COLUMBIA RIVERKEEPER
P.O. Box 950
Hood River, OR 97031
(541) 387-3030
columbiariverkeeper.org

August 15, 2025

Columbia Riverkeeper Comments on the Proposed Plan to Amend the Hanford Site 300 Area Record of Decision for 300-FF-2 to Address Changed Field Conditions at the 300-296 Waste Site. DOE/RL-2024-34, Rev. 0 June 2025

I. Why we care

Columbia Riverkeeper ("Riverkeeper") is a non-profit organization with a mission to restore and protect the water quality of the Columbia River and all life connected to it, from the headwaters to the Pacific Ocean. Columbia Riverkeeper has over 20,000 members and supporters who live, work, and recreate throughout the Columbia River Basin, including thousands of members and supporters in Washington. For over two decades, Columbia Riverkeeper has worked with Tribal Nations and people in communities throughout the Northwest who rely on a clean Columbia to address toxic and radioactive waste at the Hanford Nuclear Site ("Hanford"). Based on this experience, our organization has seen firsthand the complex challenges and unanswered questions, when it comes to long-term management of nuclear waste.

Columbia Riverkeeper is strongly supportive of the effort to address the 324 Building. However, we have major concerns about the impacts to worker safety[1], human health, the environment, water resources, wildlife, land uses in adjacent areas, and impacts from development and traffic in the vicinity of the 324 Building from current and proposed developments. Plans released thus far do not abide by governing legal requirements by failing to provide adequate details regarding key steps in the process, such as building demolition and material disposition.

Columbia Riverkeeper profoundly appreciates the effort of cleanup workers, agency staff, and regulatory agencies to address the pollution in and near the 324 Building. 324 Building cleanup poses a tremendously difficult problem, and the people addressing it now do so in a manner that demonstrates great effort in a difficult situation. However, we remain deeply concerned that the U.S. Department of Energy ("Energy") is failing to abide by the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") which outlines the requirements of this amendment to 300 Area Record of Decision.

Columbia Riverkeeper supports efforts to prioritize worker safety, and to pace the work in a way that is realistic and responsive to workers' experience, concerns, and training. The presence of extremely radioactive waste in close proximity to the Columbia River and the City of Richland at the 324 Building presents major challenges involving material from irradiated nuclear fuel, high-level waste.

---

[1] https://www.dnfsb.gov/sites/default/files/2025-05/Hanford%20Week%20Ending%20March%207%202025.pdf Defense Nuclear Facilities Safety Board. March 7, 2025. Hanford Activity Report for the Week Ending March 7, 2025. See entry regarding 324 Building: "The CPCCo emergency preparedness organization conducted a drill at the 324 Building, which simulated a seismic event that caused a partial collapse of the 324 Building resulting in a worker injury. A resident inspector observed the drill, noting that the scenario was sufficiently challenging and that facility personnel effectively responded to the event. He also noted that the drill team's evaluation of the response was critical but fair. During the response, facility personnel frequently demonstrated practical decision-making skills to resolve problems. Additionally, the resident inspector observed that response team performance of contamination control at the cold area boundary and fire-fighter equipment doffing were improved compared to previous observations at this facility. However, first-aid treatment and support for the injured worker were deficient, and the transport of the individual to a medical facility was not timely. Lastly, the Building Emergency Director and Incident Commander chose to collocate the Incident Command Post with the Field Emergency Response Organization at the scene. This resulted in some command-and-control overlap, which can cause confusion." The DNFSB report underscores the worker safety challenges identified in the Proposed Plan.

See also:
https://www.dnfsb.gov/sites/default/files/2025-03/Hanford%20Week%20Ending%20January%2024%202025.pdf Hanford Activity Report for the Week Ending January 24, 2025. "CPCCo declared a Potential Inadequacy in the Safety Analysis (PISA) for the Hanford Sitewide Transportation Safety Document (TSD) because the distances to offsite receptors from a radiological release are closer than those assumed in the TSD. The TSD had not been revised after DOE transferred unused land just north of the 300 Area to local jurisdiction. The resulting change places some transfers within 10 meters of the site boundary. CPCCo subsequently determined that a positive unreviewed safety question exists. Radiological shipments originating south of the Wye Barricade, except Department of Transportation (DOT) compliant and DOT special permit shipments, are prohibited until the safety of the situation is evaluated. This compensatory measure primarily impacts shipments onsite from the Pacific Northwest National Laboratory Radiochemical Processing Laboratory." Transportation concerns have been the subject of HAB advice, and the 324 Building removal and 300-296 remediation could impact area traffic.

II. Groundwater

The 324 building poses major concerns for both groundwater and groundwater's ultimate destination: the Columbia River. Tremendously radioactive soil, generating tremendous radioactive risks measured in hotspots over 10,000 R/hr[2] during characterization in advance of building stabilization, sits just 42 feet above groundwater destined for the Columbia River, less than 1,000 feet away.[3]

As written, the Proposed Plan contains no provision for what Energy will do if the cleanup of the 324 Building leads to a significant impact on groundwater contamination levels. During the public meeting for the Proposed Plan on June 30, 2025, Energy stated that there have been no detected impacts to groundwater as a result of the 324 Building. However, publically available data strongly suggest that the 300 area groundwater is impacted by Hanford activities, regardless of whether the contamination originated from the 324 Building.[4]

40 CFR 300.430 explicitly states that "[t]he ROD shall describe the following statutory requirements as they relate to the scope and objectives of the action: (A) How the selected remedy is protective of human health and the environment, explaining how the remedy eliminates, reduces, or controls exposures to human and environmental receptors." Failure to include provisions in the proposed plan related to groundwater is not protective of human health and the environment. Additionally, excluding impacts to groundwater from the Proposed Plan fails to account for the current contamination present in the groundwater and how the chosen path protects the River.

Achieving cleanup of the 324 Building area, and the 300 Area overall, is vital to protecting communities who rely on the Columbia River, where the River water mixes readily with groundwater in the 300 Area and levels go up and down based on releases from upstream dams. It is a complex problem, which Energy summarizes

---

[2] See The U.S. Nuclear Regulatory Commission, High Rad Dose Rate, March 20, 2020 available at https://www.nrc.gov/about-nrc/radiation/health-effects/high-rad-doses.html (explaining the effects of high dose rates of radioactivity.)

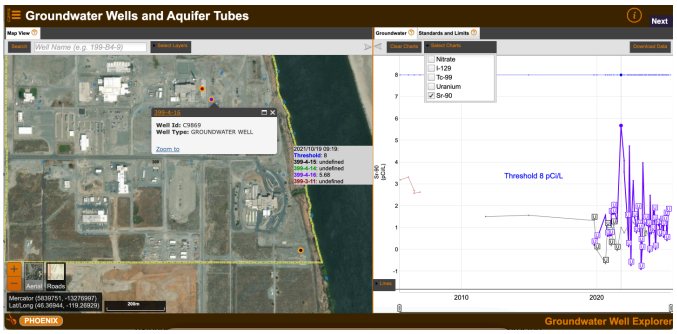
[3] See attached DNFSB Reports for references to 324 Building.

[4] See PHOENIX data for well 399-4-16 on October 19, 2021 which measured 5.68 picocuries per Liter.

This is below the MCL but still an indication of likely contamination that emanated from the 300-296 site or another release in or near the 324 Building. The presence of additional toxic and radioactive waste in the soil column above or upgradient is a big motivation for cleanup. Nearby in 2022, aquifer tube identified as c6347 in PHOENIX measured 56 micrograms per Liter, well above the MCL of 30 for uranium. The uranium problem persists, and our concern is that the solution for one problem may exacerbate the other, but possibly the opposite is true as well, that there could be an opportunity for co-benefits of addressing uranium at this time if monitoring and uranium treatment were linked, as HAB has discussed for instance, for other areas of 100 Area, and as ERWM raised in comments over 10 years ago on both 300 Area and K Area.

> Groundwater in the uppermost aquifer discharges to the Columbia River via upwelling through the riverbed and riverbank springs and seeps. The rate of discharge from the aquifer is very low, compared to the flow of the river. Groundwater flow direction in the immediate vicinity of the 324 Building is predominantly to the southeast.[5]

The highest Strontium-90 ("Sr-90") level in groundwater was 5.68 picocuries per Liter in 2021 in downgradient well 399-4-16, identified in Figure 3 of the Proposed Plan:



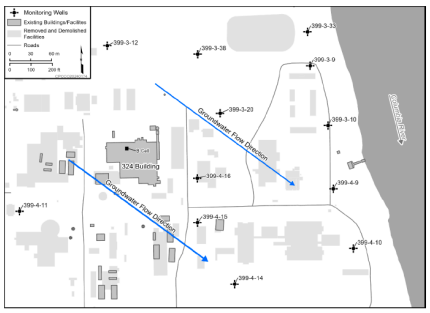


Figure 3. Locations of Groundwater Monitoring Wells in Proximity to the 324 Building

Image: Sr-90 levels in wells downgradient from the 324 Building. PHOENIX. PNNL and U.S. DOE. Accessed June 2, 2025. Groundwater flow diagram from the Proposed Plan on the right for comparison. Energy argues that data demonstrate that contamination is stable, staying relatively in place compared to contaminants like nitrate uranium, which are present in area groundwater also.

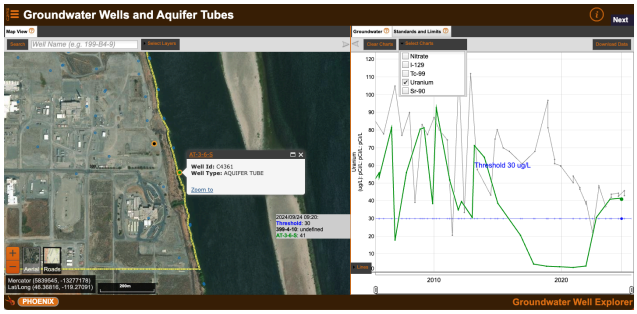
Wells in the area where the aquifer discharges to the River are elevated for uranium, but the source of this has not been attributed to the 324 Building, and we can observe wells upgradient from 324 also being impacted. Still, it is worth noting that the shoreline downgradient from the 324 Building is polluted with elevated levels of nitrate and uranium in the groundwater, both exceeding the MCLs of 10 milligrams/L and 30 micrograms/L, respectively.

For example, an aquifer tube labeled AT-3-6-S in PHOENIX, located downgradient from the 324 Building according to the maps in the Proposed Plan, exhibited a concentration of uranium of 41 micrograms/L in September 2024.[6]

---

[5] Proposed Plan, p. 6.

[6] Source: PHOENIX. PNNL and U.S. DOE. Accessed June 2, 2025. Additionally, the Focused Feasibility Study states, "Cleanup level basis for radionuclides is a cancer risk of 1x10-4 or 15 mrem/yr dose, whichever is more conservative. For uranium, 15 mrem/yr is more conservative, so that is the basis for the uranium isotope total cleanup level. That total is divided among the individual uranium isotopes using the natural ratio of isotopes. No uranium isotope cleanup level is selected for groundwater and river protection because the drinking water standard is used, which is based on uranium metal." Appendix A. p. A-2. This information suggests that uranium must be closely monitored in the area and the 2013 ROD questioned for its efficacy in protecting groundwater in the vicinity of the 324 Building.



