

Response to Comments Waste Encapsulation and Storage Facility Class 3 permit modification

August 3 to September 30, 2020

By Matt Williams For the **Nuclear Waste Program** Washington State Department of Ecology Richland, Washington November 2020, Publication 20-05-026



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¹ www.ecology.wa.gov/contact

Department of Ecology's Regional Offices



Map of Counties Served

Southwest Region 360-407-6300 Northwest Region 425-649-7000 Central Region 509-575-2490 Eastern Region 509-329-3400

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	3190 160th Ave SE Bellevue, WA 98008	425-649-7000
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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Nuclear Waste Program Washington State Department of Ecology Richland, WA

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Introduction

The Washington State Department of Ecology's Nuclear Waste Program (Ecology) manages dangerous waste within the state by writing permits to regulate its treatment, storage, and disposal.

When a new permit or a significant modification to an existing permit is proposed, Ecology holds a public comment period to allow the public to review the change and provide formal feedback. (See <u>Washington Administrative Code [WAC] 173-303-830</u> for types of permit changes.)

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

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

Comment period	Waste Encapsulation and Storage Facility Class 3 permit modification, Aug. 3 – Sept. 30, 2020.
Permit	Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit for the Treatment, Storage, and Disposal of Dangerous Waste, Waste Encapsulation and Storage Facility
Permittees	U.S. Department of Energy, Office of River Protection (USDOE) and CH2MHILL Plateau Remediation Company
Original Issuance date	November 16, 2020
Effective date	December 16, 2020

This Response to Comments is prepared for:

To see more information related to the Hanford Site and nuclear waste in Washington, please visit our webpage, <u>Hanford Cleanup</u>².

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

Reasons for Issuing the Permit

The Waste Encapsulation and Storage Facility (WESF) has been operating as an interim status facility under Washington Administrative Code (WAC) 173-303. It currently stores 1,936 capsules containing radioactive cesium chloride and strontium fluoride salts underwater in pool cells. These salts were separated from tank waste from 1967 to 1985 to reduce the temperature inside storage tanks. The capsules are dangerous waste subject to WAC 173-303 due to the presence of heavy metal contaminants in the cesium and strontium salts.

This permit modification will add the operating units at WESF into the Hanford Sitewide Dangerous Waste Permit, bringing WESF from interim to final status. This is important because the permittees will be renovating WESF to transfer the capsules to dry storage at a new facility, Capsule Interim Storage (CIS). Capsule transfer to dry storage will provide increased safety and resiliency.

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.

Once in dry storage, the capsules can be passively cooled with air movement. Moving the capsules eliminates the risk of power loss or equipment failure impacting the current cooling system. In an emergency, such as a significant earthquake, the potential for spread of contamination to soil and groundwater is more limited than it would be in wet storage.

Moving the capsules is also essential to initiating cleanup and closure of WESF. Although the capsules will still be on site, they will be stored more safely at CIS. And CIS will have a much smaller physical and environmental footprint than current facilities. This transfer advances the overall goal of Ecology and the permittees to clean and restore the Hanford Site.

Public Involvement Actions

Ecology encouraged public comment on the draft conditions, *Part A form*, permit addenda, and supporting documentation during a 45-day public comment period, which was schedule to run August 3 through September 18, 2020. During the public comment period Ecology received a request for extension from a member of the public. That extension was granted and the public comment period was extended until September 30, 2020.

The following actions were taken to notify the public:

- Mailed a public notice announcing the comment period to 1175 members of the public.
- Placed a public announcement legal classified notice in the Tri-City Herald on August 2, 2020.

- Emailed a notice announcing the start of the comment period to the Hanford-Info email list, which has 1347 recipients.
- Posted the comment period notice on the Washington Department of Ecology Hanford Facebook and Twitter pages.

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
- Fact Sheet for the proposed WESF Permit Modification
- Draft WESF Permit Modification

The following public notices for this comment period are in <u>Appendix A</u> of this document:

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

List of Commenters

The table below lists the names of organizations or individuals who submitted a comment on the WESF Permit modification. The comments and responses are in <u>Attachment 1</u>.

Commenter	Organization		
Holder, Carl	Citizen		
Conlan, Mike	Citizen		
Pigott, Judy	Citizen		
Carpenter, Tom	Hanford Challenge		
Clough, Pamela	Citizen		
Norton, Kelly	Citizen		
Thomas, Jim	Citizen		
Pigott, Judy	Citizen		
Cimon, Shelley	Citizen		
Kuroiwa-Lewis, Nathalie	Citizen		
Mayo, Ainsley	Citizen		
Carter, Duane	Department of Energy – Richland Operations		
Hare, Leah	CH2M Hill Plateau Remediation Company		
Anter, Simone	Columbia Riverkeeper		
Pollet, Gary	Heart of America Northwest		

Attachment 1: Comments and Responses

Description of comments:

Ecology accepted comments from August 3 through September 30, 2020. This section provides a summary of comments that we received during the public comment period and our responses, as required by RCW 34.05.325(6)(a)(iii). Comments are grouped by individual and each comment is addressed separately.

I-1: CARL HOLDER

Comment I-1-1

Waste Encapsulation and Storage Facility permit modification

Publication text, page 3. "Why capsule transfer matters"

"... will provide increased safety and resiliency."

• The current configuration is safe and resilient.

"... the concrete pool cell walls show signs of deterioration..."

• The thick, reinforced concrete walls can suffer deterioration, are holding water, and the integrity is not compromised due to deterioration.

"... active cooling and water circulation are necessary to dissipate the heat..."

• The capsules are now cooled by water and are being moved to a dry storage, so this statement is not logical.

"A spill or release would create a significant volume of contaminated water."

• The water is not currently contaminated, the capsules are double encapsulated stainless steel, the capsules are not deteriorating after decades under water; so, what significant future event would cause capsules to fail, to cause the water to become contaminated?

o A power loss or equipment failure? No, it would not. If the facility would be left without power and unattended, evaporation of the pool water would manifest over years.

o In the extremely unlikely event that the 13 feet of pool water totally evaporated, the capsules would be dry, in a concrete containment, 13' below grade.

o If there would be a flood, again there would be no release.

o There is no imaginable earthquake scenario that would displace the capsules from the 13' deep concrete structure.

o If the capsules were uncovered by evaporated water, the capsules would not breach, but would be unshielded to the sky.

"There are no viable alternatives to continued storage of the cesium and strontium capsules at the Hanford Site."

• So this statement begs the questions:

o What is the benefit of this major project?

o Why was the No-Action alternative not selected?

o What is the total cost and schedule of this action?

o Why design and build non-standard casks for a one-of-a-kind use?

o Why subject workers to gamma ray exposure when today there is none?

o Why subject the environment to a possible radioactive spill accident?

The radioactive half-life of Cesium 137 is 30 years, so more than half of the original radioactivity is already gone. The present pool configuration is sound and has performed perfectly.

The double encapsulated SS capsules have high value as a future gamma irradiation source and should be left in-situ.

Focus on and accomplish more important Hanford clean-up matters.

Respectively submitted:

Response to I-1-1

While the capsules are currently in a safe and compliant configuration, the WESF is an aging facility that began operations in 1974 and is of concern to DOE. If the cooling water is lost, it would increase the risk of radioactivity exposure to personnel, reduce the ability of active monitoring, and delay future waste management activities.

Placing the capsules in dry storage, in accordance with NRC standards for spent nuclear fuel, will position the capsules in a configuration designed to minimize the possibility of release while maintaining the ability of active management. The mobility of a release is greatly reduced in dry storage as compared to a release from underwater storage. As described in the Capsule Interim Storage (OUG-19) portion of the Hanford Facility RCRA Permit, the casks consist of multi-layered containment that provide robust radiation shielding to protect workers and offer capsule cooling through passive ventilation. Cool air is drawn into the cask and warm air flows out, without the need for fans or mechanical equipment.

Dry storage will consist of minimal equipment that will require little maintenance and calibration. Managing the capsules in dry storage will result in a cost benefit to the government, as day-to-day personnel and maintenance costs will be reduced.

I-2: MIKE CONLAN

Comment I-2-1

- 1. Remove all nuclear waste,
- 2. Do not allow anymore nuclear waste into the facility,
- 3. Replace all the single storage tanks,
- 4. Stop all the nuclear leakage entering the Columbia River
- 5. Glassification!

Response to I-2-1

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

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

Single-shell tanks are not in the scope of this comment period.

Ecology does agree the tanks pose a threat. We believe a better approach to addressing it is to transfer waste from the single shell tanks to the double-shell tanks to prepare for eventual treatment in the Waste Treatment Plant.

Stopping any potential nuclear waste from impacting the Columbia River is not within the scope of the WESF Permit. Prevention of groundwater and surface water impacts are addressed in operations associated with other units.

I-3: JUDY PIGOTT

Comment I-3-1

I'm writing to say that there must be NO DELAY in effectively and fully dealing with the waste encapsulation and storage. The risks of delay, given state of the current storage facilities and the dangers of having a "chernobyl-like" event are too grave. For heaven's sake, the money spent now will be a pittance of what's required if there's a delay, an exposure event occurs (which is likely), and what evolves cannot be mitigated.

Response to I-3-1

Current evaluations show that the Waste Encapsulation and Storage Facility can safely contain the cesium and strontium capsules through all reasonably probable events in the near future. However, Ecology agrees that transfer of the capsules should be prioritized to ensure that facility age does not cause or contribute to a release. Milestone M-092 addresses requirements to transfer the capsules to dry storage and continue to evaluate permanent treatment, storage, or disposal options.

I-4: TOM CARPENTER

Comment I-4-1

Accelerate Dry Storage Timeline: Hanford Challenge urges the WA Department of Ecology to aggressively use its regulatory authority and accelerate the movement of the WESF capsules to safer storage, and at a minimum, reject any proposals to delay the 2025 milestone.

Response to I-4-1

Ecology supports transferring capsules to dry storage as soon as safely possible and would not, at this time, support extending the 2025 milestone regarding transfer.

There are physical modifications needed at the WESF to support the transfer of the capsules to dry storage, and workers will need to be trained on the unique equipment which will be used to assemble the components of each cask storage system. A mockup of the equipment which will be installed in Hot Cell G is currently under construction at the Material Storage Facility for this purpose. These steps will take time, but the project is planning to begin once the permit is issued and effective.

Comment I-4-2

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.

Response to I-4-2

WAC 173-303-350 requires that a compliant Contingency Plan be included as part of the Dangerous Waste Permit. This plan is included in Addendum J of the WESF permit. Ecology has determined that the information in Addendum J satisfies the requirements of WAC 173-303-350.

Comment I-4-3

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 DOE 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 DOE 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 I-4-3

At this time there is no plan to study the concrete in the Waste Encapsulation and Storage Facility (WESF) pool cells. When closure activities are initiated for WESF, DOE and Ecology will consider this suggestion. One advantage of dry storage at Capsule Interim Storage is that any potential degradation of the concrete casks and storage pad can be more easily observed through regular inspections.

