Class 2 Permit Modification for the Waste Encapsulation and Storage Facility, July 6 – Sept. 4, 2022
Permit	*Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit for the Treatment, Storage, and Disposal of Dangerous Waste*, Waste Encapsulation and Storage Facility Operating Unit Group 14 (OUG 14)
Permittees	US Department of Energy (USDOE) Central Plateau Cleanup Company, LLC
Original Issuance date	Nov. 16, 2020
Effective date	Dec. 3, 2022

To see more information related to the Hanford Site and nuclear waste in Washington, please visit our webpage, Hanford Cleanup[3].

[3] https://www.ecology.wa.gov/Hanford

Reasons for Issuing the Permit

The Waste Encapsulation and Storage Facility (WESF) currently stores 1,936 capsules which contain highly radioactive cesium or strontium mixed with heavy metals and other chemical impurities. From 1974 to 1985, USDOE processed tank waste to convert cesium and strontium compounds to solid salts, cesium chloride and strontium fluoride, which were separated from the liquid waste. This was done to protect storage tanks from the heat produced by relatively short-lived isotopes.

The dried cesium chloride and strontium fluoride were packaged and sealed in approximately 1-liter inner capsules. For secondary containment, the inner capsules were leak checked, sealed in a larger outer capsule, and leak checked again. Remote manipulators in Hot Cells A through G were used to protect workers during production and any necessary handling steps.

Once assembled, capsules were transferred to pool cells where circulated water provides cooling and radiation shielding. A cart, transfer chute, and long grabbing tools allow capsules to be safely moved between Hot Cell G and the pool cells. Radiation monitors confirm that the capsules are not leaking in the pool cells.

Historically, some of these capsules were loaned out for research in food, medical, and sewage sludge irradiation. Concerns with excessive handling of the capsules, especially unnecessary thermal cycling, and a documented leak at a private facility led to all capsules being recalled in 1988. Sixteen cesium chloride capsules that showed signs of bulging, due to improper storage, and seven new capsules produced with loose cesium chloride from the 324 Building were sealed inside larger Type W overpacks for safety.

Hot Cells A through F, which were contaminated during the production process, have been separated into Closing Unit Group 6 and grouted for stability. Hot Cell G has been preserved for handling, inspection, and potential maintenance of capsules. OUG 14 covers the following sections of the WESF: Hot Cell G; Pool Cells 1, 3, 4, 5, 6, 7, and 12; and the Truckport.

The WESF is currently being renovated and modified to begin transferring capsules into Cask Storage Systems (CSSs). Once loaded, each CSS will be moved about 0.5 miles to the new Capsule Interim Storage (CIS). Thick concrete walls, a steel canister, and steel sleeves will be used to group together capsules for protection and shielding within a CSS. Each CSS is about 11 feet tall and 10 feet in diameter, and able to hold up to 132 capsules. Cooling will be provided through a passive ventilation system designed to release hot air from the top and draw in cooler air from the bottom. This design is a modified version of the casks used at commercial nuclear power plants, including Columbia Generating Station, for storing spent fuel rods.

The CSS construction and transfer procedures were authorized by a Class 3 modification issued Nov. 16, 2020. Hot Cell G will be used to group up to six capsules into a Universal Capsule Sleeve (UCS). Each UCS will then be transferred to the Truckport for the final CSS construction steps.

Currently Hot Cell G has a listed capacity of nine capsules. This covers a single UCS and three loose capsules in shielded storage, the transfer cart, and the UCS assembly equipment. The permittees have identified a safe storage configuration for two complete UCSs and two loose

capsules in Hot Cell G, which brings the total capacity to 14 capsules. This Class 2 modification will modify language in the Part A Form and Addendum C to cover this potential scenario. Also, the Training Plan in Addendum G is being updated to address additional staff and courses needed once transfers begin.

Transfer to dry storage at CIS extends the length of time the permittees can safely store capsules on the Hanford Site. Milestone M-092-21 currently requires that the transfer to interim storage be completed by Aug. 31, 2025, because the WESF has exceeded design life and there are no facilities in the Unites States which are permitted for permanent treatment, storage, or disposal of the capsules. The permittees have set a 300-year lifespan as a design criterion for CSS components, but Milestone M-092-00 requires a permanent solution by Dec. 31, 2047.

After the Fukushima Daiichi Nuclear Power Plant in Japan was significantly damaged in a 2011 earthquake, USDOE began evaluating the potential consequences of natural disasters exceeding facility design criteria in the United States. Several aspects of the current WESF design were identified as concerns if an unprecedented earthquake, or similar disaster, did occur. The WESF was designed for a fifty-year lifespan, which has now been exceeded, and the strong radiation field in the pool cells may be leading to degradation of the concrete pool cell walls and floor.

A stainless-steel liner prevents water loss from the pools. In the event that the concrete structure and liner fail, water leaking from the pool cells would need to be continuously replaced. If capsules were damaged in the same event, the cooling water could transfer mixed waste into soil and groundwater. Dry storage will eliminate this risk of rapid transfer by cooling water. Additionally, it would likely be easier to approach and stabilize a damaged cask with a limited number of capsules than the entire inventory of 1,936 capsules exposed in the bottom of the WESF pool cells.

Public Involvement Actions

USDOE encouraged public comment on the draft Part A, Addendum C, and Addendum G during a 60-day public comment period held July 6 through Sept. 4, 2022.

USDOE and Ecology took the following actions to notify the public:

- Mailed a public notice announcing the comment period to 973 members of the public.
- Placed a public announcement legal classified advertisement in the Tri-City Herald on July 5, 2022.
- Emailed a notice announcing the start of the comment period to the 1,315 recipients of the Hanford-Info email list.
- Posted the comment period notice on the Washington Department of Ecology – Hanford's Facebook and Twitter pages.

USDOE held a hybrid public meeting 5:30 p.m. Aug. 16, 2022, on Microsoft teams and at the Richland Public Library. Eleven 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 WESF OUG 14 Permit Modification
- Draft WESF OUG 14 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 WESF Permit modification. The comments and responses are in Attachment 1.

Commenter	Organization
Anonymous	Citizen
Coral Shaffer	Citizen
Jeanne Poirier	Citizen
Richard Honour	Citizen
Nancy Arbuckle	Citizen
Frank Lacey	Citizen
Steven Gary	Citizen
Linda Greene	Citizen
Dave King	Citizen
James Millbauer	Citizen
Tom Carpenter	Citizen
Kelly Norton	Citizen
Sylvie Haven	Citizen
Pamela Howard	Citizen
Susan Crampton	Citizen
Dave King	Citizen
Albert Snow	Citizen
Sara M	Citizen
Judith Klayman	Citizen
Shannon Cram	Citizen
Holly Blomberg	Citizen
Julie Boddy	Citizen
Robert Cherwink	Citizen
Diane Burke	Citizen
Hanford Challenge	Organization
Columbia Riverkeeper	Organization

Attachment 1: Comments and Responses

Description of comments:

Ecology accepted comments from July 6 through Sept. 4, 2022. This section provides a summary of comments that we received during the public comment period and our responses, as required by Revised Code of Washington (RCW) 34.05.325(6)(a)(iii). Comments are grouped by individual, and each comment is addressed separately.

I-1: ANONYMOUS

Comment I-1-1

1) The 2011 incident report about radiation damage to the WESF basin noted radiation doses so severe that the calculated damage to the concrete at the center of the walls between cells near the capsules far exceed even the wetted concrete standards that DOE relies on. As such the concrete in these areas had no structural capability at all in 2011, 11 years ago. The conditions now are worse.

Note: this is not the exterior walls, though it is important information for those. This is also not the basin bottom. That is 23 inches thick (nearly double the thickness of the cell interior divider walls). However it does indicate that a large depth of the concrete is severely degraded. This is import for any risk assessment for canister or other equipment being dropped or impacting the basin bottom). As a rough estimate, with 11 added years of radiation exposure, the aggregate dose is likely about 20-25% greater now than it was even then.

2) When testing is done on the basin concrete (coring or archeological like excavation to assess concrete integrity with depth), there need to be detailed requirements for the gathering of specific data on concrete integrity and strength versus depth into the concrete, along with precise location information which can be related to specific capsule storage and gamma exposure calculations, not just general information. Areal differences in performance of the concrete may be very important as well.