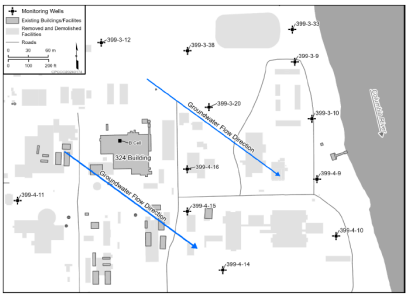


Figure 3. Locations of Groundwater Monitoring Wells in Proximity to the 324 Building

Source: Uranium in downgradient wells from the 324 Building. Source: PHOENIX. PNNL and U.S. DOE. Accessed June 2, 2025. Note the aquifer tube exceeds MCL at the shoreline. AT-3-6-S is drilled approximately 10 feet deep. Further upstream, the problem is even more pronounced with high levels of uranium reaching the shoreline.

Additionally, Energy measured a concentration of 1,710 micrograms per liter of uranium on March 5, 2025 in well 399-1-62. This is 57 times above the drinking water standard for uranium, which is known to cause kidney damage. This extremely high concentration of uranium in the groundwater is less than 1,000 feet from the Columbia River.

The 300 Area generally has a history of surprising us, as is clear from the fact that the remedial cleanup plan needed to be revised in the first place due to the contamination being more extensive than anticipated. It appears that there is also cesium-137 and strontium-90 located in the soil above the area where the uranium is percolating in from the deeper groundwater upslope. These contaminants are both known to cause an increased risk of cancer.

Failing to include response measures related to groundwater in the Proposed Plan excludes very real potential impacts that a remove-treat-dispose plan could have on the stability of contaminants contained in the soil. For example, up until now, the 324 Building has acted as a large cap, covering the ground underneath so that it remains dry and the materials have not moved very much. However, during demolition and excavation under the Proposed Plan, it is very plausible that moisture could seep deeper down into the ground, causing contaminants and radioactivity in the soil to get into the groundwater. The Proposed Plan and Work Plan associated with the ROD Amendment must include specific provisions that account for increased groundwater contamination that can be reasonably expected to occur based on past events in the 300 Area and an unpredictable climate with the potential for severe precipitation events occurring during cleanup.

Several concerns about the impact to groundwater were raised during the public meeting as well. Commenters raised valid questions during the hearing, captured in a summary below:

Question: Has the plan to dig up the waste site been evaluated by a hydrogeologist? There's seasonal changes in the river that affect the groundwater pretty close to the river. What will your plan be if you do see an uptick in those contaminants?

Response from Energy: After the 2013 ROD was in place, we went under remedial action planning and there was a significant modeling study… that was looking at the mobility of this waste site and also how moisture in the soils affected it and it's incredibly detailed… but going forward we will likely have to reevaluate this because the information is dated.

In order to comply with CERCLA requirements, the Proposed Plan should have looked at this information and updated it. When is Energy planning on doing that?

Question: I understand monitoring has not detected increases in contaminants of concern (yet), but has this potentially increased risk of partitioning to groundwater been evaluated? And if so, what was concluded?

Response from Energy: Yes with the additional hotspot that we found in that area, in terms of the mass of contamination is greater still within the building foundation, so completely covered in kind of like a protective cap over the waste site.

Response from EPA: Right now, with the building over it, there is no driving force essentially, so that's the primary reason that right now we're not viewing the different configuration of the contamination as a change in the risk. But as part of the demolition planning depending on which alternative we go with may change what that needs to look like, what monitoring we need in place, what controls we need in place, what potential protective measures need to be in place so that we do continue to have no driving force to move that contamination.

If the Proposed Plan is to remove the protective cap covering the groundwater, this CERCLA amendment must contain specific provisions for what additional protective measures will need to be in place once the cap is removed.

Question: Currently the industrial standard is the cleanup standard… so this would leave much more contamination in the soil compared to the residential standard due to the expectation that no one will live on the land. Could you explain why the industrial standard was chosen? Especially considering the City of Richland has it in their comprehensive plan to eventually residentially develop the area and the Yakama Nation has treaty rights to the resources on the land and the Columbia River.

Response from Energy: I can't speak to that in detail. I can say that Hanford's comprehensive land use plan outlines some of the different zones whether it's industrial versus residential. So, please, if you can make that comment during the public comment period and formally submit that, that's one we can definitely respond to.

Response from EPA: The vast majority of the 300 Area was cleaned up to the residential standards and a small area, particularly where there's a large Pacific Northwest National Lab ongoing mission, is being cleaned up to the industrial levels… Although currently none of the groundwater is being used as drinking water but we do cleanup even under the industrial standards it's all to the same groundwater drinking water standards.

As noted in the 2013 ROD (EPA et al., 2013)

> The reasonably anticipated future land use for the 300 Area Industrial Complex and 618-11 is industrial. DOE's reasonably anticipated future land use for the remaining portions of the 300 Area will be industrial whereas EPA believes other uses including residential are the reasonably anticipated future land use for the remaining areas where residential based cleanup levels are used, which also achieves a level of cleanup that allows for industrial use.[7]

The future land use is uncertain. Responses from Energy and EPA continue to suggest that future land use is uncertain, with EPA confirming that groundwater must meet the drinking water standards, which is not true in this case. Additionally, lapses in institutional controls occur in cleanup sites.

Question: Will the 324 cleanup impact groundwater, particularly with the potential to increase mobilization of the uranium that has been detected at downgradient wells?

Response from Energy: We talked about the soil samples taken and uranium is not present in any appreciable quantities; that's not one of our main concerns, that's mainly cesium and strontium with respectively very low amounts in comparison of americium and plutonium. So, what we're doing here isn't going to release anything.

Response from EPA: The protection of the waste site itself means that we are not going to be having significant water additions. That is going to have to be very detailed planning to make sure that any water additions are controlled. So in terms of potential for pushing the uranium plume or changing how the uranium is sitting in the vadose zone or anything like that, we're at a distance from the uranium and we are already going to need to be controlling all of the water additions because of the waste site itself. All of that will be considered under the protection that gets put in place during the remedial process.

Given the documented evidence of changes in groundwater conditions in the 300 Area, the history of the continuously changing landscape at the 300 Area, and the clearly demonstrated public concern surrounding the issue, Energy should have a plan for what will be done if there is

[7] Proposed Plan p. 9-10.

a significant impact to groundwater safety. We urge you to include such a provision in the Proposed Plan.

In addition to having a plan, another way to ensure that there is no impact to groundwater is to have a well placement that both monitors for the contaminants from the 324 Building, and extracts uranium at the same time in a zone where the well would not accelerate migration of radioactivity. Since Energy will be digging deep in the ground and putting up a large structure, they may generally disturb the area. It is only 1,000 feet from the River, and the groundwater is immediately adjacent to the River and exchanging water with the River, and is demonstrably polluted with uranium. Therefore, instead of assurances, we ask that Energy and EPA have a plan for impacts to uranium. In the CERCLA 5-year review, we will raise this issue again.

Additionally, emerging contaminants such as PFAS were present in tank waste streams, reactor areas, fire stations and other places at Hanford and could have found entry into the 324 Building or the environment nearby. Although this Building is not specifically called out in Energy's recent review of PFAS at Hanford, the March 2025 overview of PFAS at Hanford states

> The 300 Area Fire Station or 3709A Building was constructed in 1964 and serves as the primary Fire Station for the 300 Area. It contained five bedrooms, offices, and other facilities to accommodate firefighting personnel. The main fire training areas at the Hanford Site were the 100 Area and 200 Area (Chapter 3.0). However, foam use at the 300 Area did occur, but was at the discretion of the fire chief (Figure 7-70 through Figure 7-73). In addition, WHC-MR-0388, Past Practices Technical Characterization Study – 300 Area – Hanford Site, states that mandatory fire training classes did occur and burning of fuels, oils, slurries, and other substances took place at this location. *The 300 Area Fire Station has photographic evidence of PFAS releases into the environment, and the area should be considered for future groundwater and soil sampling events.*[8] [emphasis added]

[8] DOE/RL-2024-23, "The Preliminary Assessment of the Historical and Current Uses of Per- and Polyfluoroalkyl Substances (PFAS) at the Hanford Site." p 7-68. See also, General overview of PFAS at Hanford. 2024 Presentation by U.S. DOE. https://www.hanford.gov/files.cfm/9_-_PFAS_Presentation_FINAL.pdf . See also https://www.columbiariverkeeper.org/2024/pfas-invisible-forever-everywhere/

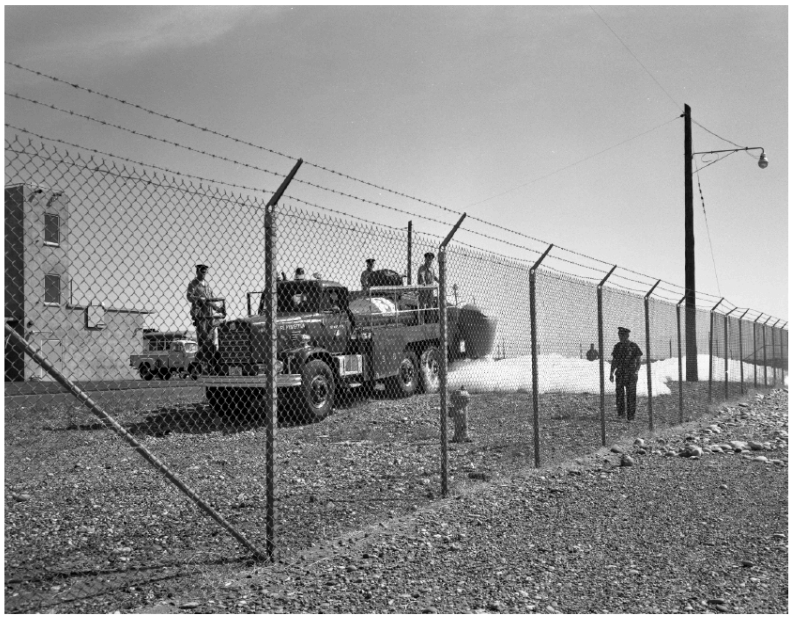


Figure 7-72. Firefighting Foam Application at the 300 Area Fire Station – Photograph 3.

Image from Energy Report DOE/RL-2024-23, "The Preliminary Assessment of the Historical and Current Uses of Per- and Polyfluoroalkyl Substances (PFAS) at the Hanford Site."

Given the nature of PFAFs as a forever chemical, it would be in accordance with CERCLA to bring results of further investigations about PFAS into decision-making in the 300 Area. With so many uncertainties, it is essential that emerging information be taken into consideration.

III. Air issues

Currently, the Proposed Plan offers very little information about the demolition process, which is concerning when taking into account the certainty that the demolition process has to produce hazardous air contaminants, particularly dust. The Proposed Plan states that "measures will be taken" to avoid blowing dust during cleanup of the 300-296 site, but fails to account in a detailed way for how demolition may occur that also avoids releasing contamination. HAB advice on this topic was well-reasoned, and EPA and Energy were present for HAB's discussion of this important issue, including reference to the demolition of the Plutonium Finishing Plant.

At the public meeting, EPA claimed that discussing details about the demolition process was "out of the scope" of the Proposed Plan. However, it has been explicitly stated by EPA, at that same public meeting, that "what you leave from the demolition becomes the starting point for the waste site [cleanup]," making it inherently relevant in the consideration of dust control and air quality. To put it simply, demolition will cause air emissions; these emissions will need control; any releases will create more cleanup challenges and are thus within the scope. The plan itself requires this demolition in order to excavate the 300-296 waste site. There is no excavation

without demolition, and vice versa; again, this makes it part of the Proposed Plan. Specific measures related to emissions, hazardous air contaminants, and dust must be included.