Comment I-4-4

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 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 I-4-4

At this time there is no plan to study the concrete in the Waste Encapsulation and Storage Facility (WESF) pool cells. When closure activities are initiated for WESF, DOE and Ecology will consider this suggestion.

Comment I-4-5

Increase Clarity in Communications: Permit Modifications are notoriously inaccessible to the public, but this does not need to be the case. In future permit modification public materials like fact sheets and presentations, use plain language to clearly communicate why an action is being taken and how it fits into the bigger picture of ultimate Hanford cleanup goals.

Additionally, provide a guide for the public that explains the linked permit modification documents. For example, it was not clear that the first document the public should access for

this comment period is the Focus Sheet. Information in the focus sheet could have been more widely circulated.

Response to I-4-5

Ecology will take this into consideration for future Focus Sheets and Fact Sheets. Ecology does not have a preferred order for the public to read public notice documents, but does typically list plain language summaries (Focus Sheet and Fact Sheet) before the draft permit and technical documents so that a reader will see them early in the review process. Ecology tries to make the documents as accessible as possible for each public comment period.

Comment I-4-6

Plan for Public Meetings: Ecology should plan and hold virtual public meetings on all permit modification comment periods to clearly explain what the modification covers and how it affects Hanford cleanup. In-person public meetings are also helpful, when safe and requested. As a baseline, it always helps to have an opportunity to present information and have a Q&A with interested members of the public. Meetings should be recorded and uploaded for those who are not able to attend.

Response to I-4-6

A public meeting on the WESF permit modification was held by the permittees on December 13, 2017.

WAC 173-303-840(5)(a) requires that Ecology hold a public hearing "...whenever, on the basis of requests, there is a significant degree of public interest in a draft permit or there is written notice of opposition and the director receives a request for a hearing during the forty-five day comment period." Ecology did not receive any requests for a public hearing during the public comment period, therefore a hearing was not held during the second public comment period to support the public review of the draft WESF permit.

Comment I-4-7

Make Relevant Documents Easier to Navigate and Accessible: In the future, please provide a summary of which documents are included in each permit modification package for ease of navigation. Please make sure these materials are available and accessible in an easy to navigate format online. In the case of this WESF permit modification, the information requested by Ecology from DOE was difficult to locate and once located did not contain the multiple attachments referenced in the transmittal letter. Only one of the referenced attachments was identified as for Official Use Only, and yet none of the other attachments were available.

Response to I-4-7

Ecology will consider whether an additional summary of permitting documents would be helpful for future permitting actions.

If the requested information referenced in this comment is described in Letter 18-NWP-019, dated February 5, 2018, the information was provided in Letters 18-AMRP-0088 and 18-AMRP-0103. All three letters are available on the Hanford Administrative Record at <u>https://pdw.hanford.gov/</u>. If non-confidential attachments received by Ecology are not available on the Administrative Record, they can be requested from Ecology at https://ecology.wa.gov/About-us/Accountability-transparency/Public-records-requests.

When determining which documents to include in a permit modification, Ecology must consider what is directly relevant to the permitting action. In many cases the relevant information is directly incorporated into the final permit addenda. Additionally, plans for the WESF were significantly updated between 2017 and 2020. Including design information which is no longer accurate to the final design in the public notice package would have created additional confusion.

Based upon this, Ecology determined that the relevant information for this modification was contained in the permit addenda themselves supplemented with the WESF Modifications Final Design Report (Project W-135), which contained the most up-to-date design information available.

I-5: PAMELA CLOUGH

Comment I-5-1

Thank you for the opportunity to provide public comment on the plan to add WESF to the active portion of the RCRA Permit, Section III as Operating Unit Group 14 to allow the capsules at WESF to be moved into dry storage.

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:

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.

Ensure Conditions Are Safe Now and in the Future: Require that data sets showing the effect of gamma dose on dry concrete are applied to assessments of risk at WESF and other DOE 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. Making conditions safer at WESF and other DOE sites is important to me.

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.

Accelerate Transfer to Dry Storage: Use your regulatory muscle to push up the deadline to get the capsules into dry storage sooner than 2025.

Make Information Accessible: Ensure that plain language materials are provided that explain permitting history, provide a guide to the documents that are part of the comment period in question, and the context of the action.

Response to I-5-1

Current evaluations show that the Waste Encapsulation and Storage Facility can safely contain the cesium and strontium capsules through all reasonably probable events in the near future. However, Ecology agrees that transfer of the capsules should be prioritized to ensure that facility age does not cause or contribute to a release. Milestone M-092 addresses requirements to transfer the capsules to dry storage and continue to evaluate permanent treatment, storage, or disposal options.

WAC 173-303-350 requires that a compliant Contingency Plan be included as part of the Dangerous Waste Permit. This plan is included in Addendum J of the WESF permit. Ecology has determined that the information in Addendum J satisfies the requirements of WAC 173-303-350.

At this time there is no plan to study the concrete in the Waste Encapsulation and Storage Facility (WESF) pool cells. When closure activities are initiated for WESF, DOE and Ecology will consider this suggestion.

Ecology supports transferring capsules to dry storage as soon as safely possible and would not, at this time, support extending the 2025 milestone regarding transfer.

There are physical modifications needed at the WESF to support the transfer of the capsules to dry storage, and workers will need to be trained on the unique equipment which will be used to assemble the components of each cask storage system. A mockup of the equipment which will be installed in Hot Cell G is currently under construction at the Material Storage Facility for this purpose. These steps will take time, but the project is planning to begin once the permit is issued and effective. One advantage of dry storage at the Capsule Interim Storage is that any potential degradation of the concrete casks and storage pad can be more easily observed through regular inspections.

Ecology will consider whether an additional summary of permitting documents would be helpful for future permitting actions.

When determining which documents to include in a permit modification, Ecology must consider what is directly relevant to the permitting action. In many cases the relevant information is directly incorporated into the final permit addenda. Additionally, plans for the WESF were significantly updated between 2017 and 2020. Including design information which is no longer accurate to the final design in the public notice package would have created additional confusion.

Based upon this, Ecology determined that the relevant information for this modification was contained in the permit addenda themselves supplemented with the WESF Modifications Final Design Report (Project W-135), which contained the most up-to-date design information available.

I-6: KELLY NORTON

Comment I-6-1

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 storagepools, 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.

Ensure robust, specific and detailed emergency response plans for a catastrophic release of radioactivity at WESF are included in the permit.

Require data sets showing the effect of gamma dose on dry concrete are applied to assessments of risk at WESF and other DOE 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. Making conditions safer at WESF and other DOE sites is important to me!!!

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.

Use your regulatory muscle to push up the deadline to get the capsules into dry storage sooner than 2025!!!

Ensure plain language materials are provided that explain permitting history, provide a guide to the documents that are part of the comment period in question, and the context of the action.

Thank you for prioritizing SAFETY over expedience and cost savings.

Kelly Norton

Response to I-6-1

Current evaluations show that the Waste Encapsulation and Storage Facility can safely contain the cesium and strontium capsules through all reasonably probable events in the near future. However, Ecology agrees that transfer of the capsules should be prioritized to ensure that facility age does not cause or contribute to a release. Milestone M-092 addresses requirements to transfer the capsules to dry storage and continue to evaluate permanent treatment, storage, or disposal options.

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There are physical modifications needed at the WESF to support the transfer of the capsules to dry storage, and workers will need to be trained on the unique equipment which will be used to assemble the components of each cask storage system. A mockup of the equipment which will be installed in Hot Cell G is currently under construction at the Material Storage Facility for this purpose. These steps will take time, but the project is planning to begin once the permit is issued and effective. One advantage of dry storage at the Capsule Interim Storage is that any potential degradation of the concrete casks and storage pad can be more easily observed through regular inspections.

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Based upon this, Ecology determined that the relevant information for this modification was contained in the permit addenda themselves supplemented with the WESF Modifications Final Design Report (Project W-135), which contained the most up-to-date design information available.

I-7: JIM THOMAS

Comment I-7-1

The Waste Encapsulation Storage Facility (WESF) on the west end of Hanford's B Plant is a catastrophe waiting to happen. If even one of the five WESF cells fails, the contamination release could force the abandonment of all other Hanford cleanup efforts. The impact on the region's agricultural and tourism businesses would be devastating.

The transfer of the Cs and Sr capsules to dry cask storage should be completed no later than 2023. This is not a new problem. It was recognized as one of the priority situations in 1986 when I was a member of the Northwest Citizens Forum on Defense Wastes.

Transferring to dry storage is not only safer, it is also cheaper. The sooner the transfer to dry storage, the greater the savings. Hanford can save millions of precious cleanup funds each year by completing the transfer expediently. We have seen delay after delay for 34 years. WESF is 20 years beyond the design life. The time for action is now.

Thank you for the opportunity to provide these comments on the plan to add WESF to the active portion of the RCRA Permit, Section III as Operating Unit Group 14 to allow the capsules at WESF to be moved into dry storage. Ecology and Governor Inslee should also contact the state's Congressional delegation and urge them to assure that USDOE addresses this paramount priority.

Response to I-7-1

Current evaluations show that the Waste Encapsulation and Storage Facility can safely contain the cesium and strontium capsules through all reasonably probable events in the near future. However, Ecology agrees that transfer of the capsules should be prioritized to ensure that facility age does not cause or contribute to a release. Milestone M-092 addresses requirements to transfer the capsules to dry storage and continue to evaluate permanent treatment, storage, or disposal options.

Ecology supports transferring capsules to dry storage as soon as safely possible and would not, at this time, support extending the 2025 milestone regarding transfer.

There are physical modifications needed at the WESF to support the transfer of the capsules to dry storage, and workers will need to be trained on the unique equipment which will be used to assemble the components of each cask storage system. A mockup of the equipment which will be installed in Hot Cell G is currently under construction at the Material Storage Facility for this purpose. These steps will take time, but the project is planning to begin once the permit is issued and effective.

I-8: JUDY PIGOTT

Comment I-8-1

I'm writing to express my concern about any delay or minimizing the scope of work on the WESF. If there were an earthquake, if the concrete bottoms of the storage containers have had water intrusion, if the radiation leaks in any way or for any reason, our whole community will be at risk.

It's important that the capsules be moved to long-term dry storage as soon as possible, surely ahead of 2025. Please use your influence to push up the deadlines. Also see that information regarding this is in plain language, and that documentation is available. Long term, this will save money and save lives.

THANK YOU --

Response to I-8-1

Current evaluations show that the Waste Encapsulation and Storage Facility can safely contain the cesium and strontium capsules through all reasonably probable events in the near future. However, Ecology agrees that transfer of the capsules should be prioritized to ensure that facility age does not cause or contribute to a release. Milestone M-092 addresses requirements to transfer the capsules to dry storage and continue to evaluate permanent treatment, storage, or disposal options.