3) It is important to note that this information also applies to the high-activity (and possibly low-activity) high-level waste canister storage in both the HLW, ILAW and any external storage facilities. It is highly likely that the radiation fields in the planned HLW external storage facility will be so high that not only will the concrete pads be destroyed during the facilities operational life (creating all sorts of horrible challenges), but also the oils and greases used in the planned cranes will be destroyed resulting in crane failures IN THE FACILITY which may not re retrievable due to the high radiation fields.

Also, the insulation of the planned motors and wiring, both extending to the motors as well as in the motors will likely be severely damaged and destroyed by the expected radiation exposure. All of these factors need to be very very carefully considered in the facility design. Smaller clusters of storage set on thick stone or stainless steel over rammed earth rather than concrete may be advisable so that any failure is easier to recover from without impacting the entire facility. Alternately - extensive radiation shielding between areas and over areas may allow for safer operation.

4) The impacts for DOE and the entire US nuclear industry are much larger. The data from the concrete at WESF tells us about real world impacts of such radiation exposure on concrete in real conditions with calculable doses. This is rare. And if the adverse impacts are as severe as expected and/or as feared, this data is essential for establishing safe storage of nuclear fuel and materials at thousands of locations all over the nation (and more over the world) to protect the public, not just at Hanford. This is not a problem where taking the "osterich sticking his head in the sand", or three monkeys see-no-evil, hear-no-evil, speak-no-evil approaches will work. Those approaches expose the public to potentially catastrophic risks and actual impacts from

failure and consequent potential Chernobyl scale releases at quite literally hundreds of facilities.

5) Ecology should insist that DOE investigate and submit other data that DOE may have on other facilities which may have experienced radiation exposure related damage or failure. The data and information for these may be classified. Urgent declassification should be pursued to provide this information to Ecology, EPA and DOE Hanford staff. In particular: In 2005 DOE proceeded with the Expended Core Facility Recapitalization Project, requesting money from the Congress to urgently replace the Expended Core Facility in Idaho. That facility stores (stored) 'spent' nuclear fuel from Naval reactors. The radiation dose to concrete in the basin was likely similar to that experienced at WESF. In the request to Congress DOE noted that the basin had begun leaking and that three attempts at repair had failed and the leak had increased. The request also noted the very large daily rate of leakage. This is a harbinger for Hanford.

That data may be directly applicable to analysis of the WESF facility. Previous attempts by the Oregon Department of Energy to have DOE staff talk to the Idaho DOE staff or the US Navy to request that information were all rebuffed. No one at Hanford wanted to ever ask those questions of the Idaho facility staff. That facility though under Navy auspices is owned and operated by USDOE. And in any event, the unitary executive principal applies. DOE needs to ask itself for that information. And if it is classified as expected, any data, information or reports on that issue and causes needs to be urgently declassified to the greatest extent possible and provided to Ecology, EPA, and the Hanford DOE staff for use in assessing WESF.

If the information, photos, and reports cannot be fully declassified, the full classified reports should be made available for Ecology, EPA, and DOE Hanford staff to review with the requisite clearances. If no staff have sufficient clearance, DOE should work to urgently clear management and technical staff for the agencies to review this information for application at WESF and other Hanford facilities and beyond. As this information almost certainly has national and global application for the safe storage of nuclear fuels and radioactive materials and processing facilities, declassification to the greatest degree possible should be a priority.

Response to I-1-1

The pool cells are out of the scope of the current Class 2 modification to increase Hot Cell G capacity. This modification will increase flexibility to respond to events which would potentially slow the transfer of capsules out of the pool cells and into dry storage.

Notwithstanding this, the 2010 evaluation and the March 2014 follow-up by the Office of the Inspector General (OAS-L-14-04) did not determine that there was a risk that the pool cells would fail, outside of a seismic event beyond the design basis for the facility. Such an event is extremely unlikely, based upon the underlying geology of the Hanford site and historical seismic records.

I-2: CORAL SHAFFER

Comment I-2-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. Don't you think that it is time (past time) to deal with the nuclear waste at Hanford? The federal government has had decades now to think about it. Sincerely, Coral Shaffer Yakima, WA 98902 clshaffer77@gmail.com

Response to I-2-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of Washington Administrative Code (WAC) 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022, Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

At this time, the Permittees have not requested that the 2025 milestone for capsule transfer be extended. However, they have indicated that a request is likely due to global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and

training of operators at the full-scale mock-up, currently under construction at the Maintenance and Storage Facility, will potentially confirm how quickly the transfer process can be completed.

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

I-3: JEANNE POIRIER

Comment I-3-1

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Response to I-3-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

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I-4: RICHARD HONOUR

Comment I-4-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. In the first case, "Preventing" added delays for getting the capsules into safer storage for near-term safety is the cardinal challenge at hand, not more politically-driven excuses. The on-going funding and work at WESF must include a formal final action plan, as shall be reviewed and approved by the directly-affected communities, for the perpetual, safe and long-term sequestration of the materials in question, far beyond the impact of any imagined catastrophic event. These materials cannot be stored under any conditions by the methods of the historic and current plans and proposals, and therefore a Number One Priority for the project going forward must be to identify the safest long-term storage of these materials, based on the latest technology and engineering inputs, without inherent delays brought to us by yet another round of conversational planning and false starts. The timebomb is ticking on a major seismic event near or directly under Hanford, and therefore such anticipated event poses a direct death threat to

the local and adjacent populations, stat, or in the not-too-distant future, while Nero fiddles. No one will be able to say after the fact that, "No one knew," for you do know. The greatest danger from these wastes in not necessarily the said wastes of and by themselves, but it is the inept planning and failure to enact a firm action plan that poses the killer threat. The future is upon us, and you must be a key part of it, or go home. Sincerely, Richard C. Honour, PhD The Precautionary Group Sincerely, Richard Honour Kenmore, WA 98028 rhono@precautionarygroup.org

Response to I-4-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

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I-5: NANCY ARBUCKLE

Comment I-5-1

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considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. Sincerely, Nancy Arbuckle San Francisco, CA 94109 crockerbuckle@mindspring.com

Response to I-5-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

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I-6: FRANK LACEY

Comment I-6-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather

than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. "Catastrophic" and "Delay" are the two key words here. Though I live many miles from Hanford, I recognize the impacts of failure encompass the entire Pacific Northwest. This is truly a catastrophic possibility. Clean-up efforts must not be characterized by the term "delay," as they have been for decades. Delay is inexcusable. Our children, their future children and their environment should be protected from a Hanford catastrophe. Sincerely, Frank Lacey Anacortes, WA 98221 flacey67@gmail.com

Response to I-6-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022, Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

At this time, the Permittees have not requested that the 2025 milestone for capsule transfer be extended. However, they have indicated that a request is likely due to global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and training of operators at the full-scale mock-up, currently under construction at the Maintenance and Storage Facility, will potentially confirm how quickly the transfer process can be completed.

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The

Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

I-7: STEVEN GARY

Comment I-7-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. Sincerely, Steven Gary Seattle, WA 98118 gramgary66@gmail.com

Response to I-7-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022, Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

At this time, the Permittees have not requested that the 2025 milestone for capsule transfer be extended. However, they have indicated that a request is likely due to global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and

training of operators at the full-scale mock-up, currently under construction at the Maintenance and Storage Facility, will potentially confirm how quickly the transfer process can be completed.

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

I-8: LINDA GREENE

Comment I-8-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. Please don't delay the transfer to dry storage beyond August 2025. The lives of so many people are affected by what you do. You must honor the commitment to those people by following the timeline you have already laid out in the past. Sincerely, Linda Greene Spokane, WA 99223 greenepeace@gmail.com

Response to I-8-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022, Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial

groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

At this time, the Permittees have not requested that the 2025 milestone for capsule transfer be extended. However, they have indicated that a request is likely due to global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and training of operators at the full-scale mock-up, currently under construction at the Maintenance and Storage Facility, will potentially confirm how quickly the transfer process can be completed.