Among the most concerning airborne materials that pose a threat to human health and safety at Hanford are mercury and per- and polyfluoroalkyl substances ("PFAS"). Mercury is known to cause damage to the gastrointestinal tract, the nervous system, and the kidneys. Exposure to PFAS has been linked to liver damage, cancer, thyroid problems, and reproductive issues. Efficient air quality monitoring is essential considering the presence of these harmful air pollutants that will be kicked up during the demolition and cleanup process at the 324 Building. There has been conflicting data presented, so we ask Energy to clarify whether there are mercury wastes and/or PFAS wastes in the 324 Building.

We also know that hexavalent chromium is present in groundwater and soil at Hanford, specifically in the 100 Area along the River. Hexavalent chromium is also known to cause cancer and other health issues. Given its proximity to the River and its danger, we would like clarification on whether hexavalent chromium presents an issue at or near the 324 Building.

At the public meeting, Dan Serres, Advocacy Director at Columbia Riverkeeper asked: will the Hanford Air Operating Permit process provide any opportunity to learn more about 324 in terms of ambient air monitoring?

In response, EPA stated

> We are in discussions with Benton Franklin Health District and they have some external monitoring points that they second check and provide a more independent look, separate from the Hanford triparties and so in that way I would say that their general air monitoring would provide us some additional data. But, we will have our own separate data as part of the demolition plan and the air monitoring plan. Under the remedial process, we have our own air monitoring plan so there will be, specifically for these actions, CERCLA air monitoring programs as well.

Building on this answer, there should be specific information in the Proposed Plan about how this air monitoring data will be utilized and implemented. Right now, there is no mention of dust control beyond the perimeter of the cleanup site, despite this being a major concern in the demolition and cleanup process.

The Hanford Air Operating Permit requires regular reports on how it is tracking its emissions and controls being used to limit emissions and requires Hanford to certify whether or not it has met the air requirements of the permit.[9] Energy also has a general duty to monitor airborne radioactive pollutants to ensure compliance with federal and state emission standards, as well as

---

[9] *Hanford Air Operating Permit 00-05-006 Renewal 3,* *https://fortress.wa.gov/ecy/nwp/permitting/AIR/AOP/renewal/three/index.html*.

ensure that dose rates to humans and the environment does not exceed a harmful threshold.[10] Although it was stated by EPA that there will be separate air monitoring under the remedial plan, there is no mention of it in the Proposed Plan and therefore, we do not know what this monitoring consists of or whether it will comply with CERCLA. Beyond the concern of dose rates, which was explicitly stated would be included by EPA in the separate air monitoring as required under CERCLA, there was nothing stated about specific measures for dust suppression, including beyond the boundaries of the cleanup site should unexpected events occur. The Hanford Air Operating Permit can and should inform the cleanup approach in the Proposed Plan given the additional harm that could be caused if the dust is not properly contained.

The Hanford Air Operating Permit requires reasonable precautions to be taken to prevent fugitive dust from becoming airborne and to minimize dust generation. The most common method for dust suppression is to water down the dust.[11] However, at the 324 Building and at Hanford generally, this poses a significant risk of mobilizing contaminants that readily travel with water. Therefore, we ask Energy to clarify what they intend to do in order to minimize dust generation both in demolition and cleanup and include this in the ROD Amendment or specifically in the Work Plan.

The Hanford Air Operating Permit states that the Hanford site is a source of fugitive dust both during construction and demolition, again, pointing to the fact that demolition is and should be considered within the scope of the Proposed Plan for purposes of comment.[12]

Dust suppression and the 324 Building were still of concern at the time that the Hanford Air Operating Permit was issued, as is clear from the comments submitted at that time

> Comment I-7-33: [draft Attachment 1, 1.4.23, Discharge Point: P-WTP-001, p.63]: The "Fugitive Dust Control" condition requires preparation of "Construction Phase Fugitive Dust Control Plan(s)". However, there is no date specified by which these plan(s) must be prepared. Absent such a date this condition is both unenforceable and meaningless. Supply a completion date for the plan(s).
>
> Department of Ecology ("Ecology") Response to I-7-33: Thank you for your comment. Specifying a date by which the construction phase fugitive dust control plan(s) must be prepared is not necessary and does not make the condition unenforceable. The fugitive dust control plan must be used during construction or routine/ad hoc dust suppression. Therefore, the fugitive dust control plan must be prepared prior to construction or routine/ad hoc dust suppression. The permittee is required to comply with the condition. Not having specified date for preparation of the plans does not void this requirement. No change to the AOP is required

---

[10] *Chapter 6.0 Air Monitoring - Hanford Mission Integration Solutions*, page 1, https://hmis.hanford.gov/files.cfm/DOE-RL-2020-26_Section6.pdf

[11] *Hanford Air Operating Permit 00-05-006 Renewal 3, Attachment 1: Ecology Permitting Conditions*, page 11.

[12] *Statement of Basis for Ecology Permitting Conditions*, Section 1.1, Hanford Air Operating Permit No. 00-05-006.

> Comment I-3-2: As a Richland resident, I am highly concerned about airborne releases of radioactivity from the 324 Building demolition. The fights between the Tri-Parties over regulatory authority to regulate air ignore the real problem. I request that Ecology and the Department of Health apply the highest possible oversight to radioactive air emissions from the 324 Building demolition. Based on DOE's (and CHPRC's) loss of control over radioactivity during the PFP demolition, I am highly concerned that lack of adequate controls at the 324 Building could contaminate Richland and Franklin County. Also we know that US EPA has cut back oversight of Hanford (they may hire their new manager in Seattle). US EPA has never had local air inspectors like Ecology and Health.
>
> Ecology Response to I-3-2: Thank you for your comment. The Hanford Air Operating Permit does not cover the 324 Building, so this comment is out of scope. The 324 Building transitioned to coverage under the Comprehensive Environmental Response, Compensations, and Liability Act (CERCLA). This comment has been forwarded this to the US EPA who has led on the 324 CERCLA activity. US EPA informed Ecology that an approved Air Monitoring Plan for the 324 site will be in place prior to any remediation activities starting. It will be reviewed by US EPA, Ecology, and the Department of Health. In addition, a baseline air monitoring survey has already been performed by the Department of Health around the vicinity of the 324 site.

This Community Air Monitoring Plan ("CAMP") referenced in Ecology's response to comment I-3-2 should also inform the air monitoring at the 324 Building during demolition and cleanup.

Since remediation has changed so drastically as to require a ROD amendment, a new air monitoring plan is also needed. The CAMP was written based on the premise that "the actual and potential diffuse and fugitive emissions from the proposed activities… [were] not expected to be significant."[13] However, this presumption has been undermined given the need for the ROD amendment due to contamination being more significant than expected, therefore requiring a new air monitoring plan.

As is demonstrated from the questions above, the concerns of air pollution at Hanford and the 324 Building, as well as the enforceability of dust suppression requirements given their potential harm have been and continue to be of ongoing concern and the responses continue to be unsatisfactory. At the very least from these comments, it seems like the Proposed Plan, which contains new remediation measures for the 324 building, must contain a new Air Monitoring Plan. Where is that plan?

At the public meeting, Gerry Pollet, Executive Director at Heart of America Northwest, asked

> Will you use concrete shielding over the excavation site areas that are not immediately being excavated? Have you considered the alternative of putting a tent over the building prior to demolition?

---

[13] *Removal Action Work Plan for 300 Area Facilities*, February 2016, at C-3.

In response, EPA stated

> We essentially right now have not designed what it's going to look like inside of the tent structure and it will absolutely have to incorporate an entire shielding design and there's a whole nuclear safety design that will have to be generated as part of this, which includes the modeling of how the radiation is controlled, the values inside of the work, how much they can put in a certain waste package; all of that stuff comes later… You'll see in the schedule that they take a significant amount of time to come up with those designs and work through all the details… Even in terms of the air monitoring plan we're looking to update for the building demolition planning, that is one thing we are looking at to protect the public… But the demolition aspect of the project is separate from this meeting because that is under a separate regulatory process.

Not all of the information stated by EPA at the public meeting is contained within the Proposed Plan, which is concerning for several reasons. It is difficult for people to submit a comment on something that is part of the cleanup process, yet not described in the Proposed Plan, particularly considering how air contaminants pose risks to worker and public health and safety. Additionally, there is no mention of ensuring compliance with the Hanford Air Operating Permit despite EPA's statement that it is relevant to the cleanup process.

We urge Energy to clarify how the overall picture of air quality control in the 300 Area is being assessed and monitored, particularly surrounding the potential hazards that dust from the excavation site could cause: this means including an Air Monitoring Plan with the Proposed Plan.

IV. Conclusion

In conclusion, we are deeply concerned by the situation at the 324 Building. We understand that workers have faced risks in handling the situation, and we urge Energy to continue to prioritize worker safety. We share concerns raised by Heart of America Northwest, whose comments expound on the necessity of treating the material at 324 as high level waste. Further, we appreciate comments from the Oregon Department of Energy that caution Energy to plan cleanup for contingencies, including sorting waste generated by demolition and excavation.

We would like to uplift and emphasize how Hanford Challenge, Heart of America Northwest, and Oregon Physicians for Social Responsibility members offered verbal and written comments during the public hearing and comment period offering many more detailed thoughts and issues to be considered. Additionally, concerns raised by Yakama Nation's Environmental Restoration and Waste Management Program should be addressed before the plan proceeds to action. We have taken on only a portion of the challenges in these comments.

Thank you for the effort to conduct an effective public meeting, for spending extra time on this issue in public involvement, and thank you for continuing to address the problem at the 324 Building.

Please also see the attached comment petition pertaining to the 324 Cleanup, signed by over 800 Columbia Riverkeeper members and supporters.

Sincerely,

Daniel R. Serres, Advocacy Director, Columbia Riverkeeper

Attachment 1: Member petition gathered through Columbia Riverkeeper website, signed by over 800 Columbia Riverkeeper members and supporters.

Attachment 2: Summary of DNFSB references and issues related to the 324 Building and 300 Area since 2023. Please note that Heart of America Northwest has reiterated outstanding fire safety concerns from DNFSB reports going back to 2018.

Member Petition Collected By Columbia Riverkeeper.

Leaked high-level waste is still high-level waste.

On June 29, 2023, the U.S. Dept. of Energy (Energy) announced a radical change in cleanup at Hanford's 324 Building. The 324 Building is the same building where, earlier in 2023, workers encountered a startling radioactive surprise—a large amount of highly contaminated soil underneath the building, in an area outside the expected zone of impact. This discovery led to a pause in all structural stabilization efforts at the building while soil sampling and analysis explored the extent of contamination. The presence of deadly levels of radiation very close to the Columbia River set off alarm bells.

Now, Energy has finished a Focused Feasibility Study and Proposed Plan, presenting the U.S. Environmental Protection Agency (EPA) with two proposals for how to proceed with safely removing and remediating the 324 building and the soils beneath B Cell, known as 300-296 Waste Site. Neither proposal treats the soils beneath the building as high level waste. Energy and EPA must appropriately classify the soils below the 324 building as high level waste and proceed with cleanup that protects workers, groundwater, and the River.

During the past two months, over 800 members of Columbia Riverkeeper gathered in meetings, workshops, and supported the following comment through our website. Their names are attached, and these comments are submitted in addition to the technical comments submitted by Columbia Riverkeeper staff.