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assemble the components of each cask storage system. A mockup of the equipment which will be installed in Hot Cell G is currently under construction at the Material Storage Facility for this purpose. These steps will take time, but the project is planning to begin once the permit is issued and effective.

I-9: SHELLEY CIMON

Comment I-9-1

A little over 1900 highly radioactive, stainless steel Strontium and Cesium capsules are stored in underwater pools. They represent about 1/3rd of the radioactivity on the site. The walls of the pools have been weakened by gamma radiation.

Three years ago, DOE requested the inclusion of WESF to the RCRA permit in order to codify the changes necessary to support transfer of these waste capsules into dry storage. The State of Washington returned the permit application back to DOE requiring additional, missing, information about earthquake risks, training of responders and design of WESF. It is this latest permit iteration that is out for review and that I am responding to.

These capsules have the potential, if there is a failure of the water pools that house the radioactive capsules, to initiate a catastrophic event that could collapse the building and would make responding to the breach (even from the air), impossible, resulting in releases of contamination(steam) that would contaminate portions of the Columbia Basin, making them uninhabitable for a very long time. If uncovered, this would occur very quickly - giving maybe a couple of days time to respond to a breach. Prevention is the best option.

Recommendations:

1) Removal and dry cask storage is my highest priority, based on risk, at the Hanford site and I believe that we need to stay the course of urgently moving capsules to dry cask storage by 2025, or, even better, bringing remediation further into the near-term in order to prevent an accident. Ecology has regulatory muscle to make this happen sooner. I urge you to use it.

2) Data collection through concrete testing of the basin walls, will help bound the damage the basins have already received from gamma radiation and would be of ample use in assessments of urgency to ameliorate the danger.

3) Development of detailed emergency response plans for a catastrophic release of radioactivity -specific to the permit are needed now.

Response to I-9-1

Current evaluations show that the Waste Encapsulation and Storage Facility can safely contain the cesium and strontium capsules through all reasonably probable events in the near future. However, Ecology agrees that transfer of the capsules should be prioritized to ensure that facility age does not cause or contribute to a release. Milestone M-092 addresses requirements to transfer the capsules to dry storage and continue to evaluate permanent treatment, storage, or disposal options. *Ecology supports transferring capsules to dry storage as soon as safely possible and would not, at this time, support extending the 2025 milestone regarding transfer.*

There are physical modifications needed at the WESF to support the transfer of the capsules to dry storage, and workers will need to be trained on the unique equipment which will be used to assemble the components of each cask storage system. A mockup of the equipment which will be installed in Hot Cell G is currently under construction at the Material Storage Facility for this purpose. These steps will take time, but the project is planning to begin once the permit is issued and effective.

At this time there is no plan to study the concrete in the Waste Encapsulation and Storage Facility (WESF) pool cells. When closure activities are initiated for WESF, DOE and Ecology will consider this suggestion.

WAC 173-303-350 requires that a compliant Contingency Plan be included as part of the Dangerous Waste Permit. This plan is included in Addendum J of the WESF permit. Ecology has determined that the information in Addendum J satisfies the requirements of WAC 173-303-350.

I-10: NATHALIE KUROIWA-LEWIS

Comment I-10-1

As a WA state citizen, I'm writing to you out of great concern for what is happening at WESF in Hanford right now. My family and I love living in the Pacific Northwest. We love the land, climate, nature and people here and are so grateful to be living in one of the most beautiful states in the United States.

Yet, at the same time, we also understand that WESF poses a great threat to the soil, water and air in the region. The current physical conditions of the concrete capsules at WESF is extremely dangerous and has potential to negatively impact the entire Pacific Northwest and other states at large. What you have here -- high levels of radioactive Cesium-135, Cesium-137 and Strontium-90 -- stored in capsules made of concrete, of which many have lost up to 75% of their design strength -- is a disaster that is bound to occur. When it does, people like me, run the risk of losing our health and livelihood as much of the Pacific Northwest will suffer irrevocable environmental damage. The environmental devastation would of course impact the economy and could have national and even international implications.

Here is what I am asking you to do:

1. Please move the WESF capsules into dry storage asap -- before 2025.

2. Include a detailed catastrophic release emergency response plan to the permit.

3. It's very important to me that conditions at WESF are safer than they currently are. Conduct studies on how concrete behaves with gamma dose rays. How does dry concrete respond to gamma dosage compared to wet concrete? Use the data sets in assessing risk at WESF and other DOE sites wherever there is concrete exposed to high radiation.

4. Make the data on concrete testing available and transparent to everyone. Please share the data with other DOE sites so that we learn exactly how concrete behaves when exposed to high radiation doses. We need to know this and currently we know very little about this issue.

5. In general, make information more accessible and understandable to the public. During a comment period like this, please advertise the comment periods and provide more context to the comment period in language that breaks down the science for a general audience.

Thank you for your time and I appreciate this opportunity to comment.

Sincerely,

Nathalie Kuroiwa-Lewis

Response to I-10-1

Current evaluations show that the Waste Encapsulation and Storage Facility can safely contain the cesium and strontium capsules through all reasonably probable events in the near future. However, Ecology agrees that transfer of the capsules should be prioritized to ensure that facility age does not cause or contribute to a release. Milestone M-092 addresses requirements to transfer the capsules to dry storage and continue to evaluate permanent treatment, storage, or disposal options.

WAC 173-303-350 requires that a compliant Contingency Plan be included as part of the Dangerous Waste Permit. This plan is included in Addendum J of the WESF permit. Ecology has determined that the information in Addendum J satisfies the requirements of WAC 173-303-350.

At this time there is no plan to study the concrete in the Waste Encapsulation and Storage Facility (WESF) pool cells. When closure activities are initiated for WESF, DOE and Ecology will consider this suggestion.

Ecology supports transferring capsules to dry storage as soon as safely possible and would not, at this time, support extending the 2025 milestone regarding transfer.

There are physical modifications needed at the WESF to support the transfer of the capsules to dry storage, and workers will need to be trained on the unique equipment which will be used to assemble the components of each cask storage system. A mockup of the equipment which will be installed in Hot Cell G is currently under construction at the Material Storage Facility for this purpose. These steps will take time, but the project is planning to begin once the permit is issued and effective. One advantage of dry storage at the Capsule Interim Storage is that any potential degradation of the concrete casks and storage pad can be more easily observed through regular inspections.

Ecology will consider whether an additional summary of permitting documents would be helpful for future permitting actions.

The Focus Sheet and Fact Sheet are intended to be plain language summaries of this permitting action. Ecology will consider whether a guide or summary of public notice documents would be a worthwhile addition to these documents. When determining which documents to include in a permit modification, Ecology must consider what is directly relevant to the permitting action. In

many cases the relevant information is directly incorporated into the final permit addenda and available during the public comment period.

I-11: AINSLEY MAYO

Comment I-11-1

Thank you for the opportunity to provide public comment on the plan to add WESF to the active portion of the RCRA Permit, Section III as Operating Unit Group 14 to allow the capsules at WESF to be moved into dry storage.

I am a Seattle resident who is concerned about moving the WESF capsules into dry storage as soon as possible. If something were to happen, such as an earthquake or another natural disaster that were to cause the water to drain from WESF pools, it could relase an unmanagable level of radioactivity that would make the Hanford site inaccessible. We can't let this happen

Thank you for considering my comments:

Include Catastrophic Release Emergency Response Plans: Ensure that there is a specific emergency response plan for a catastrophic release of radioactivity at WESF that is included in the permit.

Ensure Conditions Are Safe Now and in the Future: Require that data sets showing the effect of gamma dose on dry concrete are applied to assessments of risk at WESF and other DOE 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.

Require Concrete Testing: Due to the scarcity of data on the effects of gamma radiation on dry concrete, it is vital that Ecology require collection of concrete testing data at WESF in order to make conditions safer now and into the future when we are dealing with these materials.

Accelerate Transfer to Dry Storage: Push up the deadline to get the capsules into dry storage sooner than 2025. Right now we have the opportunity to still prevent this site from becoming a major human health and ecological catastrophe. I ask you to act as quickly as possible to ensure that this doesn't become reality, and protect the environment, people's livelihoods and lives.

Make Information Accessible: Ensure that materials are provided that gives residents and nonresidents information on the site, the documents that relate to the commenting period and the context of the decisons that are being made. This safety of this site effects so many people living in the tri-cities region and millions of people all throughout Washington. They deserve to have access to accessible information about the decisions that are being made in their backyards.

Thank you

Response to I-11-1

Current evaluations show that the Waste Encapsulation and Storage Facility can safely contain the cesium and strontium capsules through all reasonably probable events in the near future. However, Ecology agrees that transfer of the capsules should be prioritized to ensure that facility age does not cause or contribute to a release. Milestone M-092 addresses requirements to transfer the capsules to dry storage and continue to evaluate permanent treatment, storage, or disposal options.

WAC 173-303-350 requires that a compliant Contingency Plan be included as part of the Dangerous Waste Permit. This plan is included in Addendum J of the WESF permit. Ecology has determined that the information in Addendum J satisfies the requirements of WAC 173-303-350.

At this time there is no plan to study the concrete in the Waste Encapsulation and Storage Facility (WESF) pool cells. When closure activities are initiated for WESF, DOE and Ecology will consider this suggestion.

Ecology supports transferring capsules to dry storage as soon as safely possible and would not, at this time, support extending the 2025 milestone regarding transfer.

There are physical modifications needed at the WESF to support the transfer of the capsules to dry storage, and workers will need to be trained on the unique equipment which will be used to assemble the components of each cask storage system. A mockup of the equipment which will be installed in Hot Cell G is currently under construction at the Material Storage Facility for this purpose. These steps will take time, but the project is planning to begin once the permit is issued and effective. One advantage of dry storage at the Capsule Interim Storage is that any potential degradation of the concrete casks and storage pad can be more easily observed through regular inspections.

The Focus Sheet and Fact Sheet are intended to be plain language summaries of this permitting action. Ecology will consider whether a guide or summary of public notice documents would be a worthwhile addition to these documents.

When determining which documents to include in a permit modification, Ecology must consider what is directly relevant to the permitting action. In many cases the relevant information is directly incorporated into the final permit addenda. Additionally, plans for the WESF were significantly updated between 2017 and 2020. Including design information which is no longer accurate to the final design in the public notice package would have created additional confusion.

Based upon this, Ecology determined that the relevant information for this modification was contained in the permit addenda themselves supplemented with the WESF Modifications Final Design Report (Project W-135), which contained the most up-to-date design information available.

A-1: DEPARTMENT OF ENERGY - RICHLAND OPERATIONS

Comment A-1-1

Permit Condition III.14.D.1.e.

"Records documenting stalled loading or transport operations for Permit Condition III.14.L.5, if operations have stalled."

