

COLUMBIA RIVERKEEPER

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

April 4, 2025

U.S. Department of Energy Attn: Jennifer Colborn U.S. Department of Energy P.O. Box 450, H5-20 Richland, WA 99352

Sent via email to: <u>CleanupPriorities@rl.gov</u>

RE: Columbia Riverkeeper Public Comment on Hanford Cleanup Priorities

Dear U.S. Department of Energy,

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 16,000 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.

Riverkeeper hereby submits the following comments on the Hanford Cleanup Priorities of the U.S. Department of Energy ("Energy") for Fiscal Year (FY) 2027.

1. During FY 2027 Riverkeeper urges Energy not to lose focus on River Corridor clean up.

The Hanford Reach is an immeasurably important part of the Columbia River. As the last free flowing section of the Columbia, the Hanford Reach remains the most productive mainstem habitat for endangered Chinook salmon on the Columbia, producing 52 million juvenile Chinook salmon every year. Communities downstream draw drinking water from this part of the river and use the river to water crops. People fish, hunt, and gather in areas sustained by the Hanford

Reach. Hanford cleanup today is an effort to protect clean water for a millenia. Decisions today and cleanup ongoing and tomorrow will decide how safe this area will be for all future generations.

a. New Hexavalent Chromium Standards must be applied.

In 2024, the state of Washington updated freshwater water quality standards for hexavalent chromium. WAC 173-201A-240. Concurrently, the U.S. Environmental Protection Agency (EPA) listed a numeric value for hexavalent chromium. In August 2024, EPA published the updated IRIS Toxicological Review of hexavalent chromium, updating the original 1998 assessment with the latest data. This new assessment recognizes hexavalent chromium as a mutagenic carcinogen, specifically carcinogenic to humans by the oral route of exposure, thus deriving a cancer slope factor of 0.5 kg-day/mg.

Consider for example the dust involved in proposed activities for the 200 West WARM project, the 618-11 cleanup, excavation near the 324 Building, or any other serious effort to address leaking tanks, structures, poisoned soils, and plumes of contamination reaching groundwater and migrating towards the River. In each of these situations, hexavalent chromium may be in play. Riverkeeper is aware that there are radiation alarms, but are there hexavalent chromium alarms? When alarm bells and sirens ring at Hanford, what do they mean for people near the site? Particularly when winds are driving dust offsite?

Additionally, new road construction in 200 West, for instance, could have implications for hexavalent chromium contamination mobilization through dust generation, suppression, and groundwater contamination. Following hexavalent chromium closely as it moves through the Hanford site provides a window into important and under-appreciated pathways for exposure to humans, animals, fish, and living organisms near the Columbia River shoreline. The demolition of the plutonium finishing plant was sufficiently disruptive to yield americium-241 detections in the 100-K Area. It follows logically that the proposed actions now underway—but being tackled with an inadequate budget and workforce—should raise serious concerns.¹

Previous Hanford cleanup studies and plans dealing with hexavalent chromium did not incorporate an oral slope factor for hexavalent chromium in developing cleanup levels. This specific issue is not very nuanced when put in a different context: what enters the human body can become lodged in the tissues there, causing harm. Different tissues, different exposure periods, different levels of pH and other factors such as salinity in blood and tissues and other substances, all of these play into how hexavalent chromium impacts the health of people. The data is clear: hexavalent chromium is a harmful factor at Hanford.

¹ These questions have been posed in town hall meetings to elected officials, with no answers adequately provided to date, despite efforts on the part of elected officials to obtain them.

Additionally, the most recent cleanup plan in the River Corridor for the 100-B/C Area used a soil cleanup level of 2 mg/kg and a groundwater cleanup level of 10 μ g/L. Using EPA's updated regional screening levels that consider an oral cancer slope factor for hexavalent chromium and the mutagenic effects of hexavalent chromium, cleanup levels must now be adjusted significantly.