> Dear U.S. Department of Energy and U.S. Environmental Protection Agency,
>
> I appreciate the effort of cleanup workers, agency staff, and regulatory agencies to address the pollution in and near the 324 Building. I strongly support efforts to prioritize worker safety, and to pace the work in a way that is realistic and responsive to workers' experiences.
>
> The presence of extremely radioactive waste in close proximity to the Columbia River and the City of Richland at the 324 Building presents major challenges involving material from irradiated nuclear fuel, high-level waste material that originated in Hanford's B Plant.
>
> I am deeply concerned that you are not treating the soils below the 324 building, contamination associated with the 300-296 waste site, as high level waste, contradicting the Nuclear Waste Policy Act.

I do not want high level waste grouted and disposed of onsite at Hanford. I do not want the 324 Building cleanup to be encumbered by mistakenly downplaying the need to remove the highly radioactive material from Hanford.

This is contrary to the law and poses a long term threat to people and the Columbia River.

I urge you to treat the soils below 324 as the law requires, anything less is not permissible.

Sincerely,

(See list for signers)

John	Roche	Front Royal	VA
Nicole	White	Spokane	WA
Teresa	Mueller	Eugene	OR
AJ	cho	San Leandro	CA
Kathryn J	Albert	Portland	OR
Frances	Dunham	Ashland	OR
Allan	Peterson	Ashland	OR
Jen	Rund	Novato	CA
Emily	Austin	West Richland	WA
Donald	Dicken	Thorp	WA
Mike	Peale	Aston	PA
Sharon	Longyear	Port Ewen	NY
Marilyn	Costamagna	Medford	OR
Lynne	Ashton	Indianola	WA
Mary Ann	Sward	Corvallis	OR
Vicki	Wheeler	Deshler	OH
Diana	Talcott	Portland	OR
Karla	Devine	Manhattan Beach	CA
Rondi	Saslow	Oakland	CA
Rebecca	Berlant	Brooklyn	NY
Bob	Plass	Los Banos	CA
JL	Angell	Rescue	CA
kathy	grieves	Peoria	AZ
Audrey	Klein	Portland	OR
Anna	Cowen	Oregon City	OR
Yehudah Alan	Winter	Portland	OR
Jeff	Bohan	Ridge	NY
Steve	Harrington	Lilliwaup	WA
Lucille	Smith	Seattle	WA
Jo Anna	Hebberger	Saint Paul	MN
William	Obrien	Vancouver	WA
Norman	Baker	Sequim	WA
J	Kelly	Olalla	WA
Robert	Reed	Laguna Beach	CA
patricia	milliren	Port Angeles	WA
Bruce	Cratty	Akron	OH
Gerald	Walsh	Brewster	NY
Martha	Gorak	Bellaire	TX
Edward	Kaeufer	Blaine	WA
Lisa	Johnson	San Antonio	TX
Rowen	Kade	Bellingham	WA
Georgia	Shankel	Chicago	IL
Sharon	Paltin	Laytonville	CA
Paul	Clinch	Oak Brook	IL
Michael	Brandes	Fort Lee	NJ

jeanne	Deller	Bellevue	WA
Nina	French	Portland	OR
Sandra	Couch	Naperville	IL
Stan	Isley	Yakima	WA
Barbara	Harper	Castroville	CA
Cam	Wolff	Portland	OR
Barclay	Hauber	Pollock	ID
Tom	Harris	Burlington	NJ
Sherry	Bupp	Redmond	WA
Nanci	McChesney	Eugene	OR
Beverly	Mitchell	Boise	ID
TIA	TRIPLETT	Los Angeles	CA
Kate	Ruland	Suches	GA
Rutherford	Charlot	Saint Albans	NY
Kimberly	Crane	Snohomish	WA
Nancy	Preston	New York	NY
Dana	Weintraub	Beaverton	OR
Barbara	Brock	Camano Island	WA
Lenora	ONeill	Toledo	WA
David	Dougherty	New Britain	CT
Chad	Leming	New Orleans	LA
Joyce	Follingstad	Portland	OR
Jennifer	Cooper	Beaverton	OR
Patricia	McDonald	Winter Park	FL
Ann	Nowicki	Eugene	OR
Patrick	Ramsey	Albuquerque	NM
Director	Memes	Bothell	WA
James	Richardson	Seattle	WA
Jennifer	Valentine	Massapequa Park	NY
Dena	Plemel	Aloha	OR
Phillip	Hope	New York	NY
Laurie	Fisher	Tigard	OR
Kathryn	Fox	Salem	OR
R-Laurraine	Tutihasi	Oracle	AZ
Liana	Lang	White Haven	PA
Betty	Laws	El Paso	TX
priscilla	martinez	Snoqualmie	WA
rebecca	reynolds	Monroe Township	NJ
David	Hermanns	San Francisco	CA
Linda	Carroll	Spokane	WA
Merna	Baker Blagg	Longview	WA
Ellen	Bailey	Portland	OR
Mark	Koritz	Atlanta	GA
Carrie	Darling	Sun City	AZ
Paul	Potts	Raymond	WA

Jean	Mendoza	White Swan	WA
Christi	Dillon	Mooresville	NC
Pamela A.	Lowry	Grand Junction	CO
Kevin	Walsh	Madison	CT
Richard	Stern	New York	NY
April	Atwood	Portland	OR
Caephren	McKenna	Oakland	CA
Melda	Montgomery	Portland	OR
Linda	Thompsen	Redmond	WA
Kalah	Hanken-Follett	Mount Hood Parkdale	OR
Cheryl	Speer	Camas	WA
Kate	Skolnick	New York	NY
Hannah	Liu	Vancouver	WA
Anthony	Buch	Seattle	WA
Alanna	Ewert	Redmond	OR
Susan	McRae	Olympia	WA
heidi	ahlstrand	Owatonna	MN
James	Stover	Belmont	MI
Bob	Shippee	Henrico	VA
Marcy	Gordon	Brooklyn	NY
Kathryn	Plitt	Gig Harbor	WA
Jamie	Shields	Rainier	OR
Derek	Gendvil	Las Vegas	NV
Marsha	Brennan	Eugene	OR
Kathy	Bradley	Lugoff	SC
terrance	ryan	Quilcene	WA
David	M Dragon	Gardner	MA
Lark	Lennox	The Dalles	OR
Allison	Rensch	Beverly Hills	CA
Barbara	Mckee	Vancouver	WA
Charlene	Lauzon	Lynnwood	WA
Corey	Schade	Loch Arbour	NJ
Monika	Holm	Oakland	CA
JIM	LALIBERTE	Pinellas Park	FL
Warren	Allely	Council Bluffs	IA
Natalie	DeBoer	Henrico	VA
Tom	Anderson	Silver Springs	FL
Kimie	Fujimoto	La Conner	WA
Kathleen	Doyle	Golden	CO
LELAND	LONG	Denver	CO
Leslie	spurling	Seattle	WA
Jarilyn	Barton	Portland	OR
Dallas	Windham	Fort Worth	TX
Jory	Aronson	Portland	OR
Patricia	Armstrong	Yachats	OR

Donna	Wehrley	Mosier	OR
Debbie	Jenkins	Portland	OR
Dennis	Ledden	Sequim	WA
John	Kirchner	Fort Wayne	IN
John	Curotto	Quinebaug	CT
Roger	Wechsler	Bow	WA
Joann	Derie	Vancouver	WA
Alena	Jorgensen	Temple City	CA
Kate	Kenner	Guilford	VT
Lenore	Reeves	Mokena	IL
Nancy	Rupp	Glen Burnie	MD
Elizabeth	Baker-Smith	Portsmouth	VA
Cami	Cameron	Vancouver	WA
Russell	Ziegler	Downers Grove	IL
Aloysius	Wald	Columbus	OH
Cliff	Lehman	Portland	OR
Tamah	Lettieri	Coconut Creek	FL
Todd	Simmler	The Dalles	OR
Daviann	McClurg	Larned	KS
Brent	Spencer	Los Angeles	CA
Joe	Wiederhold	Bellingham	WA
Steven	Schafer	Portland	OR
Daniel	Henling	Seattle	WA
Edmund	Weisberg	Baltimore	MD
Tim	Fleischer	Louisville	KY
John	Havekotte	Vashon	WA
Bruce	Coston	Sunnyvale	CA
Lisle	Raught	Port Crane	NY
Irene	Clark	Altamonte Springs	FL
David	Nichols	Portland	OR
Bridget	Wyatt	Portland	OR
Todd	Henion	Portland	OR
Elizabeth	Enright	Scottsdale	AZ
Bailey	Sory	Bozeman	MT
Susan	Brown	Eugene	OR
Melanie	Dieringer	Epping	NH
Connor	Haller	Kirkland	WA
Donald	Shaw	St Petersburg	FL
Tabitha	Totten	Cliffside Park	NJ
Sherri	Hodges	Phoenix	AZ
Jon	Hager	Riverton	UT
Amy	Kiba	Camden	SC
Giovannina	Fazio	Oakland	CA
Joy	Rosenberry Chase	Madison	WI
Michael	Sarabia	Stockton	CA

Clifford	Ballard	Mattawa	WA
Ann	W	Chicago	IL
Rachel	Rogge	Sequim	WA
Andrew	Fisher	Williamsburg	VA
Russell	West	Shoreline	WA
Chris	Loo	Gilroy	CA
Susie	Cassens	Fort Pierce	FL
Nora	Lewis	Nipomo	CA
Janet	Heinle	Santa Monica	CA
Eric	Strid	White Salmon	WA
Gilbert	Christman	Ormond Beach	FL
Aurelia	Phillips	Beaverton	OR
Catriona	McCracken	Portland	OR
Loki	Simmons	Sharon	MA
Sally	Jennings	Siletz	OR
Shaun	Hubbard	Seattle	WA
Raymond	Bissonnette	Port Townsend	WA
Emily	Heilbrun	Eugene	OR
Tara	Horn	Portland	OR
John	Dunn	Long Valley	NJ
Paula	Morgan	Winter Springs	FL
Louise	WARREN	Mcminnville	OR
Klaudia	Englund	Anacortes	WA
Jared	Cornelia	Grand Island	NY
Charlene	Woodcock	Berkeley	CA
Linda	Martin	El Cajon	CA
Erica	Johanson	Hopewell	NJ
Robert	Gibson	Ashland	OR
Kate	Butt	Redmond	WA
Joan	Reberger	Camano Island	WA
shelly	blazich	Poulsbo	WA
Earl	Poteet	Pueblo West	CO
Mark	Hollinrake	New York	NY
Robert	Plata	Salem	OR
Dustin	Kearns	Portland	OR
Kathleen	Ritchie	Portland	OR
Beth	Goode	Los Angeles	CA
Jane	Farrell	Eugene	OR
Susan	Hartford	Hood River	OR
Mary	Neptune	Vancouver	WA
Andrea	Tracey	Glendale	AZ
Joe	Garoutte	White Salmon	WA
Dawn	Griffin	Portland	OR
Harrison	Husting	Happy Valley	OR
Diane	Williams	Wellsboro	PA