Response: Ecology's definition of "stalled" in Permit Condition III.14.L.5b does not accurately portray activities being conducted for loading operations. For instance, once the TSC is full, actions will begin to weld the lids in place. If these activities takes longer than 7 days, we would be "stalled" by Ecology definition, "...stalled if seven calendar days pass without the addition of a UCS to a partially or completely filled TSC." This is problematic since operations are clearly not stalled and work is continuing in a safe and compliant pace.

Recommend removing this permit condition. The Permittees will perform loading activities in a compliant and safe pace in accordance with the TPA schedule.

Response to A-1-1

Ecology has left permit condition III.14.D.1.e in the permit as written, but we have made a revision to permit condition III.14.L.5.b to clarify the definition of "stalled."

Comment A-1-2

Permit Condition III.14.C.2

"The Permittees will have an accurate and complete description for each waste stream managed at the WESF OUG as necessary to document designation according to WAC 173-303-070, applicable Land Disposal Restriction Treatment Standards pursuant to WAC 173-303-140, and any other information necessary to ensure management of the waste streams in accordance with requirements of this Permit. [WAC 173-303- 380(1)(a)]"

Response: Recommend adding capsule to sentence to be better specify what waste streams: "The Permittees will have an accurate and complete description for each capsule waste stream managed at the WESF OUG"

Response to A-1-2

The additional word was added to permit condition III.14.C.2 as requested. We would like to remind the permittees that this text change does not eliminate the requirement to comply with WAC 173-303 if other waste streams are generated during operations at WESF.

Comment A-1-3

Permit Condition III.14.D.1.a

"The quantity and description of each mixed waste stream managed at the WESF OUG. [WAC 173-303-380(1)(a) and (b)]"

Response: Recommend adding capsule to sentence to be better specify what waste streams: "The quantity and description of each capsule waste stream managed at the WESF OUG. [WAC 173-303-380(1)(a) and (b)]"

Response to A-1-3

The addition of "capsule" was added to permit condition III.14.C.2 as requested. We would like to remind the permittees that this text change does not eliminate the requirement to comply with WAC 173-303 if other waste streams are generated during operations at WESF.

Comment A-1-4

Permit Condition III.14.L.1.b.

"If the water collection rate for Pool Cell 5 increases or decreases by more than 25% from the baseline leak rate for two or more consecutive weeks the Permittees will notify Ecology immediately and evaluate whether repair or other intervention is necessary to address the issue."

Response: The water is not removed on a weekly basis. The water collects in the sump over several months until there is an adequate volume for efficient removal and measurement. The water is then removed, measured, and an average rate (liters/week) is calculated.

Recommended language change:

"If the water collection rate for Pool Cell 5 increases or decreases by more than 25% from the baseline leak rate for two consecutive measurements the Permittees will notify Ecology immediately and evaluate whether repair or other intervention is necessary to address the issue.

Response to A-1-4

Modifications were made to the series of permit conditions in III.14.L.1. The text changes in these permit conditions address the permittees' concern and ensure the facility's operating practices are documented correctly.

Comment A-1-5

Permit Condition III.14.L.1.c.

"If the water collection rate for Pool Cell 5 increases or decreases by more than 75% from the baseline leak rate for any single week or any other pool cell sump begins collecting water, the Permittees will notify Ecology immediately and evaluate whether repair or other intervention is necessary to address the issue."

Response: The water is not removed on a weekly basis. The water collects in the sump over several months until there is an adequate volume for efficient removal and measurement. The water is then removed, measured, and an average rate (liters/week) is calculated.

Recommend language change:

"If the water collection rate for Pool Cell 5 increases or decreases by more than 75% from the baseline leak rate for any single measurement or any other pool cell sump begins collecting water, the Permittees will notify Ecology immediately and evaluate whether repair or other intervention is necessary to address the issue."

Response to A-1-5

Modifications were made to the series of permit conditions in III.14.L.1. The text changes in these permit conditions address the permittees' concern and ensure the facility's operating practices are documented correctly.

Comment A-1-6

Permit Condition III.14.L.5

"Once loading of a specific TSC has started, if loading operations in the Truckport or transport operations from the Truckport apron are stalled, the Permittees will notify Ecology and provide a description of what has cause the delay and when it is estimated operations will resume."

Response: In the fact sheet, Ecology stated "It is most protective of human health and the environment to minimize the periods where capsules are out of the pool cells. However, Ecology does not want loading operations to be rushed. The permittees are required to notify Ecology if operations stall for one week or more. This allows transfer operations to be conducted at a safe pace and ensures Ecology can determine if stoppage of work is justified." The TPA has its own enforcement provisions. Milestone M-092 has a schedule for the removal of all capsules from WESF, thus ensuring accountability for progress. The TPA states that Ecology can only take enforcement action under the TPA or the permit. Adding additional enforcement in the permit does not increase protection of human health and the environment and only leads to confusion. For example, DOE could enter into good faith negotiations regarding an extension request to M-092, while at the same time an Ecology compliance inspector could issue a permit violation separately in accordance with the proposed permit condition. Recommend removing this permit condition to avoid confusion.

Response to A-1-6

Modifications were made to the series of permit conditions in III.14.L.5. The text changes in these permit conditions address the permittees' concern and ensure the facility's operating practices are documented correctly.

Comment A-1-7

Permit Condition III.14.L.5.a.

"Notifications for stalled operations only apply to a TSC or CSS which holds at least one wastecontaining capsule."

Response: Ecology's definition of "stalled" in Permit Condition III.14.L.5b does not accurately portray activities being conducted for loading operations. For instance, once the TSC is full, actions will begin to weld the lids in place. If these activities takes longer than 7 days, we would be "stalled" by Ecology definition, "...stalled if seven calendar days pass without the addition of a UCS to a partially or completely filled TSC." This is problematic since operations are clearly not stalled and work is continuing in a safe and compliant pace.

Recommend removing this permit condition. The Permittees will perform loading activities in a compliant and safe pace in accordance with the TPA schedule.

Response to A-1-7

Modifications were made to the series of permit conditions in III.14.L.5. The text changes in these permit conditions address the permittees' concern and ensure the facility's operating practices are documented correctly.

Comment A-1-8

Permit Condition III.14.L.5b.

"Loading operations are considered stalled if seven calendar days pass without the addition of a UCS to a partially or completely filled TSC which has not been sealed."

Response: Ecology's definition of "stalled" does not accurately portray activities being conducted for loading operations. For instance, once the TSC is full, actions will begin to weld the lids in place. If these activities takes longer than 7 days, we would be "stalled" by Ecology definition (...stalled if seven calendar days pass without the addition of a UCS to a partially or completely filled TSC). This is problematic since operations are clearly not stalled and work is continuing in a safe and compliant pace.

Recommend removing this permit condition. The Permittees will perform loading activities in a compliant and safe pace in accordance with the TPA schedule.

Response to A-1-8

Modifications were made to the series of permit conditions in III.14.L.5. The text changes in these permit conditions address the permittees' concern and ensure the facility's operating practices are documented correctly.

Comment A-1-9

Appendix IA, Inspection Frequency Justification

Response: The inspection frequency justification table, Appendix IA, has been added as part of the permit. During Major Themes resolution, DOE and ECY agreed that the justification table would be kept in the operating record and not be included within the permit. The Permittees believe the table was added to the draft permit in error and request it be removed from the permit.

Recommendation: Remove the Appendix IA, Inspection Frequency Justification from the permit.

Response to A-1-9

Ecology agrees with this comment. This document will not be included as part of the WESF OUG-14 Permit, it was only provided as supplemental information to support the review of the draft permit during the public comment period. It will remain in the Administrative Record.

Comment A-1-10

WESF Modification Final Design Report

Response: The WESF Modification Final Design Report has been added as part of the permit. The Design Report was included as supplemental information. The Permittees believe this report was added to the draft permit in error and request it be removed from the permit.

Recommendation: Remove the WESF Modification Final Design Report from the permit.

Response to A-1-10

Ecology agrees with this comment. This document will not be included as part of the WESF OUG-14 Permit, it was only provided as supplemental information to support the review of the draft permit during the public comment period. It will remain in the Administrative Record.

B-1: CH2M HILL PLATEAU REMEDIATION COMPANY

Comment B-1-1

Comments for WESF Class 3 permit modification

1. Permit Condition III.14.D.1.e.

"Records documenting stalled loading or transport operations for Permit Condition III.14.L.5, if operations have stalled."

Response: Ecology's definition of "stalled" in Permit Condition III.14.L.5b does not accurately portray activities being conducted for loading operations. For instance, once the TSC is full, actions will begin to weld the lids in place. If these activities takes longer than 7 days, we would be "stalled" by Ecology definition, "...stalled if seven calendar days pass without the addition of a UCS to a partially or completely filled TSC." This is problematic since operations are clearly not stalled and work is continuing in a safe and compliant pace.

Recommend removing this permit condition. The Permittees will perform loading activities in a compliant and safe pace in accordance with the TPA schedule.

2. Permit Condition III.14.C.2

"The Permittees will have an accurate and complete description for each waste stream managed at the WESF OUG as necessary to document designation according to WAC 173-303-070, applicable Land Disposal Restriction Treatment Standards pursuant to WAC 173-303-140, and any other information necessary to ensure management of the waste streams in accordance with requirements of this Permit. [WAC 173-303-380(1)(a)]"

Response: Recommend adding capsule to sentence to be better specify what waste streams: "The Permittees will have an accurate and complete description for each capsule waste stream managed at the WESF OUG"

3. Permit Condition III.14.D.1.a

"The quantity and description of each mixed waste stream managed at the WESF OUG. [WAC 173-303-380(1)(a) and (b)]"

Response: Recommend adding capsule to sentence to be better specify what waste streams: "The quantity and description of each capsule waste stream managed at the WESF OUG. [WAC 173-303-380(1)(a) and (b)]"

4. Permit Condition III.14.L.1.b.

"If the water collection rate for Pool Cell 5 increases or decreases by more than 25% from the baseline leak rate for two or more consecutive weeks the Permittees will notify Ecology

immediately and evaluate whether repair or other intervention is necessary to address the issue."

Response: The water is not removed on a weekly basis. The water collects in the sump over several months until there is an adequate volume for efficient removal and measurement. The water is then removed, measured, and an average rate (liters/week) is calculated. Recommended language change:

"If the water collection rate for Pool Cell 5 increases or decreases by more than 25% from the baseline leak rate for two consecutive measurements the Permittees will notify Ecology immediately and evaluate whether repair or other intervention is necessary to address the issue.

5. Permit Condition III.14.L.1.c.

"If the water collection rate for Pool Cell 5 increases or decreases by more than 75% from the baseline leak rate for any single week or any other pool cell sump begins collecting water, the Permittees will notify Ecology immediately and evaluate whether repair or other intervention is necessary to address the issue."