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

I-9: DAVE KING

Comment I-9-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. Sincerely, Dave King Portland, OR 97203 landd_2@q.com

Response to I-9-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022, Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

At this time, the Permittees have not requested that the 2025 milestone for capsule transfer be extended. However, they have indicated that a request is likely due to global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and training of operators at the full-scale mock-up, currently under construction at the Maintenance and Storage Facility, will potentially confirm how quickly the transfer process can be completed.

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

I-10: JAMES MILLBAUER

Comment I-10-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. After working on the Hanford site for many years and several years at the WESF facility I have seen first hand how the lack of funding has taken a toll on getting these capsules out of this aging facility. Don't delay the transfer of these dangerous capsules to dry storage, fund this project for the safety of the workers and the safety of our community. Sincerely, James Millbauer Sincerely, James Millbauer Kennewick, WA 99336 jpmillbauer@icloud.com

Response to I-10-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022, Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

At this time, the Permittees have not requested that the 2025 milestone for capsule transfer be extended. However, they have indicated that a request is likely due to global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and training of operators at the full-scale mock-up, currently under construction at the Maintenance and Storage Facility, will potentially confirm how quickly the transfer process can be completed.

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

I-11: TOM CARPENTER

Comment I-11-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans

for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. This cleanup project has been repeatedly delayed, and this must not happen again. The consequences of even a small release of the radionuclides stored in WESF would be severe. Stop playing radioactive roulette with Washington State and get these highly radioactive spent fuel components out of this unstable and risky storage configuration before it is too late. Sincerely, Tom Carpenter Anacortes, WA 98122 tom.carpenters@gmail.com

Response to I-11-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022, Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

At this time, the Permittees have not requested that the 2025 milestone for capsule transfer be extended. However, they have indicated that a request is likely due to global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and training of operators at the full-scale mock-up, currently under construction at the Maintenance and Storage Facility, will potentially confirm how quickly the transfer process can be completed.

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

I-12: KELLY NORTON

Comment I-12-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for

considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. Last month's joint announcement by Ecology and Energy was toothless. Enough with vague future-aiming words. PLEASE take ACTION immediately. Sincerely, Kelly Norton Seattle, WA 98117 kjnorton13@gmail.com

Response to I-12-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

At this time, the Permittees have not requested that the 2025 milestone for capsule transfer be extended. However, they have indicated that a request is likely due to global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and training of operators at the full-scale mock-up, currently under construction at the Maintenance and Storage Facility, will potentially confirm how quickly the transfer process can be completed.

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

I-13: SYLVIA HAVEN

Comment I-13-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects

of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. Please spend more time and energy in getting Congress to fully fund the safe and proper disposal of dangerous waste.s Your delay tactics are threatening the area for hundreds of years to come. Sincerely, Sylvia Haven Seattle, WA 98125 sylviahaven@mac.com

Response to I-13-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022, Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

At this time, the Permittees have not requested that the 2025 milestone for capsule transfer be extended. However, they have indicated that a request is likely due to global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and training of operators at the full-scale mock-up, currently under construction at the Maintenance and Storage Facility, will potentially confirm how quickly the transfer process can be completed.

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

I-14: PAMELA HOWARD

Comment I-14-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. The 1,963 capsules containing cesium and strontium have been stored at Waste Encapsulation Storage Facility (WESF) since the mid 1970's. Getting the capsules to dry storage should be the number one remediation priority at Hanford. The basin containing the pools of cooling water has been compromised by gamma radiation emitted by the capsules. It is not known to what degree the basin has been weakened. I urge the government to completely fund this critical project and urge the US Department of Energy and the Environmental Protection Agency to safely complete the dry storage project by 2025. According to estimates the amount of radioactivity stored in the WESF is approximately the same amount released during the 1986 Chernobyl nuclear disaster. Sincerely, Pamela Howard Portland, OR 97210 pamhow48@gmail.com

Response to I-14-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022, Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

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Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

I-15: SUSAN CRAMPTON

Comment I-15-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. This is one more public comment to support attention to addressing WESF cleanup now and not deferring and increasing risks to public and environmental health. Please meet your responsibilities. Thank you. Sincerely, Susan M Crampton Twisp, WA 98856 scrampton@methownet.com

Response to I-15-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022, Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

At this time, the Permittees have not requested that the 2025 milestone for capsule transfer be extended. However, they have indicated that a request is likely due to global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and training of operators at the full-scale mock-up, currently under construction at the Maintenance and Storage Facility, will potentially confirm how quickly the transfer process can be completed.

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

I-16: DAVE KING

Comment I-16-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. Sincerely, Dave King Portland, OR 97203 landd_2@q.com

Response to I-16-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider

whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022, Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

At this time, the Permittees have not requested that the 2025 milestone for capsule transfer be extended. However, they have indicated that a request is likely due to global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and training of operators at the full-scale mock-up, currently under construction at the Maintenance and Storage Facility, will potentially confirm how quickly the transfer process can be completed.

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

I-17: ALBERT SNOW

Comment I-17-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. We must act for the future.NOW Sincerely, Albert Snow Bellingham, WA 98225 abeasis@aol.com

Response to I-17-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022, Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

At this time, the Permittees have not requested that the 2025 milestone for capsule transfer be extended. However, they have indicated that a request is likely due to global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and training of operators at the full-scale mock-up, currently under construction at the Maintenance and Storage Facility, will potentially confirm how quickly the transfer process can be completed.

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

I-18: SARA M

Comment I-18-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans

for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. I have lived downstream from Hanford for my r tire 59 year life in the major metropolitan area of Portland Oregon. The federal government has promised to clean up Hanford and stop the leaking tanks with a permanent solution for over half a century. It is unacceptable that this project remains incomplete. Please prioritize this project t and get it completed as soon as possible. The livability and safety of the entire region and the country depend upon it. Sincerely, Sara M Portland, OR 97201 saramatarazzo@comcast.net

Response to I-18-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022, Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

At this time, the Permittees have not requested that the 2025 milestone for capsule transfer be extended. However, they have indicated that a request is likely due to global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and training of operators at the full-scale mock-up, currently under construction at the Maintenance and Storage Facility, will potentially confirm how quickly the transfer process can be completed.

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

I-19: JUDITH KLAYMAN

Comment I-19-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make

the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. Thanks very much for considering this input. Sincerely, Judith Klayman 1621 E. Garfield St. Seattle WA. 98112

Response to I-19-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022, Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

At this time, the Permittees have not requested that the 2025 milestone for capsule transfer be extended. However, they have indicated that a request is likely due to global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and training of operators at the full-scale mock-up, currently under construction at the Maintenance and Storage Facility, will potentially confirm how quickly the transfer process can be completed.

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

I-20: SHANNON CRAM

Comment I-20-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. Sincerely, Shannon Cram Duvall, WA 98019 shannoncram@gmail.com

Response to I-20-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022, Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

At this time, the Permittees have not requested that the 2025 milestone for capsule transfer be extended. However, they have indicated that a request is likely due to global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and training of operators at the full-scale mock-up, currently under construction at the Maintenance and Storage Facility, will potentially confirm how quickly the transfer process can be completed.

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The

Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

I-21: HOLLY BLOMBERG

Comment I-21-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. Hanford, the most contaminated site in the Western hemisphere sits in a seismically active zone next to a major river. As a resident of Washington State, I beg you to prioritize moving the WESF capsules to dry storage! We must stop kicking the can down the road — Hanford is a ticking time bomb Sincerely, Holly Blomberg Olympia, WA 98513 nurselawyer@gmail.com

Response to I-21-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022, Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

At this time, the Permittees have not requested that the 2025 milestone for capsule transfer be extended. However, they have indicated that a request is likely due to global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested,

Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and training of operators at the full-scale mock-up, currently under construction at the Maintenance and Storage Facility, will potentially confirm how quickly the transfer process can be completed.

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

I-22: JULIE BODDY

Comment I-22-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. PLEASE Sincerely, Julie Boddy Takoma Park, MD 20912 juliemboddy@gmail.com

Response to I-22-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022, Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

At this time, the Permittees have not requested that the 2025 milestone for capsule transfer be extended. However, they have indicated that a request is likely due to global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and training of operators at the full-scale mock-up, currently under construction at the Maintenance and Storage Facility, will potentially confirm how quickly the transfer process can be completed.