EPA's change in cancer risk for hexavalent chromium creates large areas of the Hanford site where risks need to be re-analyzed and will likely be above standards for hexavalent chromium.

Energy must prioritize this re-analysis. Work underway could cause harm, otherwise.

Riverkeeper is concerned that if Energy doesn't begin to consider new cleanup standards now, it is unlikely that the River Corridor will have unrestricted use by the end of the cleanup timeline. The consequences of this outcome would be very harmful to people in the region.

b. Both the 100 K-Area and 100 N-Area Remedial Investigation Feasibility Studies (RI/FS) Need Hexavalent Chromium Addendums.

Energy should develop 100 K-Area and 100 N-Area Records of Decision ("RODs") that protect human health and the environment, provide for unrestricted use of the River Corridor, and offer meaningful opportunities for public engagement. In order to do this, Riverkeeper urges Energy to develop hexavalent chromium addendums for both the 100 K-Area and 100 N-Area.

As Energy knows, hexavalent chromium is the dominant contaminant in the 100 K-Area. During operations, hexavalent chromium was injected directly into the reactors in order to prevent corrosion. It is also a relatively mobile contaminant and despite progress with pump-and-treat systems, current levels remain high and require immediate action. Thus far, decisions in the 100 K-Area area used values that are higher than both the 2024 state and federal values. This means that decisions previously made are not protective of human health or the River. This complex problem in the 100 K-Area requires prioritization now.

In the 100 N-Area, strontium-90 remains the dominant contaminant, however hexavalent chromium still poses complex problems. Riverkeeper commends Energy in issuing a strontium-90 addendum to the RI/FS and encourages the agency to issue another addendum for hexavalent chromium. The presence of significant cultural resources in the 100 N-Area poses a unique challenge to tackling hexavalent chromium. Soil flushing, the processes by which excess water is injected into the soil to capture hexavalent chromium and sucked up through the pump and treat system, threatens cultural resources in the area.

Furthermore, the Department of Energy now proposes to concentrate strontium-90 in shallow or surface storage in areas co-located with potential hexavalent chromium issues. This dynamic is not well-understood or explored in these comments or in the strontium-90 addendum, a hexavalent chromium addendum could look at this.

Under CERCLA, when a significant difference or change emerges, it can be either examined through an addendum or an amendment, depending on the stage of the cleanup plan. Every five years, final RODs are reviewed, at which time an amendment can be made. When a cleanup plan is in the draft phase, an addendum may be issued to address a significant change. This is what occurred with strontium-90 in the 100 N-Area. How long an amendment versus an addendum takes to issue, depends on the complexity of the problem, however an amendment usually takes longer.

Riverkeeper urges Energy to withhold issuing a final ROD for both the 100 K-Area and 100 N-Area until new standards for hexavalent chromium are used and data is updated, resulting in addendums to both draft cleanup plans.

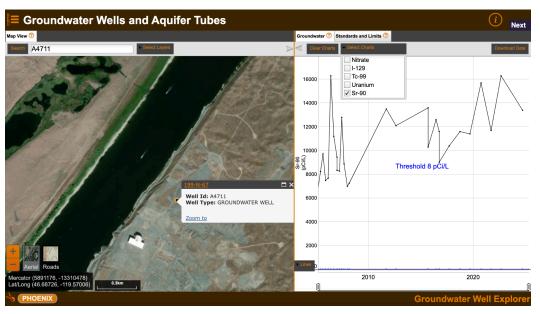
The RI/FS phase of CERCLA is crucial. In this phase the site is characterized, a baseline risk assessment is created,² treatability studies are conducted, there is a development and screening of alternatives and a detailed analysis of those alternatives, which results in the choosing of the preferred alternative, delineating cleanup for the future. If updated hexavalent chromium standards are not looked at now and instead punted five to seven years down the road (after a final ROD is issued), the risk to human health and the river is exponentially high.³ The implementation of plans must prevent cancer-causing pollution from reaching groundwater and eliminate the risk of contaminants leaking into the River. Energy must prioritize issuing addendums to the 100 K-Area and 100 N-Area draft cleanup plans in FY 2027.

c. Groundwater remediation must remain a top priority for Hanford cleanup.