Response: The water is not removed on a weekly basis. The water collects in the sump over several months until there is an adequate volume for efficient removal and measurement. The water is then removed, measured, and an average rate (liters/week) is calculated. Recommend language change:

"If the water collection rate for Pool Cell 5 increases or decreases by more than 75% from the baseline leak rate for any single measurement or any other pool cell sump begins collecting water, the Permittees will notify Ecology immediately and evaluate whether repair or other intervention is necessary to address the issue."

6. Permit Condition III.14.L.5

"Once loading of a specific TSC has started, if loading operations in the Truckport or transport operations from the Truckport apron are stalled, the Permittees will notify Ecology and provide a description of what has cause the delay and when it is estimated operations will resume."

Response: In the fact sheet, Ecology stated "It is most protective of human health and the environment to minimize the periods where capsules are out of the pool cells. However, Ecology does not want loading operations to be rushed. The permittees are required to notify Ecology if operations stall for one week or more. This allows transfer operations to be conducted at a safe pace and ensures Ecology can determine if stoppage of work is justified."

The TPA has its own enforcement provisions. Milestone M-092 has a schedule for the removal of all capsules from WESF, thus ensuring accountability for progress. The TPA states that Ecology can only take enforcement action under the TPA or the permit. Adding additional enforcement in the permit does not increase protection of human health and the environment and only leads to confusion. For example, DOE could enter into good faith negotiations regarding an extension request to M-092, while at the same time an Ecology compliance inspector could issue a permit violation separately in accordance with the proposed permit condition.

Recommend removing this permit condition to avoid confusion.

7. Permit Condition III.14.L.5.a.

"Notifications for stalled operations only apply to a TSC or CSS which holds at least one wastecontaining capsule."

Response: Ecology's definition of "stalled" in Permit Condition III.14.L.5b does not accurately portray activities being conducted for loading operations. For instance, once the TSC is full, actions will begin to weld the lids in place. If these activities takes longer than 7 days, we would be "stalled" by Ecology definition, "...stalled if seven calendar days pass without the addition of a UCS to a partially or completely filled TSC." This is problematic since operations are clearly not stalled and work is continuing in a safe and compliant pace.

Recommend removing this permit condition. The Permittees will perform loading activities in a compliant and safe pace in accordance with the TPA schedule.

8. Permit Condition III.14.L.5b.

"Loading operations are considered stalled if seven calendar days pass without the addition of a UCS to a partially or completely filled TSC which has not been sealed."

Response: Ecology's definition of "stalled" does not accurately portray activities being conducted for loading operations. For instance, once the TSC is full, actions will begin to weld the lids in place. If these activities takes longer than 7 days, we would be "stalled" by Ecology definition (...stalled if seven calendar days pass without the addition of a UCS to a partially or completely filled TSC). This is problematic since operations are clearly not stalled and work is continuing in a safe and compliant pace.

Recommend removing this permit condition. The Permittees will perform loading activities in a compliant and safe pace in accordance with the TPA schedule.

9. Appendix IA, Inspection Frequency Justification

Response: The inspection frequency justification table, Appendix IA, has been added as part of the permit. During Major Themes resolution, DOE and ECY agreed that the justification table would be kept in the operating record and not be included within the permit. The Permittees believe the table was added to the draft permit in error and request it be removed from the permit.

Recommendation: Remove the Appendix IA, Inspection Frequency Justification from the permit.

10. WESF Modification Final Design Report

Response: The WESF Modification Final Design Report has been added as part of the permit. The Design Report was included as supplemental information. The Permittees believe this report was added to the draft permit in error and request it be removed from the permit.

Recommendation: Remove the WESF Modification Final Design Report from the permit.

Response to B-1-1

Please see responses to comments A-1-1 though A-1-10 for responses to these comments.

B-2: CH2M HILL PLATEAU REMEDIATION COMPANY

Comment B-2-1

This comment is a duplicate of B-1-1 and A-1-1 through A-1-9. Please see A-1-1 through A-1-9 responses to these comments.

Response to B-2-1

Please see responses to comments A-1-1 though A-1-9 for responses to these comments.

O-1: COLUMBIA RIVERKEEPER

Comment O-1-1

I would like to express my strong support for adding the Waste Encapsulation and Storage Facility (WESF) to Hanford's Site-Wide Permit. This move, requiring the U.S. Dept. of Energy (Energy) to create a legally enforceable closure plan for the facility, is necessary to hold the federal government accountable for a cleanup of Hanford that is protective of people and the environment.

The President's proposed budget for FY 2021 left me with serious concerns about the potential impacts on Hanford cleanup. There is not enough budget information available to see if there is funding being requested for WESF closure. I would like to understand the budget profile for the closure of WESF. Adding WESF to the Site Wide Permit seems like a tangible next step to push Energy to create a plan for closure of WESF, providing the public with a meaningful and legally enforceable plan to achieve that closure. Currently, the Tri-Party Agreement (TPA) deadline for removing the cesium and strontium capsules stored in WESF into dry storage is 2025. However, Energy may be at risk of missing this milestone, prolonging the serious risk posed by storing massive quantities of radioactive cesium and strontium in aging concrete basins.

The WESF facility stores 1,936 cesium and strontium capsules, containing about 90 million curies of radioactivity, about one-third of all radioactivity at Hanford. [1] Since 1970 these capsules have been stored in pools at WESF. Now, almost over 50 years later, we see aging infrastructure around the Hanford Site beginning to fail. Scientists fear that a failure of the

WESF facility, containing this much radioactivity, would be a Chernobyl-like catastrophe. Including changes necessary to move these capsules into dry storage is absolutely necessary to ensure the safety of the site.

Thank you, Ecology, for thinking about the future of Hanford and holding the U.S. government accountable for a cleanup of Hanford that protects people, salmon, and the environment now and in the future.

Response to O-1-1

Ensuring that DOE finds a permanent treatment, storage, or disposal solution for the cesium and strontium capsules has been a priority for Ecology. Ecology agrees that transfer to dry storage will be an important step to minimize the risk to Washington's citizens and natural resources until such a solution can be found.

The permittees have identified that operational costs for dry storage will be less than the current costs for storage operations at the WESF. Ecology is hopeful that this potential savings will continue to be considered in allocating funds to complete the transfer.

O-2: HEART OF AMERICA NORTHWEST

Comment O-2-1

WESF Permitting is integrally related to B-Plant remediation, and the permit should reflect conditions to protect health and safety:

We appreciate that Ecology extended the comment period for the WESF permit to September 30, 2020.

We requested the extension because of the need to review a large quantity of permit documents and conditions; and, to coordinate review and comments with review and comments on the proposed B-Plant "Non-Time Critical Removal Action" (NTCRA) Engineering Evaluation and Cost Analysis (EECA) document. That comment period now extends until October 14.

At the time we requested the extension, we did not know that the USDOE had violated the requirement of the TPA to submit a remedial action work plan for the B-Plant Complex by September 390, 2019: M-085-70 (submit the work plan to prepare and issue a full RI/FS for 200-CB-1, including all of B-Plant).

Nor had we yet learned that M-085-76 requires USDOE to Initiate Response Actions for B Plant Remedial/Removal Action Work Plan by 9/30/2025.

USDOE failed to include any mention of these remedial action milestones or of Ecology's actions in regard to this violation and extensions of negotiations. In any of the public notice materials for the B-Plant EECA comment period. Nor did USDOE disclose this in the EECA despite requirements to disclose or link all related regulatory requirements and actions. Nor the TPA agencies link any of the TPA milestone violation formal documents on the comment period web page for the EECA.

We also have to object that the documentation of Ecology's initial review and rejection of the permit application are not mentioned or linked in the public materials. Of particular importance is the lack of a training plan for the dangerous activities (which still is inadequate, e.g., for transportation as discussed below). The worker health and safety plan and contingency plans fail to acknowledge the dose rates within the structure and from operations. While Ecology does not directly regulate nuclear safety, the activities resulting in doses are from handling and storing missed wastes. Ecology has a duty to obtain adequate technical advice in issuing worker health and safety permit provisions that ensure that conditions do not result in cancers or acute

illnesses triggering workers compensation. USDOE's worker radiation exposure standards are not adequate for this protection, nor are they the sole relevant consideration for the required permit conditions.

Response to O-2-1

The B Plant removal under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the proposed dangerous waste permit modification for the Waste Encapsulation and Storage Facility (WESF) are two separate activities. Each action will be guided by separate regulations, have significantly different enforcement mechanisms, and are undertaken with different lead agencies.

The WESF is a currently operating facility subject to RCRA dangerous waste permitting requirements under WAC 173-303. Ecology has the authority to issue and enforce this dangerous waste permit. Removal of B Plant will be undertaken under CERCLA. To support CERCLA actions at the Hanford Site a lead regulatory agency is established. Under the Tri-Party Agreement this could be the United States Environmental Protection Agency, Ecology, or both. Ecology is the lead regulatory agency for the B Plant Canyon and Facility.

While there are physical and historical connection between the WESF and B Plant, the ongoing B Plan EE/CA does not directly connect with the RCRA Permitting associated with the WESF Pools, Hot Cell G and Truck Port.

Ecology's initial completeness review of the permit modification application and subsequent request for additional documentation was addressed in the public notice materials. Please see Section 3.0 of the Fact Sheet.

As noted in this comment, radiation exposure at the WESF is not regulated by Ecology under WAC 173-303 except in a general requirement for miscellaneous units to be located, designed, constructed, operated, maintained, and closed in a manner that will ensure protection of human health and the environment [WAC 173-303-680(2)]. The permittees have a site-wide radiation exposure monitoring program and violations of worker protection standards would be addressed through more appropriate legal and regulatory procedures. Ecology can not arbitrarily dictate operational practices through a permit if these requirements are not detailed in WAC 173-303.

Comment O-2-2

If Ecology had not extended the comment period, we would have been required to submit comments prior to determining that the WESF activities to which the permit pertains are likely to overlap with demolition activities under the proposed removal action, or with investigation activities under the requirement to conduct a remedial investigation and initiate a full remedial action by September 2025.

Thus, we have to respectfully and forcefully disagree with Ecology's response to us (attached with the request) which, while granting the extension, the B-Plant removal action "is not linked with" the permit modification; and, "the B Plant CERCLA Removal Action is not connected with the WESF RCRA Permit Modification and the documentation for one action will not address the other

The "closure plan" for WESF should now be coordinated with the overdue remedial investigation work plan for the B-Plant complex, which includes WESF.

We are clearly not alone in raising the concern that the B-Plant complex, including WESF, should have a full remedial investigation proceed and remedial action begin by September 30, 2025 pursuant to the TPA milestones.

We are not alone in our concern that the delays in removing the Cs and Sr capsules will now cause the project being permitted to overlap with the remedial investigation.

We are not alone in voicing strong objections to USDOE's proposed B-Plant Non-Time Critical Removal Action, which would include demolition activities.

If the demolition activities, including preparations for demolition, proceed under the NTCRA, there are significant risks of releases and exposure, as well as the need to impose worker exposure and access controls to the B-Plant complex, including WESF and the SCA.