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

I-23: ROBERT CHERWINK

Comment I-23-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. Sincerely, Robert Cherwink Sonoma, CA 95476 robertcherwink@icloud.com

Response to I-23-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022,

Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

At this time, the Permittees have not requested that the 2025 milestone for capsule transfer be extended. However, they have indicated that a request is likely due to global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and training of operators at the full-scale mock-up, currently under construction at the Maintenance and Storage Facility, will potentially confirm how quickly the transfer process can be completed.

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

I-24: DIANE BURKE

Comment I-24-1

Dear WA State Department of Ecology Hanford Nuclear Site, Thank you for the opportunity to provide comments on the Class 2 Permit Modification for the Waste Encapsulation Storage Facility. I am very concerned about getting the WESF capsules into dry storage sooner rather than later. If a major earthquake or other event causes the water to drain from the WESF capsule storage pools, it could trigger a catastrophic release of radioactivity that could make the Hanford Site inaccessible for hundreds of years. We can't let that happen. Thank you for considering my comments: -Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. -Don't Delay Transfer to Dry Storage: Work hard to stay on schedule to complete work by August 2025, while ensuring a safe work environment. -Fully Fund WESF: Deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, is completed. -Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of the delays to the 2025 milestone. The eventual dismantling of the WESF is a golden opportunity to carry out studies of the damage to its concrete components from gamma radiation. The data accrued would be critical for risk assessment for many Hanford facilities. Sincerely, Diane Burke Neskowin, OR 97149 ddb777@charter.net

Response to I-24-1

Thank you for your comment. The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider

whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022, Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

At this time, the Permittees have not requested that the 2025 milestone for capsule transfer be extended. However, they have indicated that a request is likely due to global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and training of operators at the full-scale mock-up, currently under construction at the Maintenance and Storage Facility, will potentially confirm how quickly the transfer process can be completed.

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

O-1: HANFORD CHALLENGE

Comment O-1-1

Accelerate Dry Storage Timeline: Hanford Challenge urges the WA Department of Ecology to accelerate movement of the WESF capsules to safer storage to meet the 2025 deadline, while ensuring a safe work environment.

Response to O-1-1

Thank you for your comments. Ecology agrees that transfer of the capsules to dry storage is a high-priority step in safely managing this waste until a permanent disposal option is identified. The Permittees have indicated that a request for an extension to the milestone may be needed as a result of global supply chain and manufacturing delays caused by the COVID-19 pandemic. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and training of operators at the full-scale mock-up, currently under construction at Maintenance and Storage Facility (MASF), will potentially confirm how quickly the transfer process can be completed.

Comment O-1-2

Request a Compliant Budget: Hanford Challenge urges Ecology and USDOE to deliver a unified message on fully funding Hanford cleanup to ensure crucial cleanup work, such as transferring the capsules to dry storage, stays on track. Request funding levels based on projections in the

2022 Lifecycle Scope, Schedule and Cost Report and use the report as leverage to advocate for the funding needed to meet the 2025 milestone.

Response to O-1-2

Ecology thanks Hanford Challenge for their participation in the August 9, 2022, joint letter to President Biden regarding a general need to increase the Hanford Site budget to meet cleanup milestones and prevent additional costs caused by avoidable delays. This letter does not address the cesium and strontium capsules directly, but Ecology agrees that unified messages regarding the importance of cleanup work at the Hanford Site are potentially helpful in ensuring adequate federal funding.

The U.S. Department of Energy (USDOE) has identified that the annual cost for dry storage will be significantly less than current costs at the WESF, due to reduced staffing, maintenance, and energy expenses. Although there still may be logistical or technical issues to resolve before capsules can be safely transferred, this is a case where appropriate funding over the next several years will reduce long-term costs for the Hanford Site.

Comment O-1-3

Include Catastrophic Release Emergency Response Plans: Ensure that robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit. The emergency response plan is even more important in light of potential delays to the 2025 milestone.

Response to O-1-3

Addendum F, Preparedness and Prevention, and Addendum J, Contingency Plan, contain a level of detail which Ecology has accepted as reasonable for addressing potential emergencies. The Permittees have not requested to revise these addenda and Ecology did not identify necessary revisions to support the increase in Hot Cell G capacity.

Comment O-1-4

Apply Data Sets Showing Effects of Gamma Dose on Dry Concrete in Ecology's Evaluation of Structural Conditions and Disaster Prevention: Require that data sets showing the effect of gamma dose on dry concrete are applied to assessments of risk at WESF and other USDOE facilities where concrete structures are exposed to high-dose radiation fields. This data has been excluded and has direct relevance to WESF, the casks DOE has designed for dry storage and the pads the casks will sit upon. Ensure that conditions are safer now and in the future at WESF and other USDOE sites. The data on the concrete conditions at WESF has direct bearing on the calculation of risk from accidents or events at these facilities. Lacking reliable data, it is simply not possible to assure that the risk of catastrophic accident is low. That absence of significant relevant data requires that these risk assessments assert a high likelihood of failure in any adverse event - including from the simple passage of time. Assuming the adequacy of the existing base of data and standards for assessing safety is a dereliction of Ecology's duties.

Response to O-1-4

The pool cells are beyond the scope of this modification and the available data indicates that they are able to safely hold the capsules until they can be moved to dry storage.

Comment O-1-5

Require Structural Adequacy of Concrete for at Least Twice the Intended Design Life of the Facility: The concrete structure at WESF was designed to meet certain structural standards. Those standards apply to holding the building up. Initially they also applied to retaining the water in the basins. With the severe calculated damage to the basin floor and walls, the basin integrity can no longer be assured for its design purposes of retaining the necessary water for cooling and shielding. The structural calculation for any concrete pads used to support the cesium storage casks must also include an evaluation of the aggregate dose to the pad concrete and how they may affect the pads ability to structurally support the weight of the casks and related equipment. DOE routinely uses buildings and structures far beyond their intended design lives. This is not an argument to extend their design lives. However, based on Hanford experience, the calculations must assure the structural adequacy of the concrete for a period at least twice the intended design life of the facility.

Response to O-1-5

Capsule Sorage Area Final Design Report (Project W-135), CHPRC-02538, Revision 0, Requirement Basis 6.2.2 identifies that "Components within CSA shall have a minimum design life of 100 years, or be designed to be easily replaced without relocation of the capsules from the storage configuration." This is approximately four times the expected life of this facility, based upon current milestones.

Concrete pad lifespan is addressed on page 12 of that report, where it is identified that temperature is expected to be the limiting factor in concrete lifespan. CHPRC-02538, Revision 0, was included as a supporting document for issuance of 8C.2020.1F, the Class 3 modification that added CIS to the Dangerous Waste Permit.

Comment O-1-6

Require Concrete Testing of WESF Storage Pools Post Removal of Capsules to Dry Storage: There is a paucity of good real-world data on the dose impacts of gamma exposure on concrete under storage conditions (dry or wet). The dismantlement of the WESF facility once the capsules have been removed provides a unique and rare opportunity to gather the data required to assure the safety of ALL of these facilities, and of the public and the environment. Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is incumbent that Ecology require the collection of concrete testing data at WESF for use in assessments under Ecology's permits to make conditions safer now and in the future. This data is extremely important to improve safety at Hanford and elsewhere.

Response to O-1-6

The Permittees have not communicated a plan to study the WESF pool cell concrete to Ecology. Unless there is evidence that a leak or spill may have occurred, such a study would fall outside the scope and authority of WAC 173-303, Dangerous Waste Regulations. When closure activities are initiated, Ecology and the Permittees will consider whether it is appropriate, safe, and necessary to study the condition of concrete for clean closure. If it is not required for compliance with WAC 173-303-610, the Permittees may decide to voluntarily conduct such a study without addressing it under dangerous waste permitting.