Jeff	McCormick	New Orleans	LA
Benjamin	Martin	Plattsburgh	NY
Julie	Richards	Clackamas	OR
Michael	McMahan	Huntington Beach	CA
Lorenz	Steininger	Stafford	VA
Robert	Bresky	Oregon City	OR
Karla	Garey	Sedro Woolley	WA
James	Mulder	Wappingers Falls	NY
Elaine	Becker	Roanoke	VA
Tracy	Richards	Clackamas	OR
Mona	McNeil	Vancouver	WA
Susan	Goldberg	Kalamazoo	MI
Steve	Green	Burlington	WA
William	Hoffer	White Salmon	WA
tosh	myers	Deer Island	OR
Diane	Korf	Seattle	WA
David	Anderson	Spokane Valley	WA
Penny	Guinther	Lincoln City	OR
Brett	Little	Fayetteville	NC
Soraya	Barabi	Los Angeles	CA
John	Willian	Henderson	NV
Taylor	Smith	New Carlisle	OH
Charlotta	Ball	Hillsboro	OR
diana	cardenas	Secaucus	NJ
Brenda	Devine	Cheney	WA
Maureen	Lauran	Hood River	OR
Janet	Riordan	Seattle	WA
Penney	Reed	Enterprise	OR
Carol	Owen	Columbia	TN
Greg	Goodwin	Seattle	WA
Alex	Hackett	Nampa	ID
Randy	Kozar	Hillsboro	OR
Sharon	Hafner	Eureka	CA
Sophie	Hackett	Nampa	ID
Kristine	Robertson	Clatskanie	OR
Rory	May	Nashville	TN
Lana	Henson	Oklahoma City	OK
Steve	Sheehy	Klamath Falls	OR
Elizabeth	Watts	Boynton Beach	FL
Peter	Risser	Friday Harbor	WA
Bob	Steininger	Phoenixville	PA
Rue	Oseas	Portland	OR
Cynthia	Edwards	Ann Arbor	MI
Quentin	Fischer	Roanoke	VA
Cornelia	Teed	Bellingham	WA

Richard	Creswell	Lakewood	CO
Angela	Zehava	Portland	OR
Miriam	Kurland	Williamsburg	MA
Edie	M Sadowski	Belleville	NJ
ANNE	KILEY	Portland	OR
Shary	B	Seattle	WA
Alfred	Staab	Wichita	KS
Bonnie	New	Hood River	OR
Suzanne	Paterson	Carnation	WA
Per	Zeeberg	Portland	OR
Rick	Laister	Salem	OR
Laura	Klasner Shira	Yakima	WA
Richard	Smith	Melvindale	MI
Laura	Regan	Myrtle Beach	SC
Sandra	Herndon	Olympia	WA
Kathleen	Moraski	Woodbury	MN
Julia	Farhat	Beacon	NY
Jody	OConnor	Bingen	WA
Janis	Olson	Bellingham	WA
Warren M.	Gold	Mill Valley	CA
Pamela	Saulter	Perris	CA
Sabrina	Hickerson	Portland	OR
Cathy	Stegman	Seattle	WA
Lydia	Felley	Nehalem	OR
Lois	Danks	Port Angeles	WA
George	Fritchman	Olalla	WA
diane	marks	Port Angeles	WA
Mitchell	Stargrove	Hillsboro	OR
John	Teevan	Chula Vista	CA
Jeanne	Raymond	Corvallis	OR
Billy	Angus	Hamilton	MT
Britt	Crea	Meridian	ID
Randy	Davis	Portland	OR
George F.	Klipfel II	Cathedral City	CA
Alice	Nicholson	Seattle	WA
Jody	Caicco	Vancouver	WA
Coree	Spencer	New York	NY
Michael	Ryan	Portland	OR
alice	west	Portland	OR
Linda	Barber	Wauna	WA
Allister	Layne	Conyers	GA
Veronica	Michael	Fairfield	CA
Lisa	Robinson	Olympia	WA
Susan	Narizny	Portland	OR
Katherine Anne	Stansbury	Oregon City	OR

Jason	Johns	Portland	OR
LeRoy	W	Tijeras	NM
Elizabeth	Riggs	Seattle	WA
Lisa	Berenson	Kirkland	WA
M	Chessin	Seattle	WA
Elena	Rumiantseva	Redmond	WA
Karen	Osgood	Citrus Hts	CA
Laurie	Kerr	Battle Ground	WA
CAROLE	CROPLEY	Olympia	WA
Martin	Henderson	Goleta	CA
Marie	Weis	Fox Island	WA
cathy	crum	Agoura Hills	CA
Chloe	Greene	Silverdale	WA
Duncan	Baruch	Portland	OR
NADIA BETH	KNOBLOCK	Pittsburgh	PA
Don	Barth	Richmond	VA
Jessica	Cresseveur	New Albany	IN
Jeanne	Martin	Bremerton	WA
James	Feit	Port Townsend	WA
Eric	Edwards	West Chicago	IL
Julie	Moylan	Tacoma	WA
Kristin	Edmark	Battle Ground	WA
THOMAS	JOHNSON	Olympia	WA
Beverly	Tiemann	Lake Oswego	OR
Mary Lou	Emerson	Portland	OR
Heather	Westphal	Shiocton	WI
Trina	Decembly	Garfield Heights	OH
Gary	Millhollen	Eugene	OR
Donna	Bonetti	North Bend	OR
Susan	Cundiff	Eugene	OR
Janice	Peischl	Allison Park	PA
Susan	Dunaway	Grants Pass	OR
Steve	Stephens	Estacada	OR
Peter	Guerrero	Port Townsend	WA
Marguerite	Eliasson	Newport	OR
Tim	Hacker	Portland	OR
Beth	Levin	Portland	OR
Lisa	Mintz Kavas	Lynnwood	WA
Christie	Little	Portland	OR
Larry	Gruis	Elgin	OR
Raymond	Manis	Fairview	TN
Nora	Polk	Portland	OR
Ross	Huffman-Kerr	Lincoln City	OR
Robert	Fritsch	Newington	CT
R.	Zierikzee	San Francisco	CA

anne	ackley	Salem	OR
Todd	Corbett	Umpqua	OR
Telora	Pollard	Seattle	WA
Gavin	Bornholtz	Grand Blanc	MI
Nancy	Winn	Portland	OR
Mary Jo	Mann	Portland	OR
Robin	Pinsof	Highland Park	IL
Marc	Silverman	Los Angeles	CA
Elizabeth	Darby	Portland	OR
Steven	Weinberg	Coquille	OR
John	Sonin	Douglas	AK
Dale	Lockridge	Portland	OR
jeff	kipilman	Portland	OR
Patrice	Wallace	Santa Cruz	CA
Marcia	Wollam	Seattle	WA
Rick	Rosenberry	Seattle	WA
Brooke	BrandSmith	Portland	OR
Mark	Wheeler	Portland	OR
Michael	Burmester	Happy Valley	OR
Tracey	Loyd	Everett	WA
Felicia	Killiebrew	Hazelwood	MO
Karl	Coppock	Portland	OR
Dianne	Douglas	Phoenix	AZ
Sandi	Aden	Lincoln	NE
Richard	Barker	Beaverton	OR
Carol	Goerke	Tempe	AZ
Lindie	Brown	Hastings	NE
Liane	Parker	Lake Oswego	OR
Jeanne	Poirier	Cashmere	WA
H	Ande	South Saint Paul	MN
Lisa	Kellman	San Francisco	CA
Benton	Elliott	Eugene	OR
Becky	Orf	Ashland	OR
Paulette	Petersen	Bellingham	WA
Angela	Ferrari	Anchorage	AK
Toni	Russell	Pacifica	CA
Barbara	Ierulli	Port Townsend	WA
Sharon	Sollenberger	Vancouver	WA
James	Roberts	Sandpoint	ID
Jill	Hamilton	Bremerton	WA
David	Campbell	Eugene	OR
Judith	Smith	Oakland	CA
Leslie	Wilbur	Las Cruces	NM
Mary	Bogle	Milwaukie	OR
Carolyn Swiger	Polak	Parma	OH

Jeff	Reynolds	Bangor	ME
Elizabeth	Hickman	Auburn	WA
Tammie	Murray	Seaside	OR
CHARLENE	DONOVAN	Vancouver	WA
Penelope	Ward	Topanga	CA
Gregry	Loomis	Seattle	WA
Karen	Fortier	Monroe	WA
Connie	Grant	Clarkston	WA
Cathy	Anderson	Nampa	ID
Tina	Trahan	Deer Park	WA
Andrew	Simrin	Eugene	OR
SANDRA	Petrella	Beaver	PA
Victoria	Urias	Seattle	WA
Leslie	Burpo	Eugene	OR
Patricia	Layden	Des Moines	WA
Michelle	Mayfield	White Salmon	WA
Maggie	Davidson	Pompano Beach	FL
Meridian	Green	Vancouver	WA
Ellen	Atkinson	Danville	VA
Donna	Harris	Bend	OR
Steven	Vogel	Falls Church	VA
Michael	Abler	Sarasota	FL
Fred	nadelman	Winston Salem	NC
Clifford	Keller	Eugene	OR
John	Messer	Brutus	MI
Sharon	Herber	Portland	OR
Margaret	Haldane	Ashland	OR
Tora	Bengochea	Grants Pass	OR
Lynette	Coffey	Shasta Lake	CA
Jan Marie	Moore	Dunedin	FL
Randi	Holt	Palatine	IL
Barbara	Lamb	Langley	WA
S.F.	Brown	Sequim	WA
Linda	Holt	Anchorage	AK
Sarah	Haymond	Lakewood	WA
Linta	Bryant	Harrisburg	PA
Bernardo	Alayza Mujica	Sioux City	IA
Pamela	Heron	Seattle	WA
Suzanne	Nevins	Warner Springs	CA
Jill	James	Portland	OR
Heather	Nicholson	Friday Harbor	WA
William	Blair	Caldwell	ID
Mary	Rojeski	Santa Monica	CA
Judith	Carter	Friday Harbor	WA
Cindy	Stein	Prescott Valley	AZ

Teresa	DeLorenzo	Astoria	OR
Catherine	Janacua	Sherman Oaks	CA
Deborah	Mays	Olympia	WA
Michael	Pragheimer	Bethlehem	PA
Tricia	van Oers	West Cornwall	CT
Lenore	Sivulich	New Gloucestr	ME
Virginia	Davis	Woodinville	WA
James	Mulcare	Clarkston	WA
Wesley	Banks	Vancouver	WA
Linda	Fighera	Rhinebeck	NY
Gary	Hull	South Ogden	UT
Katherine	Christensen	Essington	PA
Joanne	Gates	Peterborough	NH
Melissa	O'Rourke	Chandler	AZ
Jackie	Stolfi	Massapequa Park	NY
Pamylle	Greinke	Peconic	NY
Lori	von der Heydt	Portland	OR
Ethan	Wright	Portland	OR
Ellen	Zarter	Bellevue	WA
Mark	Frey	Yelm	WA
Jo	Johnson	Little Rock	AR
Susan	Newton	Kapaa	HI
Emil	Gerth	Portland	OR
Annie	Palmer	Camas	WA
Eric	Ostman	Spokane Valley	WA
joe	smith	El Cajon	CA
Norman	Conrad	Mount Vernon	WA
Corrie	Podolak	Hood River	OR
Julie	Blum	Liberty Lake	WA
Jaci	Harris	Eagle Point	OR
Amy	Platt	Issaquah	WA
Catherine	Martinez	Poulsbo	WA
Sunny	Tabino	Summerville	OR
John	Nettleton	Portland	OR
Steven	Andrychowski	New Britain	CT
philip	farinelli	Cranston	RI
David	Sinks	Phoenix	AZ
Lynne	Treat	Tumwater	WA
Kirsten	Davis	Philomath	OR
Donald	Taylor	Fair Oaks	CA
George	Morgan	Washougal	WA
Angela	Helvey	Tukwila	WA
Christine	Rudolph	Kirkland	WA
Elizabeth	Schille	Portland	OR
Barbara	Stevenson	Issaquah	WA