² We have commented previously that the 2014 Baseline Risk Assessment documents for the River Corridor Cleanup cannot be used as a determinative guide any longer for assessing risk to receptors in the River Corridor. Pollution is not behaving as expected in all cases because the sources are more dense and their release timing is altered in ways not anticipated. These patterns of pollution pulses to soil, groundwater, and biota are changing. The evolution of this study causes confusion when it overly relies on outdated documents. The 2014 document was based on data prior to that time, and much has changed. We reiterate the comment that the RCBRA documents are not adequate for making decisions. And, the SEPA and NEPA documents that flow from them are in flux, and also inadequate.

³ Consider the experience of discovering 324 Building problems midstream, after having mobilized workers in such an effort. This example shows how study and planning are foundational to the work. Cutting these areas of expertise through federal mismanagement, which is presently occurring, causes major negative impacts to the work and the waters of the region.

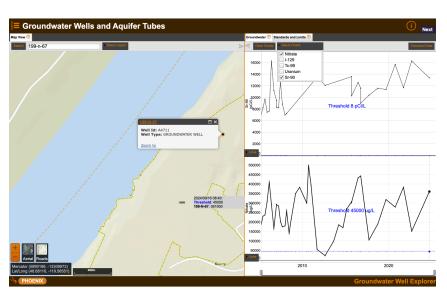
As discussed above, River Corridor groundwater contamination raises major concerns, with notably high levels of strontium-90 and hexavalent chromium. In the 100 N-Area groundwater, the strontium-90 concentration was 13,400 pCi/L in well 199-N-67 in 2024.



Source: Pacific Northwest National Labs. PHOENIX database. Groundwater well explorer. Accessed March 25, 2025.

To compare, the drinking water standard in Washington state is 8 pCi/L. At the levels present in groundwater, strontium-90 and hexavalent chromium in the River Corridor risk the health and safety of fish, animals, plants, and people who depend on them.

For added comparison, note that nitrate levels are also extremely high in the area, with fluctuations at different levels of groundwater in time. The distribution of hazardous pollutants in this area is very difficult to ascertain, and in flux—but clearly in exceedances of DWS and



pushing the limiting assumptions of the River Corridor Baseline Risk Assessment documents.

Image: Snapshot of groundwater well data for 199-N-67, including nitrate concentrations which are rising sharply and significantly above DWS. Note apparent hyporheic flow. Source: PHOENIX database. PNNL and U.S. DOE. Accessed April 2, 2025. 12:30 pm PST.

Reaching a final ROD by FY 2027 is not plausible for the 100 N-Area, given the new information about hexavalent chromium and the strontium-90 addendum to the N-Area RI/FS, which shows a very recalcitrant strontium-90 problem that will post a risk to the shoreline for more than 100 years. Additionally, nitrate issues persist. We have not yet explored issues related to PFAS, either.

At present, Energy estimates that there are 603 curies of strontium-90 adsorbed to (or stuck to) the sediment and material in the aquifer in the 100-N Area. River levels cause strontium-90 to attach to the soil, and then later the strontium-90 releases from the soil when water levels and conditions change. This causes the amount of strontium-90 that biological organisms may encounter fluctuates. Recent groundwater data seems to suggest that the limits have been exceeded at times. Looking at this another way, clean up in this area has failed, meaning that there is cancer-causing strontium-90 along the Columbia River shoreline for the foreseeable future. The federal government concludes that the situation is acceptable because of institutional controls.

For the 100-N Area, "unrestricted use" of the Columbia River Corridor was the cleanup goal. It should remain the goal, despite the fact that it is difficult to see a path to achieving it from here. Riverkeeper urges Energy to share transparently the knowledge of the failure to contain the poison that came from nuclear energy at the 100-N Reactor area. The U.S. government is responsible for a presently unsolvable, massive harm to the River and the people who depend on it.