O-2: COLUMBIA RIVERKEEPER

Comment O-2-1

Columbia Riverkeeper (Riverkeeper) submits the following comments on the Proposed Permit Modification for the Waste Encapsulation Storage Facility (hereafter referred to as "proposed permit modification"). Removal of 1936 highly radioactive cesium and strontium capsules from the Waste Encapsulation Storage Facility (WESF) should be one of the highest priority actions at the Hanford Nuclear Site. We urge the Department of Ecology (Ecology) to press the U.S. Department of Energy (Energy) to meet its deadline for removing capsules from WESF.

The consequences of a basin failure at WESF would be catastrophic for the facility, the Hanford Site, and for people and the environment downwind. WESF stores a dangerous amount of radioactivity. DOE estimated in 2017 that capsules stored in WESF contained 46 million curies of radioactivity[1]. The concrete in WESF's basins is beyond its design life after decades of exposure to intense radiation. These deteriorated basins house the water inside WESF—water critical for cooling and shielding the capsules. In the event of a large earthquake, damage to the basins could cause water to leak. Without the water to cool and shield them, the capsules could become exposed and possibly rupture, increasing the radioactivity to lethal levels within WESF.

This could potentially lead to a large airborne release of radioactive contamination, with very harmful consequences for the people nearby and the Columbia River. Ecology has acknowledged the risk, stating

> WESF is beyond its 30-year design lifespan, and the concrete pool cell walls show signs of deterioration due to radiation exposure. At WESF, active cooling and water circulation is necessary to dissipate the heat generated by capsules. A spill or release would create a significant volume of contaminated water to clean. If the pools were breached in an event such as an earthquake, it might leave the capsules uncooled and unshielded[2].

Energy must move quickly to reduce the risks at WESF by removing capsules to dry casks and moving the casks to the Capsule Storage Area (CSA). Tri-Party Agreement Milestone M-092-021 requires Energy to complete the transfer of the cesium and strontium capsules from WESF to the CSA within three years, by August 31, 2025. In the permit modification, Energy proposes to add a facility personnel position, a change that will hopefully facilitate efficient progress towards meeting the TPA milestone. We support the addition of staff and urge Energy to fully fund and support the effort to remove capsules from WESF to safer dry storage. In this respect, the proposed permit modification appears to be a positive step.

We urge Energy to remove capsules to dry storage as quickly and safely as possible. The proposed modification will allow Energy to store fourteen capsules in WESF's G Cell instead of

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[1] Federal Register. 2018. Amended Record of Decision for the Management of Cesium and Strontium Casules at the Hanford Site. https://www.federalregister.gov/documents/2018/05/18/2018-10643/amended-record-of-decision-for-the-management-of-cesium-and-strontium-capsules-at-the-hanford-site

[2] Washington Department of Ecology. November 2020. Response to Comments Waste Encapsulation and Storage Facility Class 3 permit modification. https://apps.ecology.wa.gov/publications/documents/2005026.pdf. p. 7.

the previously established limit of nine. Energy states in its fact sheet, "[t]he proposed modification supports the move to dry storage by providing WESF more flexibility to safely manage the capsules during the transfer process." During the August public meeting regarding the permit modification, Energy indicated that the storage of five additional capsules would allow Energy to manage the loading of multiple universal capsule sleeves (UCS) with two additional capsules allowed in G Cell. Each capsule may contain roughly 20,000 curies of radioactive material, based on Energy's estimate of 46 million curies for the total capsule inventory at WESF. Adding more than 100,000 curies of radioactivity to an already highly radioactive G Cell environment only makes sense if it reduces the overall risk of capsules languishing in aging concrete basins by safely facilitating their removal to dry storage.

We urge TPA agencies to avert delay as much as possible in removing capsules from WESF. According to Ecology's latest inspection report for WESF, Energy's Derek Cline indicated that Energy would be seeking to modify the milestone due date of August 31, 2025 for removing capsules from WESF to dry interim storage[3]. During the public meeting for the proposed permit modification, Energy indicated that they do not anticipate completing the necessary work at WESF prior to the milestone due date. Energy also stated that the work may be delayed by more than one year. Energy should not prolong the risk at WESF, and Ecology should not permit Energy to do so. Energy indicated that it would take one and a half months to load each cask, and so the process of removing and loading capsules must begin as soon as possible to reduce the risk at WESF. Energy should be focused on fully funding and executing the work as soon as possible.

Response to O-2-1

Thank you for your comments.

Ecology agrees that transfer of the capsules to dry storage is a high-priority step in safely managing this waste until a permanent disposal option is identified. If a milestone extension is requested, Ecology will consider whether the delay was avoidable with proper funding and whether it is possible to safely make up for any time which may have been lost. Testing of equipment and training of operators at the full-scale mock-up, currently under construction at MASF, will potentially confirm how quickly the transfer process can be completed.

Ecology agrees that properly funding cleanup efforts at the Hanford Site is important for protection of human health and the environment. In many cases, delaying necessary work is more expensive due to ongoing maintenance and/or stabilization costs. On August 9, 2022, Ecology and ten other regulatory, environmental advocacy, and local commercial/industrial groups sent a joint letter to President Joseph Biden addressing the importance of ensuring federal funding is sufficient.

As noted in this comment, increasing allowed capacity from 9 to 14 capsules significantly increases the potential radiation inventory in Hot Cell G. However, Hot Cell G is already inaccessible to workers when any capsule is outside of shielded storage.

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[3] Washington Department of Ecology. July 28, 2022. Dangerous Waste Compliance Inspection on March 31, 2022, at the Waste Encapsulation and Storage Facility (WESF). https://pdw.hanford.gov/document/AR-20815

High-capacity scenarios for Hot Cell G involve at least one completed UCS, due to limited locations to place individual capsules. The UCS adds an additional layer of containment and creates a single object to be handled, which are positives compared to large numbers of loose capsules.

If the Permittee constructs equipment to safely hold two UCSs, the operational flexibility may reduce potential delays in capsule transfer. Based upon this, and the fact that there will not be an increase in the number of loose capsules, Ecology determined that the capacity increase was reasonable.

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

THE HANFORD SITE

PUBLIC COMMENT PERIOD

Proposed Class 2 Permit Modification for the Waste Encapsulation and Storage Facility

Fact Sheet

GET INVOLVED

Comment Period
July 6 – Sept. 4, 2022

Public Meeting
Aug. 16, 2022, at 5:30 p.m. PT
(see details on page 3)

Send comments by Sept. 4, 2022, to
https://bit.ly/3NQyFg9

Questions?

Jennifer Colborn, DOE
(509) 376-5840
Jennifer.Colborn@rl.doe.gov

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

The Waste Encapsulation and Storage Facility is located in the 200 East Area of the Hanford Site.

The U.S. Department of Energy (DOE) is holding a 60-day public comment period on a proposed Class 2 modification to the Hanford Dangerous Waste Permit. This proposed modification would increase the storage capacity for a radioactive hot cell in the Waste Encapsulation and Storage Facility (WESF) and update the Facility Personnel Training Plan.

Background

The 580-square-mile Hanford Site in southeastern Washington State was created in 1943 as part of the Manhattan Project to produce plutonium for the nation's defense program. Today, Hanford's primary mission is treating tank waste through the Direct-Feed Low-Activity Waste Program and risk reduction on the Central Plateau, while also conducting site operations that enhance the safety of our workforce and the public and reduce environmental risks.

The WESF is in the 200 East Area of the Hanford Site. The facility houses 1,936 radioactive cesium and strontium capsules stored in an underwater basin. While the capsules are currently in safe storage in the basin, work is underway to install a system in WESF to transfer the capsules from the basin into engineered dry casks, and then transport them to a nearby concrete pad for safe interim storage.

Moving the capsules to dry storage not only eliminates a longer-term risk of a radioactive release in the unlikely event of a loss of water from the basin, but also will enable the planned deactivation of the aging WESF building and save as much as $6 million in annual operating costs.

Public Comment Period for Proposed Class 2 Permit Modification for the Waste Encapsulation and Storage Facility

Overview

The Hanford Dangerous Waste Permit establishes requirements to ensure waste management activities protect human health and the environment. DOE is proposing a Class 2 permit modification pursuant to Washington Administrative Code (WAC) 173-303-830, which requires a 60-day public review process that includes a public meeting, a newspaper advertisement announcing the comment period, and this fact sheet.