Yvette	Goot	Colville	WA
Bob	Miller	Santa Rosa	CA
Donna	Smith	Havertown	PA
Karen	Deora	Portland	OR
Janis	Smith	Holtsville	NY
James	Klein	Corpus Christi	TX
Douglas	Cooke	Brooklyn	NY
Jennifer	Nitz	Missoula	MT
Phil	Goldsmith	Portland	OR
Cynthia	Lehman	Cleveland	OH
Marilee	Meyer	Port Angeles	WA
Elaine	Benjamin	Alpine	CA
Carolyn	Eckel	Portland	OR
Patricia	Burton	Gaithersburg	MD
April	Lasiter	Fort Smith	AR
Niki	Wise	Eugene	OR
Kathleen	Kelley	Brooksville	FL
Roger	Kofler	Portland	OR
Robin	Esterkin	Portland	OR
stanley	sayer	Jamaica Plain	MA
Lynnette	Chiotti	Saint Helens	OR
Jennifer	MacDonald	Bellingham	WA
Deidra	Smith	Loveland	CO
Mira	Wiegmann	Portland	OR
Ann	Loera	Kingwood	TX
Mark	Reback	Battle Ground	WA
Roth	Woods	Ann Arbor	MI
Phoenix	Oaks	Portland	OR
Tony	Marey	Wapato	WA
James	Norton	Cockeysville	MD
Carol	Valentine	Selma	OR
Dana	Bleckinger	Yachats	OR
Glenn	Hufnagel	Buffalo	NY
Greg	Onsel	Arlington	WA
Steve	Groze	Youngsville	LA
Lorraine	Johnson	Seattle	WA
Rhonda	Black	Reedsport	OR
Michael	Rynes	Naperville	IL
Sean	McCoy	Shoreline	WA
Holly	Masri	Longview	WA
Tracey	Flanagan	Murphy	NC
Karen	Spradlin	Jacksonville	AL
Robin	Weirich	Irvine	CA
Stephanie	Mory	Clarks Summit	PA
Christina	Roe	Fresno	CA

Kathleen	Jones	Sioux Falls	SD
Querido	Galdo	Gualala	CA
Jude	Green	Bellingham	WA
Ian	Shelley	Portland	OR
Deborah	Goodman	Woodstock	VT
Nancy	McRae	Pepperell	MA
Twyla	Meyer	Pomona	CA
Josef	Wyss-Lockner	Gresham	OR
Kristy	Giles	Clackamas	OR
Dolores	Serdahl	Medford	OR
Oceanah	D'amore	Talent	OR
Karen	Kirschling	San Francisco	CA
Janet	Nero	Portland	OR
Paul	Russell	Valparaiso	IN
Suzanne	Fernstrom	Eugene	OR
Joyce	Johnson	Santa Rosa	CA
carrie	Anderson	Spokane	WA
Mary	Shaughnessy	Indianapolis	IN
Janice	Kropczynski	North Versailles	PA
Cindy	Shoaf	Salisbury	NC
Christina	Boyd	Portland	OR
Christie	Decker	San Francisco	CA
Clifford	Provost	New York	NY
James	Thoman	Hermitage	TN
Juanita	Rinas	Eugene	OR
Sheila	Tran	Eagan	MN
Susan	Mates	Portland	OR
I.	Engle	Tularosa	NM
Sean	Hall	Los Angeles	CA
Susan	DeWitt	Largo	FL
VIRGINIA	MENDEZ	Hollywood	FL
jamie	green	Ventura	CA
Steven	Vaughan	Hillsboro	OR
Sierra	Farris	Ashland	OR
Eric	Robson	Madison	WI
James	Monroe	Churchton	MD
Kristin	Felix	Olympia	WA
Lloyd	Schiffelbian	Virginia Beach	VA
Karen	Loeser	Mercer Island	WA
Kenneth	Loehlein	Vancouver	WA
Clifford	Spencer	Portland	OR
Maximo	Menchaca	Portland	OR
Rebecca	Read	Medford	OR
Nick	Scarim	Hennepin	IL
Heather	Marsh	Lake Oswego	OR

Robert	Thornhill	Happy Valley	OR
Donna	Musgrove	Lake Tapps	WA
Steve	Shapiro	Seattle	WA
Ernie	Walters	Union City	CA
Diane	Howard	Vancouver	WA
Rosanne	Anderson	Cheney	WA
Steve	Ongerth	Richmond	CA
Karen	Holland	Caledonia	WI
Linda	Granato	Philadelphia	PA
Renee	Stern	Kirkland	WA
Terri	Decker	Redding	CA
Colleen	K	Lake Geneva	WI
Karen	McCaw	View Park	CA
Cathy	Bledsoe	Portland	OR
Laura	Chinofsky	Southampton	PA
Georganne	Bendall	Camden	ME
Jean	Schwinberg	Seattle	WA
John	Phillips	Aspen	CO
Stewart	Wilber	San Francisco	CA
William	Sneiderwine	Vancouver	WA
Michelle	Sewald	Denver	CO
Joan	Smith	Greenbrae	CA
Marie	Wakefield	Newport	OR
Ann	Becherer	Bellevue	WA
Jeri	Iversen	Astoria	OR
Jackie	Cash-Rolland	Coeur D Alene	ID
Laura	Feldman	Portland	OR
Dana	May	Garden Grove	CA
Donna Robin	Lippman	New York	NY
Robyn	Reichert	Lake Worth	FL
Mauria	McClay	Portland	OR
Margaret	Basehore	Richland	WA
Mj	Najimi	Plano	TX
Remedios	Rapoport	Portland	OR
Larry	Fish	Moreno Valley	CA
DEBRA	LEGRAND	Olympia	WA
Cierra	Buer	Powell Butte	OR
Mary	Bryan	Port Angeles	WA
Susan	Crampton	Twisp	WA
Tamara	Wecker	Portland	OR
Beth	Darlington	Poughkeepsie	NY
Michele	Bouchard	Waterville	ME
Susan	Trombley	Kapolei	HI
Jeffrey	Sanders	Evanston	IL
Paul	Daniello	Pendleton	OR

Steven	Rosenberg	San Angelo	TX
John	Bisset	Mount Hood Parkdale	OR
Mark	Giese	Mount Pleasant	WI
Satya	Vayu	Portland	OR
Kathryn	Rose	Denver	CO
Duane	Niatum	Seattle	WA
Rick	Miller	Wilson	WY
Hillary	Tiefer	Portland	OR
Russell	Stone	San Jose	CA
d'Anne	MacNeil	Mesa	AZ
Francis	Lenski	Vancouver	WA
Joann	Koch	Lebanon	CT
Gerald	Mackey	Gainesboro	TN
Carol	Mackey	Gainesboro	TN
Sarah	Kavage	Seattle	WA
Shawn	Jones	Pismo Beach	CA
Doris	Olsen	Molalla	OR
Cameron	Foral	Brooklyn	NY
Robert	Souza	Saint Louis	MO
Rhett	Lawrence	Portland	OR
Steven	GAry	Seattle	WA
John	Viacrucis	Moorhead	MN
Tammy	King	Gardner	MA
Iris	Cline	Boise	ID
Michael	Carter	Annandale	VA
Eileene	Gillson	Sherwood	OR
Patricia	Jolly	Beaverton	OR
Kyenne	Williams	Portland	OR
Stuart	Weiss	Denver	CO
Anna	Nicholas	Portland	OR
Gail	Richardson	Stone Mountain	GA
Laura	Rogers	Portland	OR
Ann	Dorsey	Northridge	CA
Carla	Morin	Peoria	AZ
Ronald	Faas	Olympia	WA
Romona	Czichos-Slaughter	Hollister	CA
Ruth	Norris	Tacoma	WA
Leigh	Barrett	Topeka	KS
Jenny	Goodnough	Eugene	OR
SUSAN	BABBITT	Philadelphia	PA
Kathy	Shores	Tempe	AZ
Nancy	Lyles	Medford	OR
Joel	Porter	Portland	OR
Lanie	Cox	Spokane	WA
Harold	Watson	Springfield	MO

Florence	Harty	White Salmon	WA
Merri	Whipps	Portland	OR
Susan	Haywood	Portland	OR
Lawrence	Magliola	Sequim	WA
Anne M.	Van Alstyne	Redondo Beach	CA
Shri	Kingsford	Springfield	OR
Lori	Erbs	Acme	WA
Karen	Lamson	The Dalles	OR
Suzanne	O'Keefe	Vancouver	WA
Tammi	Clenard	Portland	OR
J. Barry	Gurdin	San Francisco	CA
John	Oda	San Francisco	CA
Dean	Griswold	Fair Oaks	CA
James	Hubbard	Los Angeles	CA
Pamela	Rogers	San Bernardino	CA
Mercedes	Lackey	Claremore	OK
Phoenix	Giffen	Petaluma	CA
B.D.	Bell	Portland	OR
karen	horton	Independence	OR
Tabitha	Thomasson	Dahlonega	GA
Carole	Williams	Morgantown	WV
Ruth	Flemming	Vancouver	WA
Steve	Royal	Gresham	OR
Susan	Wechsler	Corvallis	OR
Megan	DeSantis	Woodinville	WA
Scott	Kennedy	Salem	OR
Joyce	Jacobson	New York	NY
E.S.	Schloss	New York	NY
George	Lewis	Los Osos	CA
Jud	Schlacter	Eugene	OR
Ed	Fiedler	Austin	TX
Karen and Will	Lozow Cleary	Bloomington	IN
Susan	Ostlie	Albuquerque	NM
Theresa	Day	Milwaukie	OR
Dianna	Stirpe	Portland	OR
Pat	Magrath	San Dimas	CA
Kenneth	Gibb	Zephyr Cove	NV
Sheri	Kuticka	Concord	CA
Victor	Villasenor	Mazama	WA
Sherrill	Gary	Pinehurst	GA
Paul	Eisenberg	Baltimore	MD
Donna	Wilson	Williamstown	NJ
Barbara J	Glass	Miami	FL
Serena	Donnelly	Camas	WA
Rock	Dash	Saginaw	MI

Allison	Ostrer	Seattle	WA
Evan	Krichevsky	Potomac	MD
Mary Ellen	Smith	Seattle	WA
STEVEN	Nasta	New City	NY
Karen	Jacques	Sacramento	CA
Allison	Everitt	Salem	OR
Marissa	Wolfheart	Portland	OR
Brian	Baltin	Seattle	WA
Mark	Hallett	Dallas	OR
Alicia	Schubert	Beaverton	OR
Todd	Stegman	Seattle	WA
Chuck	Gehling	Hood River	OR
John	Rosapepe	Seattle	WA
Melania	Padilla	Austin	TX
Amanda	Dickinson	Yakima	WA
Kaleigh	Lucas	Portland	OR
Janice	Lucas	Portland	OR
Debra	Clapp	Anacortes	WA
Kim	Davis	Salem	OR
Julie	A Anderson	Stevenson	WA
Peggy	Erickson	Minneapolis	MN
Karen	Folger	Spokane	WA
Donna	Noyes	Huntington	NY
Deborah	Kaye	Blaine	WA
Dana	Petre-Miller	Keizer	OR
John	Endres	Newport	WA
B	Chan	San Diego	CA
Lindy	Von Dohlen	Pasco	WA
Beth	Estelle	Durango	CO
Elisabeth	Gross	Bend	OR
Theodora	Tsongas	Portland	OR
Brandon	Coleman	The Dalles	OR
Susanna	Blunt	Portland	OR
Paul	Borcherding	La Grande	OR
Dan	Roark	Farmers Branch	TX
Sandra	Christopher	Burbank	CA
Sean	Edmison	Redmond	WA
Barbara	Blackwood	Spokane Valley	WA
Kathleen	Shabi	Palm Coast	FL
Theresa	Corrigan	Sacramento	CA
Lisa	Bren	Appleton	WA
Aria	Faamasino	Mesa	AZ
Anahata	Iradah	Hogansville	GA
Anthony	Wong	Vacaville	CA
Mitchell	Maricque	Menominee	MI