The bottom line is that strontium-90 reaches the River; it is not cleaned up. Energy does not have a credible plan to intercept the damaging radioactive pollution before it reaches biological receptors and instead creates a 150-year sacrifice zone through institutional controls. The conclusions reached in the addendum to the RI/FS about what is acceptable are built on very disturbing assumptions about past, present, and future harm to people, plants, and animals.

Does Energy plan on seeking a technical impracticability waiver for strontium-90 in the 100-N Area? The recent process for the Technical Impracticability (TI) waiver for Iodine-129 in the 200 West groundwater plume near ERDF, and beneath ERDF, offers a guide to the challenges facing the N Area regulators.

These levels of contamination are of great concern, and Energy's approach has failed to fully address key pollution issues. Energy's preferred plans often involve using Monitored Natural Attenuation (MNA) with Institutional Controls (ICs) for groundwater associated with River Corridor aquifers, allowing radioactive decay and other dispersion of pollution while Energy monitors the pollution and uses ICs to restrict uses. The extensive use of MNA and ICs allows

contaminants to persist in soil and groundwater. As a result, it could be decades before groundwater pollution drops to levels that either meet surface water standards or drinking water standards.

In parallel, in the 300 Area, despite ongoing implementation of a 2013 Record Of Decision (ROD), uranium levels exceed drinking water standards very close to the Columbia River. This is unacceptable when the Hanford Reach provides critical habitat for spawning, foraging, and migration of salmon and steelhead.

If there is to be robust, unrestricted use of the River Corridor—a goal we support—active groundwater remediation needs to be addressed and prioritized in the Central Plateau and River Corridor.

As stated previously, all groundwater, even that in the Central Plateau, will come in contact with the River. Reducing cancer-causing pollution in the groundwater must be addressed using a whole-site approach. Unless pollution throughout the site continues to be addressed, including through Energy's commitment to reducing groundwater pollution, the health of the fish, wildlife, plants, and people that use or will use the site will suffer. How do Energy's FY 2027 priorities address these concerns?

2. Energy must prioritize a whole-site cleanup strategy for groundwater.

Riverkeeper urges Energy to establish requirements to ensure that waste management activities are protective of human health and the environment, now and in the future. An integral part of this is establishing a whole-site approach to groundwater at Hanford. According to the Hanford Site Environmental Report for 2022, long-lived, mobile radionuclides such as Iodine-129 (I-129) and Technetium (Tc-99) remain in the groundwater in the Central Plateau. A whole site approach to groundwater remediation is necessary to treat these contaminants due to their mobile nature in groundwater, and it seems to be the trend in thinking. One would hope so given the "One Hanford" messaging that has been consistently put forward by agencies.

The cancer-causing contaminants in groundwater in the Central Plateau will find a way to the River unless intercepted and immobilized, treated, stored, and removed from the area. There is a startling lack of planning for the remediation of these Central Plateau potential groundwater contaminants, which will one day become River Corridor contaminants, presently located in degraded structures and soils and dips in the subsurface at Hanford. The progress that has been made is very helpful: the work left to be done is daunting.

A whole site remediation plan is necessary to address the long-lived, mobile radionuclides, slowly migrating from the Central Plateau to the River Corridor. Recently the draft TI waiver

was issued for the iodine-129 plume in the Central Plateau, although this plume is slow-moving in relation to some features of Hanford, what does it mean for the rest of the site overall if institutional controls fail?

During a Hanford Advisory Board subcommittee meeting in March 2025, agency staff indicated that under no modeling conducted did this plume reach the River—what assumptions did this modeling use? We live in unsettled seismic times, with the potential for land and water dislocations that are sudden and massive. Were long term climate change impacts taken into account, such as increased precipitation or earthquakes?