Summary of Changes

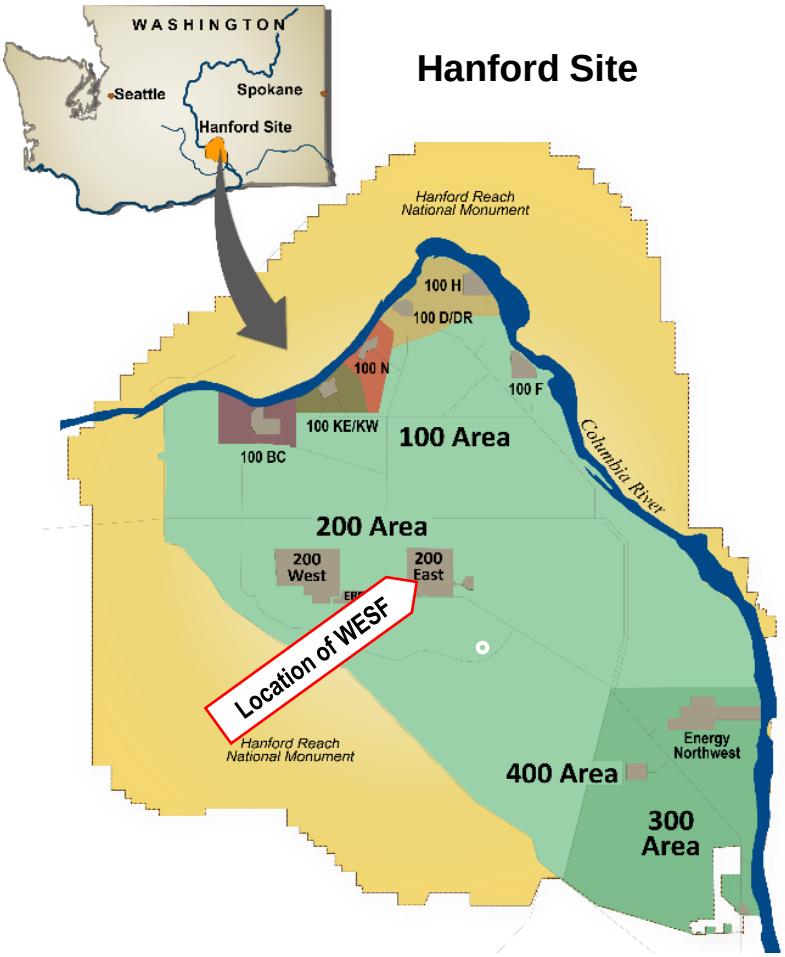
The DOE and contractor Central Plateau Cleanup Company are requesting a Class 2 modification to the WESF chapter of the Hanford Dangerous Waste Permit to increase the storage capacity of G Cell — a radioactive hot cell inside WESF — from nine to 14 capsules.

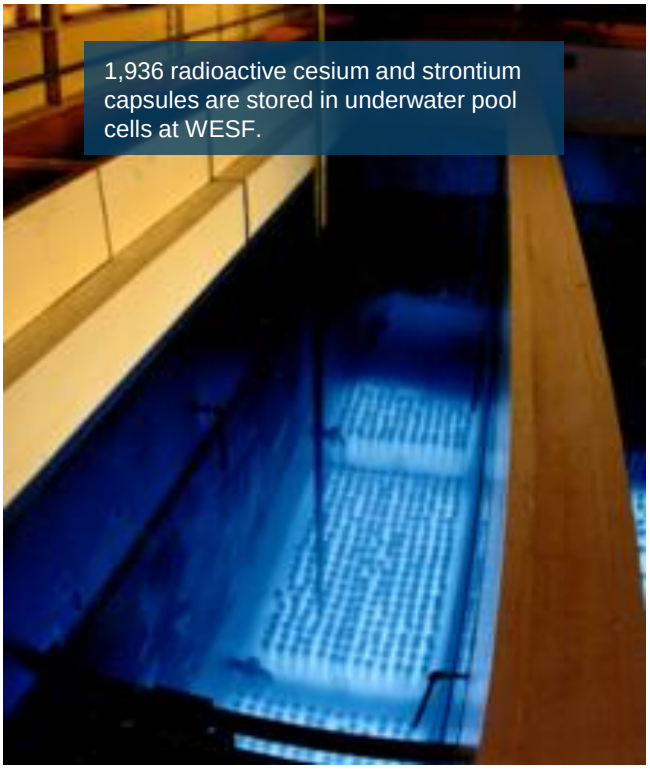
Transfer of the capsules to the dry casks will go through G Cell. The proposed modification supports the move to dry storage by providing WESF more flexibility to safely manage the capsules during the transfer process.

Other proposed changes include updating permit Addendum G, "Training," to add a facility personnel position.

A permit modification is required from the Washington State Department of Ecology to allow for these changes.

To learn more about the capsule transfer process, watch the animation video at https://bit.ly/3FVi346.




1,936 radioactive cesium and strontium capsules are stored in underwater pool cells at WESF.

Public Comment Period for Proposed Class 2 Permit Modification for the Waste Encapsulation and Storage Facility

Public Involvement

A 60-day public comment period will be held from July 6 through Sept. 4, 2022. A public meeting will be held at 5:30 p.m. PT on Aug. 16 at the Richland Public Library, 955 Northgate Drive. The meeting will include a virtual option to allow participants to view the presentation, hear the speakers and ask questions. To participate via Microsoft Teams, please follow the instructions below:

Join on your computer or mobile app
Click here to join the meeting
https://bit.ly/3FZnwH5

Join with a video conferencing device
197920091@teams.bjn.vc
Video Conference ID: 114 870 754 6

Or call in (audio only)
+1 509-931-1284 United States, Spokane
(833) 633-0875 United States (Toll-free)
Phone Conference ID: 512 778 719#

All comments must be submitted by Sept. 4, 2022, in writing by mail or electronically (preferred) to:

Washington State Department of Ecology
3100 Port of Benton Boulevard
Richland, WA 99354
eComments (preferred): https://bit.ly/3NQyFg9

At the conclusion of the public comment period, the Washington State Department of Ecology will address public comments and issue a final permit.

Copies of the proposed permit modification and supporting documentation will be available online during the public comment period on the Hanford public involvement website at https://go.usa.gov/xVmew, in the Administrative Record at https://go.usa.gov/xJ8sf, and in the Hanford Public Information Repositories at https://go.usa.gov/xVDTS.

Questions? Please contact Jennifer Colborn, DOE, at Jennifer.Colborn@rl.doe.gov.

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

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

Jennifer Colborn, DOE
P.O. Box 450, H6-60
Richland, WA 99352

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

Public Comment Period for Proposed Class 2 Permit Modification for the Waste Encapsulation and Storage Facility

Public Involvement Opportunity

We want to hear from you on the proposed changes to the Hanford Dangerous Waste Permit

Comment Period:

July 6 – Sept. 4, 2022
Public Meeting: Aug. 16, 2022, 5:30 p.m. PT (see page 3 for details)

Proposed Class 2 Permit Modification for the Waste Encapsulation and Storage Facility
U.S. Department of Energy
P.O. Box 450, H6-60
Richland, WA 99352

How abortion and mental health intersect: Experts weigh in

BY HANNAH FURFARO AND MICHELLE BARUCHMAN
The Seattle Times

Although abortion is legal in Washington, Lauren B. Simonds can quickly list ways Washingtonians – and those who come here for abortions – will be affected mentally and emotionally as abortion policy heads back to the states.

Simonds has a unique understanding of how the abortion debate intersects with mental health. She used to run two clinics that provided abortions, and for three years she led the abortion advocacy organization NARAL Pro-Choice Washington. For the past decade, she has been the executive director of the Washington chapter of the National Alliance on Mental Illness.

"Just this decision itself causes anxiety for people," she said of the recent Supreme Court ruling that ends the national right to abortion. As abortion providers across Washington brace for an influx of patients, she added, "I can only imagine the stress and anxiety that abortion providers are feeling."