William	Schoene	Santa Monica	CA
Bonnie	German	Rochester Hills	MI
Jennifer	Owen	Portland	OR
Michelle	Macy	Houston	TX
Sylvia	Etter	Beavercreek	OR
Diane	Burke	Neskowin	OR
Sharon	Fetter	Puyallup	WA
Sybil	Kohl	Seattle	WA
Meghan	McCutcheon	White Salmon	WA
David	Berger	Lyle	WA
Celina	Isgrigg	Tacoma	WA
Pamela	VourosCallahan	Granger	IN
Lori	Stefano	Yelm	WA
Lisa	Nemeth	Spokane	WA
Cynthia	Nielsen	Welches	OR
Stephan	Flint	Pullman	WA
Nancy	Fleming	Lake Oswego	OR
Jenny	Belgarde	Port Townsend	WA
Sue	Staehli	Portland	OR
Leslie	Antkowiak	Vancouver	WA
Benjamin	Martinsen	Vancouver	WA
Liisa	Wale	Bellingham	WA
sierra	sanchez	Seattle	WA
Lauren	Downey	Lake Oswego	OR
Utkarsh	Nath	Fremont	CA
Niomi	Morr	Portland	OR
Carol	Patterson	Eureka Springs	AR
Barbara	Foster	Port Townsend	WA
James	Gayden	Vancouver	WA
Deborah	Porder	Scarsdale	NY
Rachel	DiNitto	Eugene	OR
Susan	von Schmacht	Watsonville	CA
Joanne	Horton	Eugene	OR
Louise	Gordon	Portland	OR
Kattey	Rickert	Cascade Locks	OR
Elizabeth	Bateman	Corvallis	OR

DNFSB Reports 2023-Present

Key

= air concern

= groundwater concern

= worker safety/contaminant exposure

= land/building structure safety

324 Building

1/6/2023: 324 Building management convened a critique meeting to collect information related to clothing contamination found when an individual used a personnel contamination monitor after performing work in one of the facility's contamination areas. Follow-up surveys determined that the beta contamination (most likely strontium-90) was on a company issued modesty clothing shirt, which was worn underneath a personal sweatshirt. A full set of anti-contamination personal protective (anti-c) clothing was also worn during the work. Based on the facts collected during the meeting, the contamination was caused either by cross contamination during the anti-c clothing doffing process or had been present on the shirt prior to performing the 324 Building work. The individual had previously worn the shirt while performing work within the Waste Encapsulation and Storage Facility (WESF) canyon and it had not been laundered between the work activities. Based on the discovery of contamination on the shirt, the individual's work area and work vehicle were surveyed. No contamination was found in either area. Critique attendees noted there is no company policy for the use and management of modesty clothing. Additionally, they noted there was a substantial delay in the overall response, which appeared to be caused by confusion regarding whether the contamination resulted from naturally occurring sources. Lastly, the critique revealed a need for a more robust coordination between facilities to ensure issues are fully addressed when there is ambiguity in responsibility for the cause of an issue. Facility management intends to address the issues.

1/20/23: A resident inspector observed a limited emergency response drill held to allow two individuals assigned to facility emergency response organization (FERO) incident command post positions to maintain proficiency. The scenario was adequately challenging, and the drill coordination team's management of the drill was effective. Additionally, the drill coordination team's post-drill evaluation of the FERO team's performance was critical and consistent with the resident inspector's observations. Overall FERO performance fulfilled drill objectives, with only minor deficiencies.

1/27/23: A resident inspector observed a Hazard Review Board (HRB) meeting for soil stabilization drilling and permeation grouting in room 18. The HRB was thorough and asked probing questions of the workers and planners, and participation was strong from all personnel involved. The HRB voted to approve the package with comments, including follow-on interactions to correct noted paperwork deficiencies prior to starting work.

2/17/23: The resident inspectors observed a work team conduct an airlock entry. The team's goal was to install transport tracks and move a large waste box into the room to support removal of excess equipment. Facility personnel have not performed this activity in over three years and less than half the team had been involved in the previous event. Although the work was terminated before achieving its goal because of track fit up problems, the resident inspectors noted

exceptional teamwork and that the work was performed safely and efficiently, observing only minor conduct of operations and radiological control deficiencies. The resident inspectors also noted that the field work supervisor led a comprehensive pre-job brief that included meaningful participation by members of the team, and that the work in the radiologically controlled areas was effectively managed by supervisory operations and radiological control personnel. Work performed by the team within the high contamination area (HCA) and airlock was controlled and successfully contained contamination within the airlock. Individuals assigned to perform support tasks were attentive and routinely provided effective assistance to the HCA team. The resident inspectors provided their overall observations to the facility manager and discussed their radiological control observations with the field work supervisor.

3/3/23: Management stopped work at the facility when they determined that repetitive use work documents (RUWDs) were being used incorrectly to perform some work activities. In one case, workers attempted to remove a deactivated annunciation panel using an RUWD section that did not include the appropriate work steps to control electrical hazards. The panel was subsequently found to be energized by the workers. Management reviewed all released RUWD work and issued a timely order to reinforce expectations related to RUWD work. Work under RUWDs will resume after the work force has received training on the expectations.

3/17/23: The wire rope that provides the lifting force for the five-ton crane shield door for the D hot cell separated during operation of the door. The door swings upward on hinges with the door opening into the airlock cell. The door, which was being controlled remotely, was at or very near the fully open position when the wire rope failed and swung to its closed position. All personnel are excluded from the airlock by procedure during door operation, so there were no injuries. However, the extent of damage to systems or structures still needs to be determined. Based on the shock caused by the event and the visible disturbance of dust and debris noted on the airlock camera, facility personnel expect significant redistribution of contamination within the air lock and other hot cells. Shield door operations are suspended pending the development of a recovery plan and evaluation of the condition of other shield door operating mechanisms.

6/2/23: During preparations to make an airlock entry, an operator was unable to close the D-Cell shield door. A resident inspector attended a critique and noted that while cycling the door seals is a common practice by operators to address ventilation balance issues, it's not reflected in the procedures for door operation. In addition, senior management self-identified that after the D-Cell crane door failed earlier this year, the shield door should have been taken out of service as well (see 3/17/2023 report). When the D-Cell door was cycled, parts of the damaged D-Cell crane door mechanism shifted and became wedged in the shield door's path. Airlock entries are paused while the contractor works to develop a repair strategy.

6/30/23: DOE announced that CPCCo has determined that the soil contamination area located below the 324 Building is larger than expected. Based on the changed condition DOE is evaluating changes to the cleanup approach for this waste site. Under the current approach, DOE had planned to recover the contaminated soil before removing the building. DOE is now considering a resequencing of the work. The approach under consideration would deactivate the 324 Building, demolish it to slab on grade, and then build a containment superstructure over the slab prior to remediating the contaminated soils. DOE believes the modified approach will be

safer. The changes are contingent on successfully completing the applicable regulatory processes. Based on ongoing monitoring activities, the contamination plume is considered stable and there is no indication that the existing contamination is migrating into the groundwater.

8/18/23: The resident inspectors met with DOE field office and contractor representatives to discuss proposed changes to the building 324 disposition project. The changes are considered necessary since discovery of additional contamination at the facility outside the footprint of the B Cell (see 6/30/2023 report). The discussion focused on method and sequence for the remediation, preventing contamination migration in the soil column before or during site remediation, contingency planning in case the contamination does migrate into the groundwater, and the ongoing degradation of facility systems that is making it difficult to work within the building and the impact of those problems on worker radiation exposure and safety.

9/8/23: Following an entry into the Radiological Engineering Complex hot cell airlock to troubleshoot issues with the A Cell crane, a worker alarmed a personal contamination monitor. Radiological control technicians were able to identify the source and decontaminated them successfully. This is the first skin contamination event since radiological work was paused after a series of personal contamination events at the facility (see 11/19/2019 report). A resident inspector observed a critique held after the event and noted that participants were forthcoming with their observations and concerns. Two workers in the airlock had contaminated oil on their outer set of anti-contamination clothing, which was not successfully wiped off prior to doffing. In addition, the contaminated worker had sweated considerably, which could transport contaminants through his anti-contamination clothing. While no direct cause could be readily determined, the work had been delayed and then extended to add a new scope of work that had not been briefed that morning. Based on the critique meeting, facility management has paused airlock entries pending further evaluation by contractor performance assurance.

12/1/23: Facility radiological control (RadCon) management held an in-progress ALARA review to understand the reasons for contamination levels found during a routine survey in a contamination area. The contamination level exceeded the void level of the radiological work permit used for the survey and would normally require a high contamination area (HCA) posting. The attendees noted that the contamination was found at the lip of a transfer port, which is normally posted as an HCA while in use. Based on the results of the ALARA review, RadCon management will review posting of transfer ports and will also review personal protective equipment used while performing surveys in these locations.

3/8/24: A resident inspector observed an emergency preparedness drill at Building 324. The drill scenario simulated the detonation of a suspicious package, which ruptured a radioactive waste package. Facility response was prompt, though the resident inspector noted poor contamination control during the doffing of the firefighter's personal protective equipment. The drill controllers also noted the contamination control deficiency and injected a further spread of contamination to multiple individuals wearing personal protective equipment and to the personal clothing of a firefighter.

6/14/24: The CPCCo Emergency Preparedness (EP) organization conducted a drill to evaluate the proficiency of 324 Building facility emergency response organization (FERO) personnel. The

scenario presented to the FERO team simulated an aircraft crash into the building and subsequent fire resulting in a facility evacuation. As presented, the scenario was challenging and allowed a complete and substantive evaluation of the FERO team's capability. The drill team's control of the scenario was professional and, based on the results of the hotwash, their evaluation of FERO performance was accurate. The FERO team effectively coordinated the actions of facility personnel resulting in a timely and effectual response to the event. Overall radiological control performance was well above the average performance observed by the resident inspectors during other recent onsite EP drills. However, the drill did identify a need for focused training for doffing assistants on operation and handling of supplied air equipment.

3/7/25: The CPCCo emergency preparedness organization conducted a drill at the 324 Building, which simulated a seismic event that caused a partial collapse of the 324 Building resulting in a worker injury. A resident inspector observed the drill, noting that the scenario was sufficiently challenging and that facility personnel effectively responded to the event. He also noted that the drill team's evaluation of the response was critical but fair. During the response, facility personnel frequently demonstrated practical decision-making skills to resolve problems. Additionally, the resident inspector observed that response team performance of contamination control at the cold area boundary and fire-fighter equipment doffing were improved compared to previous observations at this facility. However, first-aid treatment and support for the injured worker were deficient, and the transport of the individual to a medical facility was not timely. Lastly, the Building Emergency Director and Incident Commander chose to collocate the Incident Command Post with the Field Emergency Response Organization at the scene. This resulted in some command-and-control overlap, which can cause confusion.