There is evidence of consideration of seismic uncertainties in the recently released 200 West Area Supplement Analysis of the Final TC&WM EIS for the 200W Tank Waste Treatment Mission, but it seems surficial considering the impacts implied by ongoing activities, much less planned ones.

3. Energy should prioritize active monitoring of aquatic life in the Hanford Reach.

A standard practice for other superfund sites is biological monitoring. Part of Hanford's 100-BC ROD and work plan includes the sampling of bugs in that area of the River. Is active monitoring of aquatic life being prioritized in other areas at Hanford? Is biological monitoring included in the draft cleanup plans for the 100 K-Area and 100 N-Area?

4. Cleanup of the 300 Area must be prioritized, not development.

We urge you to review and consider carefully the comments submitted by Dirk Dunning⁴, an outstanding expert on Hanford. He is a former HAB member. His knowledge has led to vast harm reduction. We are grateful for his work, and we incorporate his comments to the Oregon legislature by reference here as it relates to the importance of Hanford remaining laser-focused on cleanup.

⁴ Dirk Dunning. Retired Hanford Expert for Oregon Department of Energy. 2025. Testimony to Oregon Legislature. https://olis.oregonlegislature.gov/liz/2025R1/Downloads/PublicTestimonyDocument/136143 Dirk provides a unique perspective on the proposed actions. Dirk Dunning is a retired Registered Professional Engineer, and formerly licensed Nuclear Power Engineer. For the last 25 years of Dunning's career, Dirk worked at the Oregon Department of Energy as senior staff doing technical analysis and policy review of nuclear matters and in the cleanup of the nuclear mess at the Hanford Nuclear Reservation in eastern Washington State, as well as for Nuclear Safety and Energy Emergency Response for the State of Oregon. Dirk was on call 24/7 throughout his entire career in that role, principally concerned with the Columbia Generating Station and every conceivable nuclear accident at Hanford or the Columbia Generating Station. The cautionary notes he raises are credible, and should be taken with utmost seriousness.

a. The 324 Building needs to be prioritized.

Any changes to the 300 Area cleanup plan must go through a public process and deal with deadly radioactive waste appropriately and in accordance with law. Some measurements of radiation beneath the 324 Building are staggeringly high. This contamination remains less than 1,000 feet from the Columbia River, and it is potentially hazardous or deadly to anyone who approaches the most contaminated areas unshielded. The 324 Building provides another example of why River Corridor cleanup is far from complete. The recent discovery of this hazardous waste in unexpected locations is extremely concerning: what else don't we know about contamination in and near aging structures? The size of enclosures, excavation, and mitigation measures will directly impact neighboring areas of Hanford and Richland, such as the Columbia Generating Station, Perma-Fix Northwest, PNNL, and 618-11 cleanup.

Energy is in the process of abandoning leases: this seems to be taking actions prematurely that cause great difficulty in implementing any path for success and stability in cleanup. Why? Why is Energy laying off people that are needed right now? Why are key leaders resigning all at once? Who will be held responsible for the harm that is being caused right now? We are very grateful to the people who keep working on these problems despite harsh circumstances.

b. New nuclear development should be a non-starter at Hanford.

At the March 5, 2025 public meeting somebody asked a question about the development of Small Modular Nuclear Reactors (SMNRs) at Hanford, to which Energy replied along the lines of, that's not us, we are not building new reactors, we are focused on clean up. Does Energy not have a role in leasing land at the Hanford site for development? Shouldn't Energy consider the impacts of development on the cleanup, including activities which would generate high level waste, with no place to go? Why is Energy abandoning leases that seem useful, while leasing land that seems unsuitable for the potential development plans? This appears to us to be destructive, harmful behavior for building trust in cleanup.

Riverkeeper would like to note that development at Hanford has already hindered and delayed clean up on and near the site.

As discussed above, the draft TI waiver was issued for iodine-129 in the Central Plateau. One basis for issuing the TI waiver was that ERDF, located over the most concentrated part of the iodine-129 plume, made methods of extraction and treatment impracticable.