The draft permit has no requirements for worker health and safety plans to prevent interference and to ensure protection of the WESF project workforce from simultaneous demolition activities under the proposed NTCRA.

Lessons from the PFP demolition Plutonium release should be incorporated into the permit to ensure that no B-Plant demolition or other activities result in workers who are engaged in the high priority WESF capsule removal project will be in a zone of potential exposure. This should include requirements for control of all runoff, debris management and controls over demolition.

The permit contingency plan needs to be revised to include responding to the very real potential for releases from B-Plant demolition impacting WESF; and, as described below, conditions relating to transfer of the casks to and from trucks and transporting the casks.

The TPA requires that a remedial investigation and characterization activities for the B-Plant Complex begin immediately. This is overdue and should not be delayed because of USDOE having repeatedly failed to fund removal of the capsules from WESF.

If the proposed NTCRA removal action is authorized (which would be a violation of CERCLA, as there is no urgent, time sensitive reason for using a removal action instead of a full remedial investigation and remedial action), it will pose serious potential impacts for the WESF capsule removal project and for the remedial investigation.

Over the past month, since the extension was granted, a significant group of stakeholders have expressed these concerns and members of the Hanford Advisory Board have moved draft advice forward making these points.

Therefore, under its RCRA permit authority, Ecology should bar USDOE from proceeding with the B-Plant Removal action and ensure that a complete remedial investigation occurs prior to action.

Thus, we support adding a closure plan for WESF to the RCRA permit. The closure plan should ensure that there is full characterization (including regarding potential radiation damaged concrete and structural elements and activated metals), removal of all hazardous wastes within 90 days of the removal of the capsules, and that the characterization is utilized in the RIFS.

Response to O-2-2

Ecology agrees that it is important to coordinate closure activates when possible. The permit that has been written for the WESF Operating Unit Group 14 and was available for public comment was specifically written to support facility modifications and operational activities to facilitate the movement of the Sr and Cs capsules currently located in the WESF Pool Cells to Hot Cell G for packaging and eventual movement to the Capsule Interim Storage Facility for dry storage. Once closure of the WESF Operating Unit Group is initiated, Ecology and DOE will ensure that any potential coordination of closure activities with the B Plant will be evaluated. The WESF Permit does have a closure plan in Addendum H which meets the requirements of WAC 173-303-610. Assessment of radiation damage to concrete is beyond the requirements of WAC 173-303-610.

Comment O-2-3

Permit Conditions III.14.C.2 and III.14.D.1.a requiring full "description" of waste streams for designation of waste streams for LDR treatment standards and waste management must be maintained and strengthened. This must be clearly applied to the capsules themselves as discussed below. Potentially damaged capsules must be identified, as well as the chemical composition of capsules.

The conditions need to be strengthened to meet requirements for removal of all dangerous wastes and closure, Rather than "description" the permit should require characterization of wastes remaining in piping, ventilation, vessels, etc. So-called process knowledge from processes that were abandoned decades ago is not adequate. Failure to strengthen these conditions will likely lead to a repeat of PUREX Plant violations with wastes leashing or leaking form pipes without characterization.

These conditions must not be limited to the capsules (as USDOE appears to comment).

There is no dispute that the capsules are not purely radioactive waste without dangerous chemical wastes.

Response to O-2-3

Piping, ventilation, vessels, and other equipment which may be contaminated with dangerous waste must be characterized and properly disposed, please see Addendum C, Sections H-A4.1.3 through H-A4.1.4, H-B5.2, and H-C5.

The closure plan cannot be implemented until after the capsules have been transferred out of the WESF; therefore, the capsules are not detailed in Addenda H, Closure plan. The contents of the capsules have already been characterized to the the degree reasonably possible, given the fact that the extremely high levels of radiation produced interfere with many testing instruments and create a significant health hazard for anyone attempting to sample and test the waste. Opening capsules to assess their contents would create a significant threat to human health and the environment for no benefit. If a capsule were to be breached or leak during removal from the pools into dry storage, the facility's Contingency Plan would be followed and any necessary steps to manage newly generated waste streams would be closely followed by Ecology and DOE.

Comment O-2-4

Requirements for inspection (remote) and tracking individual capsules to ensure that there is compatibility of capsules in the same cask, and that potentially damaged capsules are identified and given additional encapsulation should be added to the permit.

"(N)ormal container inspections can not occur, and labeling of the containers inside the cask containers are contrary to requirements to maintain radiation exposure to as low as reasonably achievable" (ALARA). From WESF and Capsule Storage Area Permitting Plan Section 1.2.1 December 2017.

Response to O-2-4

There is a requirement in the permit to track individual capsules, see Addendum C, Sections C.2.2.1 and C.2.2.2.2.

All capsules are compatible with each other for storage in the same Cask Storage System (CSS). However, the permittees are voluntarily separating cesium and strontium capsules to different casks as a best management practice, see Addendum C, Section C.2.2.2.1.

Once the capsules are loaded into the CSS and transferred to the Capsule Interim Storage (CIS) Facility for dry storage they will be inspected as detailed in the the CIS Permit, Addenda I, Inspection Plan.

Comment O-2-5

While Ecology concluded that no further SEPA evaluation of the impacts from moving the capsules to dry storage and eventual vitrification of the Cs and Sr was required (See Permitting Plan, Dec. 2017) because this general activity was described in the TCWMEIS,[1] the analysis failed to consider the need to mitigate potential impacts that would arise due to the unforeseen circumstance of having delayed capsule removal to overlap with demolition as part of removal actions or remedial investigations for the B-Plant Area.

[1] Whole we agree that the slight change in transportation in moving canisters from WESF to the storage area instead of WTP is insignificant in terms of potential impacts, that determination is only supportable if a detailed transportation plan mitigates potential accident and exposure risks through permitting. Unfortunately, the permit does no include conditions that are adequate.

For example, there are significant parallels with this project's transportation element and the trucking of repackaged K-Basin fuel and sludge to the Canister storage Building. The building's design did not adequately account for the width of the trucks, necessary clearance and risks associated with moving a massive highly radioactive cask. This led to numerous serious employee concerns. This should be resolved with a set of permit conditions for design and operational safety requirements for trucking and transfer of the casks.

Response to O-2-5

The transport of capsules between the WESF and CIS is not an activity which requires a dangerous waste permit and is not part of the WESF Operating Unit Group. However, the permittees have had Registered Professional Engineers assess this process. This was addressed in CHPRC-02538 Capsule Storage Area Final Design Report, one of the supporting documents for the CIS (OUG-19) permit modification issued on February 20, 2020. As noted in Section 4.1.2 of CHPRC-02538, there are certain areas of the transfer pathway which will need to be upgraded for this process.

Specific transportation equipment has been purchased and modifications to the transfer path will be completed to ensure the safe movement of the capsules to the CIS.

Comment O-2-6

Although the permitting plan required USDOE to submit the permit modification at least 180 days prior to planned start of construction and to be based on 30% design, USDOE has proceeded to issue a contract for construction without receiving or being able to incorporate permit modifications, including those which should be included for worker safety (which may include design requirements) after consideration of our and others' comments.

Any claim by USDOE that urgency for safety required a temporary authorization is mooted by USDOE having delayed the project for years and failing to request funding for the removal of capsules for FY 2021 and FY 2022.

Response to O-2-6

No temporary authorization was requested or granted for this permit modification. Any modifications to the WESF Facility, detailed in the WESF OUG 14 permit, have not been initiated by the permittees. Ecology does not have authority to be involved with contracting decisions made by DOE.

Comment O-2-7

USDOE asserts that there is no sign of concrete damage due to gamma irradiation. However, the likelihood of damage to concrete in the pool, supports as well as other structural and ventilation elements is high. Ecology should include permit conditions for testing with engineering evaluation for he activities as well as to be used in the RIFS for demolition.

Response to O-2-7

The permittees have acknowledge degradation of concrete, see CHPRC-01858, Structural Evaluation of WESF Concrete Degradation Due to Radiation. This engineering evaluation noted degradation but found that it did not compromise the safety in the short-term. Studying concrete which has not been contaminated with dangerous waste is beyond the scope of WAC 173-303. At this time there is no plan to study the concrete in the Waste Encapsulation and Storage Facility (WESF) pool cells. When closure activities are initiated for WESF, DOE and Ecology will consider this suggestion.

Comment O-2-8

USDOE asserts that public exposure risks from WESF activities would be below 10 mrem per year. However, this is a significant dose and would result in significant latent cancers if a release resulted in multiple years of exposure. Further, USDOE has not updated its basis for these calculations to include public and Tribal members on site or living and working closer than people were doing so when the public exposure scenarios were adopted. Therefore, the contingency plan needs to be robustly reviewed to ensure that any release does not result in exposure at a fraction of these levels for the public or workforce.

Response to O-2-8

The 10 millirem standard is a threshold set in WAC 173-480-040. The permittees are evaluated to and monitored for this standard on an ongoing basis by the Washington Department of Health. A requirement to limit exposure to less than the legal limit is not a reasonable addition and is not a WAC 173-303-350 requirement for a Contingency Plan.

Comment O-2-9

The contingency plan and reporting requirements need to be strengthened to ensure that leakage from the pools is identified early to ensure action is taken.

The current language only requires notification to Ecology if leakage rates increase by 25% over the baseline for two consecutive weeks. This is not acceptable. Any statistically significant increase should trigger immediate notification. Ecology should insist on notification. Notification does not mean that specific action will be required, e.g., for the leakage rate returns to baseline. The contingency plan fails to identify what will be done if the basins begin to leak more rapidly. A plan to accelerate removal of the casks is essential, along with requirements in the closure plan for characterization and remediation of releases.

Response to O-2-9

The notification threshold is based upon the measurement accuracy possible in the sump for Pool Cell 5. The leak is very slow (approximately 0.8 liters per week) and accuracy is limited by the pumping equipment used to empty the sump. Ecology has set the notification threshold at a rate which is close to the natural historical variation in this leak rate that the permittees have observed since Pool Cell 5 was first used in 1974.

If this rate increases, Ecology and the permittees will determine the proper response. As long as the capsules remain intact, which is monitored and confirmed by beta monitors, the leak itself does pose a risk of releasing contamination into the environment. Accelerating removal of capsules could potentially increase the risk of an accident contaminating the pool cells, creating an emergency which would otherwise be avoided.

Appendix A. Copies of All Public Notices

Public notices for this comment period:

- Focus sheet
- Classified notice 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



Waste Encapsulation and Storage Facility permit modification



Public comment period

August 3 to September 18, 2020

Please submit comments

Electronically (preferred) via:

http://nw.ecology.commentinput.co m/?id=DJWB3

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

Daina McFadden 3100 Port of Benton Blvd Richland, WA 99354

Public hearing

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

Daina McFadden 509-372-7950 <u>Hanford@ecy.wa.gov</u>

Special accommodations

To request an ADA accommodation, contact Ecology by phone at 509-372-7950 or email at <u>Daina.McFadden@ecy.wa.gov</u>, or visit <u>ecology.wa.gov/accessibility</u>.