To better understand the ways the abortion decision intersects with mental health, The Seattle Times Mental Health Project spoke with legal experts and clinicians, reviewed various states' new abortion laws and compiled scientific studies. We found that although some things are clear – like where the science stands on abortion and mental health – other questions are subject to how state legislators act, how people vote and how courts decide to enforce new legal standards.

1. What does research tell us about mental health and abortion?

The most significant research on mental health and abortion comes from the landmark Turnaway Study, which spanned five years, included nearly 1,000 participants at 30 facilities and examined the consequences of being denied an abortion. The study compared people who were able to access abortion to those who couldn't because they'd passed the facility's gestational age limit.

The study found having an abortion wasn't tied to mental health problems. Several other studies, including a 2008 report from the American Psychological Association, confirm this finding, though there's evidence that having an abortion can lead to a mix of emotions: Some women report feeling sadness, grief or loss while others report relief. Both the Turnaway and APA studies also suggest a person's prior history of mental health concerns – not whether they received an abortion – are a predictor of their later mental well-being.

But the effects of being turned away are broad: Those denied an abortion were more likely to have serious health problems, raise children alone without the help of family and be unable to pay for basic needs like food. When it came to participants' mental health, those turned away experienced more symptoms of short-term anxiety and low self-esteem. Those symptoms largely resolved over time, and by the end of the study, the mental well-being of both those who received and were denied abortion had improved.

A handful of other studies suggest that in countries with abortion restrictions, like El Salvador, teenage pregnancy is tied to a heightened risk of suicide. Studies in Bangladesh and Kenya have similar findings.

2. States with abortion bans have exceptions when a pregnant person's life is at stake. Are mental health concerns, like suicide risk, considered?

Most states' new abortion laws, including those in North Dakota and Mississippi, make general exceptions when the life of the pregnant person is threatened. But many of these laws are vaguely worded and don't specifically call out suicidality as a reasonable exception to their abortion bans.

Lawmakers in some states, including Idaho and Tennessee, seemed to have foreseen the possibility that banning abortion could cause some pregnant people to experience suicidal thoughts, actions or other serious mental health concerns. Yet these states don't offer exceptions for mental illness or suicidality.

Instead, both states' trigger laws expressly state that a pregnant person's threat to harm themselves is not a suitable defense for an abortion provider facing criminal charges. In other words, it's illegal for a physician to provide an abortion to a patient who threatens to kill themselves if they can't terminate their pregnancy.

The Tennessee law also offers no exceptions for incest or rape. Victims of these crimes are significantly , according to a large body of research.

Legal advocates for abortion who are following Idaho's ban said a lack of protection for suicidal people contradicts the state's stated interest in protecting fetal life.

"It serves no purpose whatsoever because it results in the death of the pregnant person and the fetus," said Kim Clark, senior attorney for reproductive rights, health and justice at Legal Voice in Seattle.

Gemma Collins, a licensed clinical social worker and psychodynamic psychotherapist in Seattle, sees the merits of having an exception for mental health conditions but pointed out how it could backfire.

"If you're documented as having PTSD, anxiety, bipolar disorder, depression and if we've defined those things as dangerous to your life as a way to get access to abortion, then what are we doing? And how does that impact your right to bear children in the future?"

3. Will new laws compel providers to share information about patients who disclose an abortion or intent to have one?

Legal experts and Washington's mental health professional associations are currently examining this question. The issue is especially important since Washington providers now have more access to out-of-state patients than ever before. Washington recently joined a multistate compact that allows licensed psychologists here to offer telehealth appointments to patients in all other compact states, including several with strict abortion laws.

On Thursday, a group of the nation's psychologists affiliated with the American Psychological Association discussed how the decision could affect cross-border care. Topics included whether states will consider abortion child abuse, which could have ripple effects for mandatory reporters like mental health professionals, said Samantha Slaughter, director of professional affairs for the Washington State Psychological Association.

In general, psychologists and other medical professionals are bound and protected by patient privacy laws. That means they should be protected from sharing clinical notes or a patients' records with state authorities, including those outside of Washington.

But federal law offers few protections if law enforcement gets a court order for patient records, which is why some states, like Connecticut, are passing legislation that prevents government and health providers from participating in out-of-state investigations.

On Thursday, Gov. Jay Inslee issued a directive that prevents the Washington State Patrol from cooperating in such investigations.

"There's nothing the state of Washington can do to stop a criminal or civil case in another state," said Clark, of Legal Voice. "What the state can do, and I think the governor is looking into, is ensuring that Washington to the extent possible is not complicit in those investigations."

4. Are Washington mental health providers planning to make any changes to how they document or conduct therapy sessions?

Some say they're considering changes.

Lesli Desai, a licensed independent clinical social worker in Seattle who specializes in therapy for pregnant and postpartum women, has talked with other clinicians about how they will take notes in future sessions.

They follow standards from the Washington Administrative Code, but, "everybody has their own style and technique," she said. "Some therapists are very detailed in what they document and some therapists, either by their choice or by client choice, take little to no notes and documentation."

She said some clinicians are thinking about launching their practice as both therapy and life coaching because there are fewer regulations for life coaches.

"Will it be safer to do life coaching versus therapy because it's unregulated?" she said. "How do we ethically and morally continue to serve in ways that we believe are important and that we value but also protect our licenses and protect our clients from prosecution?"

5. What are Washington mental health providers hearing from their clients?

Alicia Ferris, a licensed mental health counselor in Olympia specializing in reproductive health, said an individual's mental health can be affected when personal medical decisions become the subject of a public debate loaded with stigma and judgment.

She also said short-term effects may differ from long-term effects, vary from person to person and change over time. For example, someone who had an abortion at 16 may feel significant relief, but new emotions can surface if, at 35, they experience infertility.

Desai said she has already seen clients bringing this issue up and expects that to grow.

"I think we may see an influx of clients who want to process this. It is definitely triggering for clients who have any form of this in their history," Desai said.

Providers, Desai and Ferris said, need to make it clear where they stand on abortion rights and have the appropriate training to help clients.

Gladys Rodriguez, a licensed associate therapist in Seattle, said in an email that she predicts anxiety and depression will increase in women.

"I expect PTSD cases to absolutely increase whether from carrying an unplanned pregnancy, labor and delivery, or from an already existent diagnosis of PTSD," Rodriguez said.

Slaughter noted that mental health providers are experiencing a range of emotions, too.

"Just when you didn't think you could take any more there's something else that you are having to manage," she said. "Psychologists and mental health clinicians are no different from anyone else."

7 people escape Tri-Cities area house fire July 4, but 2 were injured

BY TRI-CITY HERALD STAFF

Two adults were taken to the hospital after a fire broke out at a house in the Desert View Manufactured Home Community in West Richland Monday morning.

Nine people live in the double-wide manufactured house, with two at work and the others inside when the fire started about 6:30 a.m., said Chief Paul Carlyle of Benton County Fire District 4.

Five of the seven people inside, who included adults and children, were evaluated for injuries, Carlyle said.

Information about the injuries of the two adults taken to a hospital was not immediately available on July 4.

The house, at 145 N. 66th Ave. near Desert View Drive, was a total loss.

The origin and the cause of the fire had not been determined on Monday.

Annette Cary: 509-416-6136, @HanfordNews

Thousands of kids come together for National Boys and Girls Club week in Tri-Cities

BY ALEXANDRIA OSBORNE
aosborne@tricityherald.com

More than two dozen clubs came together in the Tri-Cities to celebrate National Boys and Girls Club week. The week-long event saw community members highlighting local Clubs supporting youth in their communities. Clubs throughout Benton and Franklin counties wrapped up their celebrations Friday.

There are 27 Boys and Girls Clubs throughout Benton and Franklin counties serving over 2,200 youth each year. They hosted special programs and activities this week as part of the event, according to a news release.

"National Boys and Girls Club week is an opportunity for clubs across the nation to celebrate youth development and investing in kids all at the same time," said Brian Ace, Benton and Franklin counties Boys and Girls Club executive director.

Ace said there were multiple activities for youth to celebrate the week, such as a pin and collage decorating activity on Monday and a soccer tournament on Tuesday.

Each club in Tri-Cities adds their own aspect of celebration to their activities, and adds fun for the adults working for the clubs as well. Activities included a lip sync contest between staff, judged by kids in the program.