Another example of development onsite hindering clean up can be found in the 300-Area, where the Northwest's only operating nuclear power plant, the Columbia Generating Station (CGS) is located. Nearby and partially under the CGS parking lot is the 618-11 burial ground. This burial

ground contains highly radioactive waste. In order to clean up the source material here, which continues to leach technetium-99 into a groundwater plume, Energy must engage and coordinate with Energy Northwest to insure worker safety, potentially pausing work at CGS. This engagement has been piecemeal and incomplete meaning characterization of the waste site is not underway.

Any future development, particularly in the 300-Area, should be a non-starter, especially a nuclear waste generating operation such as SMNRs. We would like to re-emphasize testimony submitted to the Oregon legislature in 2025 by Dirk Dunning, a retired Registered Professional Engineer,⁵ who cautioned

Whereas in the beginning it was believed that the problems with nuclear waste was minor and would one day be solved, we know today that we are no closer to having a permanent geologic repository for the waste than we were then. Worse, we know today that operating nuclear power plants build in long lived radioactive wastes including highly mobile wastes and extremely difficult actinides wastes. The problems in dealing with these wastes has proven to be unsolvable. We should not create more such wastes until we have first dealt with the wastes already created.⁶

Since Energy is only involved in the cleanup, Energy should not allow development onsite at Hanford that directly adds to the nuclear waste burden that Energy is responsible for and has no long-term disposal routes.

5. Moving the Strontium and Cesium capsules located in the Waste Encapsulation and Storage Facility ("WESF") into dry storage must happen as soon as possible.

Riverkeeper remains pleased that Energy is prioritizing the movement of WESF's capsule into dry storage. The proper movement, containment, and storage of these capsules remains extremely important, as they contain approximately ½ of all radioactivity on the Hanford site, according to the U.S. Department of Energy and PNNL.

In previous public meetings, Energy described the capsule storage area (CSA) or the "dry storage." Is Energy considering adding a cover to this area to limit water exposure? It was explained that there is no final disposition path selected for the 18 casks that will be placed into dry storage and that they will remain in interim storage in the CSA. When does Energy anticipate a disposition path will be selected and what's the process to do so? Riverkeeper understands that

⁵ Dunning was also a formerly licensed Nuclear Power Engineer, who for the last 25 years of his career worked at the Oregon Department of Energy as senior staff doing technical analysis and policy review of nuclear matters and in the cleanup of the nuclear mess at the Hanford Nuclear Reservation in eastern Washington State, as well as for Nuclear Safety and Energy Emergency Response for the State of Oregon.

⁶ Testimony is available at https://apps.oregonlegislature.gov/liz/2025R1/Measures/Testimony/HB2410.

the casks have a 300-year design life, but it's unclear to us how the aging process has been studied for the casks. Energy mentioned that they have a 19th cask which they will use for age management, adding heating elements to replicate the capsule and then do long-term studies to see if there are issues inside. Shouldn't this have been done already? Energy estimates that the cesium capsules will begin transfer this year and transfer will be completed in FY 27-28 with the strontium capsules. What if there are issues with the 19th cask? Riverkeeper remains optimistic that removing the capsules from WESF is a high priority for FY 27.

We are deeply grateful for the expert workers who have made progress in this area. Thank you.

6. Cleanup priorities outreach must be inclusive and comprehensive.

How will information gathered during this public comment period be integrated into the cleanup priorities for FY 2027?

Has public outreach occurred in languages besides English? Columbia Riverkeeper strongly suggests that public meetings have a Spanish translator and provide Energy, Washington Department of Ecology ("Ecology"), and U.S. Environmental Protection Agency ("EPA") materials in Spanish as well.

According to the most recent census data, a majority of the Tri-Cities population is Hispanic, with a high percentage of households speaking Spanish as the primary language. If Hanford materials are only provided in English, a large majority of the Tri-Cities are not being engaged. Riverkeeper has made this request in several comments, have they been considered?