For Relay Service or TTY call 711 or 877-833-6341.

Public comment invited

The Washington State Department of Ecology (Ecology) invites the public to comment on the draft permit modification to allow transfer of cesium and strontium capsules out of the Waste Encapsulation and Storage Facility (WESF).

This modification will add the currently operating WESF facility to the Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit, Revision 8c (Site-wide Permit) as Operating Unit Group 14.

The permittees are:

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

CH2M HILL Plateau Remediation Company PO Box 1600 Richland, WA 99352

Ecology invites you to comment on this new modification **August 3 to September 18, 2020.**

Modification overview

This modification will add the WESF Operating Unit Group to the Sitewide Permit. The WESF Operating Unit Group is comprised of three new Dangerous Waste Management Units (DWMUs): Hot Cell G DWMU, Pool Cells DWMU, and Truckport DWMU.

The WESF Hot Cells A through F are already incorporated in the Sitewide Permit as a Closing Unit Group. This Closing Unit Group is comprised of one DWMU and it will not be modified by this permitting action.

WESF currently stores 1,936 capsules containing radioactive cesium chloride and strontium fluoride salts. These salts were separated from tank waste from 1967 to 1985 to reduce the temperature inside storage tanks at Hanford.



The separation process also recovered small amounts of heavy metals such as lead, chromium, and cadmium which are contained in the cesium and strontium salts. This mixed waste is contained in double-walled stainless steel capsules that are stored underwater for cooling and radiation shielding.

Proposed changes

On February 20, 2020, Ecology issued a permit modification to authorize construction of a new Capsule Interim Storage (CIS) operating unit group to replace the current pool storage at WESF.

At WESF, the permittees will load 25 cask storage systems (CSSs) holding capsules in cylindrical casks approximately 10 feet in diameter by 11 feet tall. Each CSS will be constructed of concrete and steel to provide radiation shielding, waste protection and containment, and sufficient cooling through passive air ventilation. After each CSS is loaded it will be transferred to CIS for storage until a final treatment, storage, or disposal solution becomes available.

WESF will need to be reconfigured to support capsule transfer. For example, the current shielded storage container in Hot Cell G will be replaced to provide space to install the equipment to place capsules in universal capsule sleeves. A new layer of concrete floor will be poured in the Truckport to create a smooth surface for the vertical concrete casks. Additionally, there will be miscellaneous changes to piping, ventilation, and other support equipment for WESF.





Why capsule transfer matters

Transfer from WESF to dry storage in CIS will provide increased safety and resiliency. 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 are necessary to dissipate the heat generated by capsules. A spill or release would create a significant volume of contaminated water. If the pools were breached in an event such as an earthquake, it might leave the capsules uncooled and unshielded.

The cesium and strontium salts have gone through at least one half-life since being placed into pool storage and show reduced activity and heat generation. The capsules are still extremely hazardous, but can be safely shielded and cooled in storage casks. Moving capsules to dry storage eliminates the risk of power loss or equipment failure impacting the cooling system. In an emergency such as an earthquake, the potential for spread of contamination to soil and groundwater is more limited than it would be in pool storage.

Moving these capsules is also essential to initiate cleanup and closure of WESF and B Plant. Although the capsules will still be on site, CIS will have a much smaller physical and environmental footprint than existing facilities. This transfer advances the overall goal of Ecology and the permittees to clean and restore the Hanford Site.

Why capsules will remain on site

There are no viable alternatives to continued storage of the cesium and strontium capsules at the Hanford Site. There are no facilities in the United States permitted to treat or permanently store this material. Therefore, continued interim storage in a manner protective of human health and the environment is the only current option.

The permittees must continue to periodically evaluate more permanent disposition options under the Hanford Federal Facility Agreement and Consent Order. When an option is available, the cesium and strontium capsules will be treated and/or stored permanently at a different facility.

Reviewing the proposed changes

Ecology invites you to review and comment on this proposed modification for the WESF Operating Group 14. See Page 1 for comment period dates and information on how to submit comments.

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

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





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

Hanford's Information Repositories and Document Review Locations

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

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

Washington State University Tri-Cities Department of Energy Reading Room 2770 Crimson Way, Room 101L Richland, WA 99354 509-375-7443 University of Washington Suzzallo Library P.O. Box 352900 Seattle, WA 98195 206-543-5597

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

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

SUNDAY AUGUST 2 2020



THAT SCRAMBLED WORD GAME By David L. Hoyt and Jeff Knurek



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PRINT YOUR ANSWER IN THE CIRCLES BELOW

See Jumble Answers on the 2nd page of the classifieds

Auctions Abandoned Vehicle Sale Mid-Columbia Towing 4023 W Clearwater, Kennewick Thursday, August 8, 2020. @11am 1) 1976 MG MGBCV LIC#31963CV VIN#GHN5UG404962G

Merchandise

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Kohler Cast Iron Kitchen Sink \$180 Bone brand new in box 734-1323

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Richland

Richland Sat - Aug 1 8AM-4PM - 401 Hartford Street - Masks Reqired. Oak dinning table, Electric Stove, Breakfast Set, DVD Surround Set, End/Coffee Tables, Lamps, Tools, Mirrors, Moving Boxes, Misc.

Recreation

Camping/Motorhomes Winnebago Tour 43' Like new, loaded with everything

Legals

Legals & Public Notices

Applicant Hansen-Rice, Inc., 1717 E Chisholm Dr Nampa, ID 83687, is seeking coverage under the Washington State Department of Ecology's Construction Stormwater NPDES and State Waste Discharge General Permit.

The proposed 17.5-acre commercial construction project for Riverpoint Farms, located on Plymouth Commercall Rd. located in Plymouth Commen-cial Rd. located in Plymouth, WA in Benton county. The area will be distur-bed for construction of stormwater infil-tration ponds, septic drain field, waste-water settling pond, future office, and parking I drages. All discharges and parking lot areas. All discharges and runoff will go to ground water.

Any persons desiring to present their views to the Washington State Depart-ment of Ecology regarding this applica-tion, or interested in Ecology's action in writing no later than 30 days of the last date of publication of this notice. Ecology reviews public comments and considers whether discharges from this project would cause a measurable change in receiving water quality, and, if so, whether the project is necessary and in the overriding public interest ac-cording to Tire II antidegradation re-quirements under WAC 173-201A-320.

Comments can be submitted to: Comments can be submitted Department of Ecology Attn: Water Quality Program, Construction Stormwater P.O. Box 47696, Olympia, WA 98504-7696

Franklin PUD Vendor List

The Public Utility District No. 1 of Frank 1 In County, as required by RCW 39.04.190, is notifying the public of the existence of a vendor list and is solicit-ing new vendors for the 2020 calendar

year. The vendor list consists of companies that provide materials, equipment, and that provide materials, equiphent, and supplies related to the transportation and distribution of electricity to end users, i.e. primary underground cable, transformers, circuit switchers, wood and steel power poles, overhead and underground, distribution, products. underground distribution products overhead transmission products, vehi-cles, as well as other equipment, mate-rials, and supplies related to the opera-tion of Franklin PUD.

Vendors not already on the District's vendor list may obtain applications by accessing the District's website at www franklinpud.com or by contacting Julie Anderson, Purchasing Manager, at (509) 546-5950 or purchasing@frankli npud.com.

KENNEWICK PLANNING COMMIS-SION NOTICE OF PUBLIC HEARING August 17, 2020 6:30 p.m.

The Kennewick Planning Commission will hold a Public Hearing on August 17, 2020 at 6:30 p.m. or as soon as possible thereafter, to receive public com-ment on a proposed amendment to the Zoning Map. Staff will be presenting their analysis and the Planning Commission will make a recommendation to the City Council on the item. The public hearing will be held using a virtual platform. The link to the hearing will be posted online at <u>www.go2kenne</u> <u>wick.com/planningcommission</u> 5 days prior to the meeting

CLASSIFIED LEGALS

Legals & Public Notices

COZ 20-04/PLN-2020-01589 – Pro-poses to change the zoning of approxi-mately 14.4 acres from Business Park

(BP) to Commercial, Community (CC) The site is located at 10600 Ridgeline Dr Proponent – Archibald & Company Ar

chitects, PS Comment Period - Written com-ments may be submitted via email to Anthony Muai at amuai@ci.kennewick. Anthony waa a tandaded. Adminewick. wa.us. Comments may also be mailed to 210 W. 6th Ave., Kennewick, WA 99336 and must be received on or be-fore the hearing date. Comments may also be presented at the hearing.

The City of Kennewick welcomes ful The city of Kentewick welcomes tuin participation in public meetings by all citizens. No qualified individual with a disability shall be excluded or denied the benefit of participating in such meetings. If you wish to use auxiliary aids or require assistance to comment this meeting capted at this public meeting, please contact Melinda Didier at (509) 585-4275 or TDD (509) 585-4425 or through the Washington Relay Service Center TTY at #711 at least ten days prior to the date of the meeting to make arrange ments for special needs.

CITY OF RICHLAND NOTICE OF PUBLIC HEARING

The Richland City Council will conduct a virtual public hearing on Tuesday, Au-gust 4, 2020 at or after 6:00 p.m.

to receive comments on proposed Ordi-nance No. 24-20, Amending the 2020 Budget in the Parks Capital Construction Fund. Comments may be mailed to the City of Richland c/o Joe Schiessl, 625 Swift Blvd. MS-13, Richland, WA 99352, or emailed to jschiessl@ci.richland.wa.us. All comments must be received by 4:00

p.m. on the meeting date identified above For additional information, please con-tact Joe Schiessl at <u>ischiessl@ci.richlan</u> <u>d.wa.us</u> or 509-942-7578. Published: Sunday, August 2, 2020

PUBLIC NOTICE

Notice is hereby given that Bioterra Farms Beneficial Use Facility (Bioterra) submitted an application to the Washington State Department of Ecology to ington State Department of Ecology to obtain coverage under the General Per-mit for Biosolids Management to ac-tively farmed agricultural lands located at T7-R28-S20,21,22. The permit appli-cation includes a Site Specific Land Ap plication Plan that describes how biosolids would be managed at this site. The permit application also includes a General Land Application Plan that de-scribes how future application sites wil be identified and managed. Public information regarding this permit applica-tion can be obtained from the contacts listed below. The SEPA Lead Agency, Washington State Department of Ecolo-gy, issued a Determination of Nonsignificance (DNS) on 7/30/2020 and comments on the DNS and envi-

ronmental checklist will be accepted Tormental checklist will be accepted through 9/01/2020. See the DNS for information on where to send com-ments. The DNS and environmental checklist can be found at<u>https://ecolo</u> gy.wa.gov/Regulations-Permits/Guidan ce-technical-assistance/Biosolids-perm the former #Tubliblief former tienephice.