5/16/25: In 2022, DOE paused CHPRC efforts to retrieve highly contaminated soil from beneath the 324 Building when the contractor discovered that the contamination plume was larger than expected (see 9/2/2022, 6/30/2023, and 8/18/2023 reports). Because of the new information, DOE determined that the existing approach would not result in successful remediation of the plume prior to removal of the building, which was their original plan. DOE and CPCCo have completed a review of alternatives and have worked with the Environmental Protection Agency to identify a preferred alternative that they expect will result in successful retrieval of the contaminated soil, improve safety, and reduce worker exposure to radiation hazards. DOE is soliciting public comment prior to finalizing the decision.

Ongoing Issue Identified at 324 Building:

- There are continuous issues of worker safety and exposure to contamination, as is clear from the highlighted incidents below. This further emphasizes the importance of ensuring that worker safety is being prioritized during the 324 cleanup, as it remains an ongoing concern.
    - 1/6/2023: Beta contamination (likely Sr-90) found on clothing… "Critique attendees noted there is no company policy for the use and management of modesty clothing."
    - 9/8/2023: "Following an entry into the Radiological Engineering Complex hot cell airlock to troubleshoot issues with the A Cell crane, a worker alarmed a personal contamination monitor. Radiological control technicians were able to identify the source and decontaminated them successfully. This is the first skin

contamination event since radiological work was paused after a series of personal contamination events at the facility."

- 12/1/2023: "Facility radiological control (RadCon) management held an in-progress ALARA review to understand the reasons for contamination levels found during a routine survey in a contamination area. The contamination level exceeded the void level of the radiological work permit used for the survey and would normally require a high contamination area (HCA) posting."
- 3/8/2024: "[T]he resident inspector noted poor contamination control during the doffing of the firefighter's personal protective equipment. The drill controllers also noted the contamination control deficiency and injected a further spread of contamination to multiple individuals wearing personal protective equipment and to the personal clothing of a firefighter."
- 6/14/2024: "[T]he drill did identify a need for focused training for doffing assistants on operation and handling of supplied air equipment."
- 3/7/25: "[F]irst-aid treatment and support for the injured worker were deficient, and the transport of the individual to a medical facility was not timely. Lastly, the Building Emergency Director and Incident Commander chose to collocate the Incident Command Post with the Field Emergency Response Organization at the scene. This resulted in some command-and-control overlap, which can cause confusion."

Additional DNFSB Excerpts for Context - Radiochemical Processing Laboratory (RPL)

10/27/23: A resident inspector observed a critique for the loss of control of radioactive material within the High-Level Radiochemistry Facility (HLRF) hot cells. Samples of radioactive material for a project had been moved between HLRF hot cells after refurbishment during backlog waste removal activities. As a result, two samples were discovered in the wrong hot cell and several other missing samples are presumed to either have been incorrectly packaged as waste and placed into a shielded waste cask assembly (SWCA) or fallen into inaccessible locations inside the hot cell. The critique meeting was well planned and executed. All participants freely offered self-critical input and subject matter expertise. RPL management has paused movements of radiological waste in and out of the facility pending inspection of five suspect SWCAs to determine if they contain the missing samples and a causal analysis is being scheduled.

11/10/23: Workers unloaded two of the three shielded waste cask assemblies (SWCAs), which were suspected of containing radioactive samples identified as missing during work in the high-level radiochemistry facility (HLRF) (see 10/27/2023 report) and located the missing radioactive material. However, additional missing material has been identified and contractor personnel are performing a complete inventory of the HLRF hot cells to confirm the total amount of missing inventory. Facility personnel are unloading the third SWCA to locate the additional missing samples. A resident inspector observed a dry run of the SWCA unloading activity along with PNSO and contractor personnel and provided feedback on personal protective equipment and radiological control practices. This feedback was incorporated into the procedure. During the pre-job briefing for this dry run, the resident inspector observed mounting hardware fall off the facility wall and strike a person's leg. The individual was evaluated and released to duty. At the

critique, PNNL and facility personnel determined that changes to the scope of work resulted in the addition of a new subcontractor. Additionally, the work was considered skill-of-the-craft and informal guidance provided to previous contractors was not adequately communicated. Further, the potential hazard to workers inside the facility was not adequately captured during work planning. PNNL is revising their subcontractor work processes to prevent recurrence

2/9/24: Contractor management completed their root cause analysis of unaccounted radioactive material inside RPL hot cells and have successfully accounted for all material (see 10/27/2023 report). As part of an extent of condition, personnel initiated an inventory review using the facility's radioactive materials tracking (RMT) database, which implements a facility specific administrative control for material-at-risk and fissile materials. During this inventory, a worker noted a can of material in the Shielded Analytical Laboratory hot cells that was not in the RMT database. The facility promptly responded and declared a technical safety requirement violation. A resident inspector attended the critique, where participants noted that the inventory method used only verifies that all items logged in the database can be located but does not require workers to verify all material is associated with an RMT entry. As a result of the event, facility management issued standing orders to pause all work and material movements requiring RMT pending recovery actions.

3/1/24: RPL personnel completed an extent of condition review following the discovery of radioactive material in a hot cell that had no entry in the facility's radioactive material tracking system (see 2/9/2024 report); they did not find any other instances of untracked material. While the program had failed to identify this container of remote-handled material for over ten years, the facility's material-at-risk limits were never exceeded. As a result, the facility requested, and the Pacific Northwest Site Office approved downgrading the previously reported technical safety requirement violation to a management concern. The change will not impact the ongoing causal analysis of the event.

6/7/24: The Pacific Northwest National Laboratory (PNNL) conducted a quarterly emergency preparedness drill. The scenario involved an earthquake causing damage to RPL, prompting a facility evacuation and a subsequent Hanford Fire Department response to recover an injured worker and inspect the damage. Further collapse of the building during the drill forced an upgrade to the event classification and relocation of personnel. The resident inspector noted that PNNL involved all facility workers save for a small number of exempt personnel, enhancing the quality of the drill. Participants were engaged and freely provided constructive feedback following the drill.

8/16/24: A worker found radiological contamination on their hands while surveying out of the radiological buffer area after inventorying radiological material. An accompanying worker cleared the hand and foot monitor and left the facility. Subsequent radiation protection technologist (RPT) surveys identified contamination on the hands, shirt, and pants of the worker, who was subsequently decontaminated. During the fact gathering for the event, participants identified multiple weaknesses in the performance of the inventory work. The worker also recognized there was a potential contamination transfer when they had handled the other worker's computer cable. As a result, facility management requested activation of a Radiological Assistance Program team. The team performed surveys of the other worker, their car, residence,

and the computer cable. They found contamination on the cable but did not identify any other contamination spread. At RPL, RPTs conducting initial surveys of areas entered by the individual identified a contaminated logbook, but not the likely source of the personnel contamination. Later surveys identified the likely source to be an opened bag containing packaged material. Facility management suspended radiological work on the first floor of the lab pending completion of additional surveys and briefings to all lab personnel.

8/23/24: Radiological surveys performed after last week's personnel contamination event (see 8/16/2024 report) identified the likely source of the contamination as an improperly packaged uranium sample. To restart to radiological operations in the facility, management established compensatory measures and conducted a briefing for all facility personnel regarding the conditions that led to the event.

12/13/24: RPL relies on an inventory tracking system to ensure in-process radioactive material quantities do not exceed the facility limit. The limit protects assumptions used to define accident consequences that support identification of nuclear safety hazard controls. The system is also used to support decisions regarding the receipt of additional material into the facility. In mid-November, facility personnel opened a transfer cask for laboratory work and determined that, based on expectations from the inventory tracking system, several containers containing strontium 90 (Sr-90) were missing. The project leader responsible for the absent Sr-90 initiated actions to determine the location of the containers but did not notify facility management until December 4. Based on the investigation performed by the project leader and information from other individuals, facility management determined that the Sr-90 was most likely transferred to other containers without documenting the transfers in the inventory tracking system. They also determined that the existing entries in the inventory tracking system that documented the presence of the containers had been made to correct a previous inventory issue but without physically confirming the presence of the containers. Lastly, the issue had not been discovered during a recent inventory validation performed in response to a previous event (see 10/27/2023 report). Facility management is working to identify the location of the missing Sr-90 and will perform a causal analysis to identify required corrective actions. The facility limit was not exceeded because of this event. This is the third notable occurrence at RPL related to inventory control within the last 15 months (see 10/27/2023 and 2/9/2024 reports).

12/27/24: RPL relies on an inventory tracking system to ensure in-process radioactive material quantities do not exceed the facility limit to protect safety basis assumptions and inform decisions about material intake and storage at RPL. Facility personnel discovered high levels of contamination on a sample of radiological material being prepared for disposal. A paper review determined this was one of four samples generated in 2008 that were believed to all be disposed as radiological waste prior to the implementation of the current inventory tracking system. Facility management is working to identify the chain of custody of the four samples to verify their location, and access to the affected lab room was restricted. The facility limit was not exceeded because of this event. This is the fourth notable occurrence at RPL related to inventory control within the last 15 months (see 10/27/2023, 2/9/2024, and 12/13/2024 reports).

6/6/25: PNNL personnel held their annual emergency preparedness exercise at RPL, simulating a bomb threat, an explosion in a waste storage area, the discovery of a suspicious package, and the

search for and recovery of a missing person that was contaminated. Notably, PNNL has constructed a new administrative building to support RPL, which includes a new incident command post area that was used for the first time in an annual exercise. Two resident inspectors observed the contractor's response to the event, including a full facility evacuation, segregation of potentially contaminated workers, and support for both a Hanford Fire Department and a Hanford Patrol response to the event. They noted improvements compared to other recent exercises at RPL, particularly in command and control and personnel accountability.

Hanford Site

11/29/24: … [E]ffective with the Office of Environment, Health, Safety and Security, Office of Nuclear Safety (EHSS-30) contract extension expiration on June 30, 2025, the decision to independently test and inspect HEPA filters will be left to program and field office discretion. For DOE Environmental Management nuclear facilities, the decision to independently test and inspect HEPA filters will be made by the assigned safety basis approval authority based on an evaluation of the technical justification for the related system as provided in the documented safety analysis. Facilities at the Hanford Site impacted by this change in policy include T Plant, the 324 Building, the Waste Receiving and Processing Facility, and the Waste Treatment Plant. HFO Engineering is evaluating the impacts of the new policy and considering various options, which include contracting directly with the FTF, establishing a local testing and inspection capability, or utilizing existing in-service inspections consistent with facilities' quality assurance programs. The Board's staff is evaluating the planned policy changes.

1/24/25: CPCCo declared a Potential Inadequacy in the Safety Analysis (PISA) for the Hanford Sitewide Transportation Safety Document (TSD) because the distances to offsite receptors from a radiological release are closer than those assumed in the TSD. The TSD had not been revised after DOE transferred unused land just north of the 300 Area to local jurisdiction. The resulting change places some transfers within 10 meters of the site boundary. CPCCo subsequently determined that a positive unreviewed safety question exists. Radiological shipments originating south of the Wye Barricade, except Department of Transportation (DOT) compliant and DOT special permit shipments, are prohibited until the safety of the situation is evaluated. This compensatory measure primarily impacts shipments onsite from the Pacific Northwest National Laboratory Radiochemical Processing Laboratory.