Lastly, how does Energy reconcile the public comments provided on the Hanford Site 5-year plan with comments provided on the priorities for FY 2027? Columbia Riverkeeper provided detailed comments on the 5-year plan, however many of those comments are applicable here as well and require efforts to be made during FY 2027. How do Energy's FY 2027 priorities support the 5-year plan? Columbia Riverkeeper recommends that Energy explain how each of their FY 2027 priorities supports the larger 5-year plan. How do cabinet officials hear about these priorities and react to them? Do acting officials use these priorities as guidelines, and is input timely received? It seems often that decisions and actions are underway before the comment periods even begin, much less conclude.

7. Energy must request a compliant budget that funds cleanup.

For FY 2025, Energy requested \$1.46 billion less than Energy's own lowest estimate of cost for that year's clean up priorities. Riverkeeper urges Energy to ask for the amount needed to fully fund FY 2027 clean up priorities, goals, and milestones. Additionally, Energy should account for

how or if the designated Hanford cleanup budget will or will not fund the FY 2027 cleanup priorities. This should include an account of funds needed per priority and ultimate allocation of those funds.

8. Community safety around the Hanford site must be prioritized

The toxic and radioactive pollution at Hanford is not stagnant and in some cases, like with hexavalent chromium, our understanding of exposure risks and pathways changes over time. Cleanup and development at Hanford needs to more accurately consider community safety around the area, recognize that people live, recreate, and frequent these areas now and indefinitely. Throughout these comments we have raised concerns about new hexavalent chromium exposure pathways, including dust and wind, how and when will Energy address these? If the Hanford workforce, funding, and agency staff suffer reductions and cuts in the coming years, does Energy have a plan for maintaining community safety?

Other events in the area, outlined below, have raised concerns about community safety.



The PUREX tunnel collapse: Subsidence in the area is a major cause for concern. Priorities must reflect the urgency of infrastructure maintenance. How can this be accomplished when workers are being fired? Energy's priorities and actions are not in alignment with one another, and in the past this has resulted in damaging events that lead to emergency sheltering requirements for workers.

Photo Credit: Photo of PUREX area before collapse. Taken by Dan Serres, Advocacy Director, Columbia Riverkeeper.

Hanford's impacts extend beyond its boundaries, and the establishment of new industrial uses on Hanford's boundary in Richland may receive impacts from Hanford, or vice versa, over

generations. Cleanup is complicated, with ongoing studies showing that the River Corridor cleanup is far from complete, even if there are long pauses in surface-disturbing activity, or open air disturbances. The soil, dust, and water pollution emanating from Hanford and impacting regional biota should continue to be the subject of focused study. Just last week, the Yakima River Delta was involved in a wildfire emergency (see image a



screenshot from Tri-City Herald subscription service).⁷

9. Worker safety must always remain a top priority at Hanford.

At Hanford there have been issues with worker safety, incidents about exposure and not being provided with proper equipment. As part of Energy's FY 2027, are union members working on site provided with education and training on the dangers of radioactive material and high level waste? How does Energy plan to account for a diminished federal workforce at Hanford and what safety measures are being implemented to insure that work continues onsite safely and that contractors are well managed? Columbia Riverkeeper urges Energy to include worker safety, including training and education, as part of Energy's FY 2027 clean up priorities.

Thank you for considering these public comments.

Sincerely,

Simone Anter Senior Attorney & Hanford Program Director Columbia Riverkeeper

⁷ See Cameron Pobert, *UPDATE: Richland delta blaze 100% contained but blustery winds could change that*, Tri-City Herald (Mar. 27, 2025) available at

https://www.tri-cityherald.com/news/local/crime/article302795354.html#storylink=cpy (In any context we can conceive of, fires near the Hanford Nuclear Site area are a cause for regional alarm. What evacuation plans are available in instances like these?)