tis-forms#Publicinformationonbiosolids permitapplications Any person wishing to comment on this

proposal, request a public hearing or meeting, must do so in writing within

Legals & Public Notices

TRI-CITY HERALD

30 days of this notice. Comments should be addressed to the Depart-ment of Ecology contact listed below. If you wish to be included on an interested parties list to receive notification of activities relating to this project, please notify in writing, the Bioterra contact listed below. Bioterra will provide writ-ten confirmation by certified mail, return receipt requested, to each interested person or organization that their name has been placed on the list. Con-tacts for questions, comments, or re-quests: Bioterra Environmental Engi-neering Inc. Bioterra Farms Beneficial Use Facility Andrew Schmitt 3010 Street, PMB 244 Richland, WA 99352 BioterraEngineering@gmail. <u>com</u> (509) 727-4356 Department of Ecology Department of Ecology, Solid Waste Management Peter Severtson 1250 West Alder Union Gap, WA 98903 Peter.Severtson@ecy.wa.gov (509) 379-4737 name has been placed on the list. Con-(509) 379-4737



PUBLIC NOTICE The Benton-Franklin Council of Governments has released its draft Regional Active Transportation Plan (ATP) for public comments and will be holding a virtual open house via Zoom on Wednesday, August 12, from 4:00 to 6:00 pm. The link to the meeting is: Attend to learn about and provide feed-

back on active transportation in the Benton-Franklin region. To view the Benton-Franklin Council of Governmen-t's draft Regional ATP and to submit public comments, please visit www.bfc og.us. Public comments on the draft Regional

Public comments on the draft Regional ATP will be accepted through Septem-ber 2. For questions about this event or to submit a comment, please email ebr aich@bfcog.us, call (509) 492-5199, or visit www.bfcog.us.

CITY OF RICHLAND NOTICE OF SEPA DETERMINATION

Date Notice Issued: July 30, 2020, per WAC 197-11-340(2) File #: EA2020-117

Proponent: Matson Construction, LLC, Attn: Calvin Matson, P.O. Box 794,

Richland, WA 99352 **Proposal:** Grading/filling of approxi-mately 2,500 cubic yards of material in order to prepare the site for future con-struction of a 5,200 square foot pre-certionegrametric huilding

-engineered metal building. Location of Proposal: Project site is located at 2554 Robertson Drive, Richland, WA 99352. Determination:

The City has re viewed the project for environmental impacts and has issued a determination of non-significance using the proc-ess outlined in WAC 197.11.340(2). This may be the only opportunity to comment on the environmental impacts of the proposal Public Comments Due: August 14, 2020

Contact: Mike Stevens, Planning Manager 625 Swift Blvd, MS-35

Richland, WA 99352 mstevens@ci.richland.wa.us Published: Sunday, August 2, 2020

Daina McFadden 3100 Port of Benton Blvd Richland WA 99354 Fax 509-372-7971 Public Hearing

there is enough interest, we will consid-er holding one. To request a hearing or for more information, contact: for more

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



The City of Pasco

proposes to issue Industrial Waste water Discharge Permit No. IDWP 000101

Permittee: Twin City Foods (TCF) to allow TCF to discharge pollutants subject to effluent limitations and other condi-tions to Pasco's POTWs, pursuant to all applicable pretreatment regulations applicable pretreatment regulations, standards, and requirements under lo-cal, state, and federal laws, or laws that may become effective during the term of the permit. Public Comment/Information:

A public notice of proposed permit is published to allow the public to submit written comments, within 30 days of publish date. Requests for permit application material can be made to Katelyn Stroud, (509) 545-3454. Comments can be mailed to: City of Pasco, Public Works, Attn: Katelyn Stroud, P.O. Box 293, Pasco, WA 99301. The Public Works Director may hold a public hear-ing on the permit application based on ing on the permit application based on public interest. A Public Hearing notice will be published 30 days in advance of such hearing.

Waste Encapsulation and Storage Facility permit modification public comment period notification

The Washington State Department of Ecology is providing notification of a 45-day public comment period starting August 3 through September 18, 2020. This comment period will address pro-posed modifications to the Dangerous Waste Portion for the Treatment, Stor-age, and Disposal of Dangerous Waste, Waste Encapsulation and Storage Fa-cility (WESF). The Permittees are the US Department of Energy, Office of Riv-er Protection and CH2MHILL Plateau Remediation Company. WESF is locat-ed on the Hanford Site in southeastern Washington.

Changes are Being Pro-What osed?

This modification will add the WESF Op-erating Unit Group to the Sitewide Per-mit. The WESF Operating Unit Group is waste Management Units (DWMUs): Hot Cell & DWMU, Pool Cells DWMU, and Truckport DWMU. The WESF Hot Cells A through F are al-ready incorporated in the Sitewide Per-pit as a Closing Unit Group. This Close

mit as a Closing Unit Group. This Closing Unit Group is comprised of one DWMU and it will not be modified by this permitting action. How to Comment

Ecology invites you to review and com-ment on this proposed WESF permit modification. Copies of the proposed modification are located in the Adminis-trative Record and Information Reposi-tories. In addition, the proposed modi-fication is online at the Nuclear Waste Program's public comment page at <u>http</u> s://ecology.wa.gov/Waste-Toxics/Nucl ear-waste/Public-comment-periods Please submit comments by Septem-ber 18, 2020.

Electronically (preferred): <u>http://nw.eco</u> logy.commentinput.com/?id=DJWB3 Mail or hand-deliver to:

A public hearing is not scheduled, but if

Daina McFadden

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AutoZone, Inc., the leading retailer and a leading distributor of automotive replacement parts and

accessories, is hiring Over the Road Team Drivers in Pasco, WA with a focus on the Pacific Northwest with at least 2 consecutive days home!

What can AutoZone offer you?

Paid up to 53 per mile! Hourly pay of 25.00! Drivers earn up to \$80,000 a year! Stop pay of "19.00"! Per Mile Per Diem

Full benefits package including Medical, Dental, Vision, 401k! Paid Time Off and Paid Holidays! **Quarterly Safety Bonus!**

What does AutoZone require?

Class A Commercial Driver's License (CDL) with a HAZMAT endorsement or capability to obtain a Hazmat 1 year of CDL Driving experience A Safe Driving Record



How do I get started? Apply on line a www.autozone.com/careers You can also email Cheri.Montee@autozone.com your resume and/or contact information directly today!

McFadden, Daina (ECY)
HANFORD-INFO@LISTSERV.ECOLOGY.WA.GOV
30-day Advance Notice of Public Comment Period
Wednesday, July 1, 2020 8:37:21 AM

WESF permit modification 30-Day Advance Notice

The Washington State Department of Ecology is providing notification of a 45-day public comment period starting early to mid-August 2020. This comment period will address proposed modifications on the Waste Encapsulation and Storage Facility (WESF) to allow transfer of cesium and strontium capsules out of the facility. The Permittees are the U.S, Department of Energy Richland Operations and CH2M Hill Plateau Remediation Company. WESF is located on the Hanford Site in southeastern Washington.

What Changes are Being Proposed?

This modification will add the currently operating WESF facility to the Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit, Revision 8c (Site-wide Permit) as Operating Unit Group 14.

Public Hearing

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



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Waste Encapsulation and Storage Facility permit modification public comment period notification

The Washington State Department of Ecology is providing notification of a 45-day public comment period starting August 3 through September 18, 2020. This comment period will address proposed modifications to the Dangerous Waste Portion for the Treatment, Storage, and Disposal of Dangerous Waste, Waste Encapsulation and Storage Facility (WESF). The Permittees are the US Department of Energy, Office of River Protection and CH2MHILL Plateau Remediation Company. WESF is located on the Hanford Site in southeastern Washington.

What Changes are Being Proposed?

This modification will add the WESF Operating Unit Group to the Sitewide Permit. The WESF Operating Unit Group is comprised of three new Dangerous Waste Management Units (DWMUs): Hot Cell G DWMU, Pool Cells DWMU, and Truckport DWMU.

The WESF Hot Cells A through F are already incorporated in the Sitewide Permit as a Closing Unit Group. This Closing Unit Group is comprised of one DWMU and it will not be modified by this permitting action.

How to Comment

Ecology invites you to review and comment on this proposed WESF permit modification. Copies of the proposed modification are located in the <u>Administrative Record</u> and <u>Information Repositories</u>. In addition, the proposed modification is online at the Nuclear Waste Program's <u>public comment page</u>.

Please submit comments by **September 18, 2020**. <u>Electronic submission</u> (preferred) Mail or hand-deliver to: Daina McFadden 3100 Port of Benton Blvd Richland WA 99354 Fax 509-372-7971

Public Hearing

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

Ecology logo		
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Waste Encapsulation and Storage Facility permit modification public comment period notification

The Washington State Department of Ecology is providing notification that the 45-day public comment period which started August 3,2020, **is being extended through September 30, 2020.**

This comment period addresses proposed modifications to the *Dangerous Waste Portion for the Treatment, Storage, and Disposal of Dangerous Waste,* Waste Encapsulation and Storage Facility (WESF). The Permittees are the US Department of Energy, Office of River Protection and CH2MHILL Plateau Remediation Company. WESF is located on the Hanford Site in southeastern Washington.

What Changes are Being Proposed?

This modification will add the WESF Operating Unit Group to the Sitewide Permit. The WESF Operating Unit Group is comprised of three new Dangerous Waste Management Units (DWMUs): Hot Cell G DWMU, Pool Cells DWMU, and Truckport DWMU.

The WESF Hot Cells A through F are already incorporated in the Sitewide Permit as a Closing Unit Group. This Closing Unit Group is comprised of one DWMU and it will not be modified by this permitting action.

How to Comment

Ecology invites you to review and comment on this proposed WESF permit modification. Copies of the proposed modification are located in the <u>Administrative Record and</u> <u>Information Repositories</u>. In addition, the proposed modification is online at the Nuclear Waste Program's <u>public comment page</u>.

Please submit comments by **September 30, 2020**. <u>Electronic submission</u> (preferred) Mail or hand-deliver to: Daina McFadden 3100 Port of Benton Blvd Richland WA 99354 Fax 509-372-7971

Public Hearing

A public hearing is not scheduled, but if there is enough interest, we will consider

holding one. To request a hearing or for more information, contact: Daina McFadden Hanford@ecy.wa.gov 509-372-7950



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A new public comment periods begins today, held by our agency, involving the Waste Encapsulation and Storage Facility at #Hanford. Check out the details and give us your feedback by Sept. 18: ecology.wa.gov/Waste-Toxics/N...



Washington Department of Ecology - Hanford

A new public comment periods begins today, held by our agency, involving the Waste Encapsulation and Storage Facility at #Hanford. Check out the details and give us your feedback by Sept. 18: https://ecology.wa.gov/Waste-Toxics/Nuclear-waste/Public-commentperiods