National Boys and Girls Club Week serves almost like a spirit week for youth and staff with people dressing up and prizes being handed out, Ace said.

In previous years, Ace has enjoyed seeing different sites get together and collaborate with each other.

Ace said that often the programs exist in their own little bubble, but club week lets kids come together with teens and elementary aged kids they wouldn't normally interact with to celebrate and have fun.

"That's probably the most rewarding thing that I see over the years," he said.

Ace said one of his passions is working with children and he enjoys watching staff encourage and invest in members of the Boys and Girls Club. It's also important to him to create an open, safe and inclusive environment.

"Kids just feel celebrated, families feel celebrated, our staff feels celebrated," he said.

From:	Washington Department of Ecology
To:	McFadden, Daina (ECY)
Subject:	Prenotice of Comment Period for a Proposed Class 2 Permit Modification for the Waste Encapsulation and Storage Facility
Date:	Wednesday, June 1, 2022 9:18:09 AM

THE HANFORD SITE

Notice of Upcoming Public Comment Period for a Proposed Class 2 Permit Modification for the Waste Encapsulation and Storage Facility

The U.S. Department of Energy (DOE) is planning a 60-day public comment period on a proposed Class 2 modification to the Hanford Dangerous Waste Permit for the Waste Encapsulation and Storage Facility (WESF).

The comment period is expected to begin in July 2022, with a public meeting in August.

The WESF is in the 200 East Area of the Hanford Site. The facility houses 1,936 radioactive cesium and strontium capsules stored in an underwater basin. While the capsules are currently in safe storage in the basin, work is underway to install a system in WESF to transfer the capsules from the basin into engineered dry casks, and then transport them to a nearby concrete pad for safe interim storage. Moving the capsules to dry storage not only eliminates a longer-term risk of a radioactive release in the unlikely event of a loss of water from the basin, but also will enable the planned deactivation of the aging WESF building and save as much as $6 million in annual operating costs.

Transfer of the capsules to the dry casks will go through G Cell, a radioactive hot cell inside WESF. The DOE and contractor Central Plateau Cleanup Company are requesting the permit modification to increase the storage capacity of G Cell from nine to 14 capsules. This modification supports the move to dry storage by providing WESF more flexibility to safely manage the capsules during the transfer process.

Other proposed changes include updating permit Addendum G, “Training,” to add a facility personnel position.

A permit modification is required from the Washington State Department of Ecology to allow for these changes. The proposed modification and supporting documentation will be available online during the public comment period on the Hanford events calendar, the Hanford Administrative Record, and at the Hanford Public Information Repositories.

See this animation to learn more about the capsule transfer process. Additional information, including a summary fact sheet, will be provided when the comment period begins.

Questions? Please contact Jennifer Colborn, DOE, at Jennifer.Colborn@rl.doe.gov or (509) 376-5840.

From:	Washington Department of Ecology
To:	McFadden, Daina (ECY)
Subject:	Public comment period and hybrid meeting for the Waste Encapsulation Storage Facility
Date:	Wednesday, July 6, 2022 7:11:49 AM

THE HANFORD SITE

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

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

The U.S. Department of Energy (DOE) is holding a 60-day public comment period on a proposed Class 2 modification to the Hanford Dangerous Waste Permit for the Waste Encapsulation and Storage Facility (WESF).

The WESF is in the 200 East Area of the Hanford Site. The facility houses 1,936 radioactive cesium and strontium capsules stored in an underwater basin. While the capsules are currently in safe storage in the basin, work is underway to install a system in WESF to transfer the capsules from the basin into engineered dry casks, and then transport them to a nearby concrete pad for safe interim storage. Moving the capsules to dry storage not only eliminates a longer-term risk of a radioactive release in the unlikely event of a loss of water from the basin, but also will enable the planned deactivation of the aging WESF building and save as much as $6 million in annual operating costs.

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See this animation to learn more about the capsule transfer process.
The comment period runs from July 6 through Sept. 4, 2022. A public meeting will be held at 5:30 p.m. PT on Aug. 16 at the Richland Public Library, 955 Northgate Drive. The meeting will include a virtual option to allow participants to view the presentation, hear the speakers and ask questions. To participate via Microsoft Teams, please follow the instructions below:

Join on your computer or mobile app
Click here to join the meeting
https://bit.ly/3FZnwH5

Join with a video conferencing device
197920091@teams.bjn.vc
Video Conference ID: 114 870 754 6

Or call in (audio only)
+1 509-931-1284 United States, Spokane
(833) 633-0875 United States (Toll-free)
Phone Conference ID: 512 778 719#

Please submit any comments by Sept. 4, electronically (preferred) or by mail to:
Washington State Department of Ecology
3100 Port of Benton Boulevard
Richland, WA 99354

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

Questions? Please contact Jennifer Colborn, DOE, at Jennifer.Colborn@rl.doe.gov, or Daina McFadden, Washington State Department of Ecology, at Hanford@ecy.wa.gov.

To request disability accommodation, please contact Jennifer Colborn at Jennifer.Colborn@rl.doe.gov or (509)

376-5840 at least 10 working days prior to the event. DOE makes every effort to honor disability accommodation requests.

- Fact Sheet__WESF Class 2 Mod_FINAL.pdf

Ecology - Hanford @ecyHanford · 23h

A new public comment period starts today on the Waste Encapsulation and Storage Facility (WESF).
A public meeting is set for Aug. 16.
Check it out and get your feedback in by Sept. 4:
ecology.wa.gov/.../Nuclear.....

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Washington Department of Ecology - Hanford
Published by Anna Eco Alvarez · 23h ·

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Proposed Class 2 Permit Modification for the Waste Encapsulation and Storage Facility

July 6 - Sept. 4, 2022

The U.S. Department of Energy (Energy) is holding a 60-day public comment period on a proposed Class 2 modification to the Hanford Dangerous Waste Permit. This proposed modification would increase the storage capacity for a radioactive hot cell in the Waste Encapsulation and Storage Facility (WESF) and update the Facility Personnel Training Plan.

Proposed changes

The DOE and contractor Central Plateau Cleanup Company are requesting a Class 2 modification to the WESF chapter of the Hanford Dangerous Waste Permit to increase the storage capacity of G Cell — a radioactive hot cell inside WESF — from nine to 14 capsules.

Transfer of the capsules to the dry casks will go through G Cell. The proposed modification supports the move to dry storage by providing WESF more flexibility to safely manage the capsules during the transfer process.

Other proposed changes include updating permit Addendum G, "Training," to add a facility personnel position.

To learn more about the capsule transfer process, watch the animation video at https://bit.ly/3FVi346.

Facility background

The WESF is in the 200 East Area of the Hanford Site. The facility houses 1,936 radioactive cesium and strontium capsules stored in an underwater basin. While the capsules are currently in safe storage in the basin, work is underway to install a system in WESF to transfer the capsules from the basin into engineered dry casks, and then transport them to a nearby concrete pad for safe interim storage.

Moving the capsules to dry storage not only eliminates a longer-term risk of a radioactive release in the unlikely event of a loss of water from the basin, but also will enable the planned deactivation of the aging WESF building and save as much as $6 million in annual operating costs.

Review and comment

For more information on the public comment period and supporting documents, visit Energy's website.

Please submit any comments by **Sept. 4, 2022,** electronically (preferred), or by mail to:

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

Public meeting

Energy is holding a public meeting 5:30 p.m. PT Aug. 16 at the Richland Public Library, 955 Northgate Drive. The meeting will include a virtual option to allow participants to view the presentation, hear the speakers and ask questions. To participate via Microsoft Teams, please follow the instructions below:

Join on your computer or mobile app

- Use this link to join the meeting or https://bit.ly/3FZnwH5

Join with a video conferencing device

- 197920091@teams.bjn.vc
- Video Conference ID: 114 870 754 6

Or call in (audio only)

- +1 509-931-1284 United States, Spokane
- 833- 633-0875 United States (Toll-free)
- Phone Conference ID: 512 778 719#

Questions? Please contact Jennifer Colborn, U.S, Department of Energy, or Daina McFadden, Ecology.