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U.S. Department of Energy Richland Operations Office PO Box 550, H5-20 Richland, WA 99352

To whom it may concern:

Thank you for the opportunity to provide comments regarding Hanford cleanup budget priorities. I will remind you that the State of Oregon provided detailed near-term, mid-term and longer-term priorities to the U.S. Department of Energy's Richland Office in December 2015, as part of our comments on proposed Tri-Party Agreement milestones. For the most part, those priorities remain unchanged. You'll see our updated list below.

A concern we have is that we are being asked to help prioritize cleanup priorities and we and the public have not been provided detailed budget information to help in this process. In preparing our priorities in 2015, DOE-RL shared with us a detailed pre-decisional Integrated Priority List. That list provided information about projected project costs on a year by year basis. We were able to understand DOE's expectations for how quickly (or slowly) a particular project may ramp up; how long it will take to complete; and annual costs for each specific project. We were also able to determine for ourselves the tradeoffs necessary in elevating one project above another – recognizing that budget limitations are an unfortunate reality of the Hanford cleanup.

This year, we were not provided that detailed information for DOE-RL projects. We have never been provided this level of information for DOE's Office of River Protection. Without this detailed information, there is less precision in our priorities and, if we elevate one project over another, we are unable to determine whether the costs are commensurate.

As the budgets for DOE-RL and DOE-ORP are still separate, we have not attempted to combine our priorities or to rank RL projects against ORP activities.

In addition to the priorities we have identified, we recognize there are ongoing min-safe requirements for both DOE-RL and DOE-ORP which must be funded and we are generally supportive of infrastructure upgrades that have been identified.

The recent incident at the PUREX tunnel emphasizes the continued peril of a cleanup that is dragging on decades longer than originally envisioned. Other facilities are also showing serious signs of degradation. The underground waste storage tanks are of particular concern, with the recent loss of service of one of the double-shell tanks due to a leak from the inner tank and serious concerns about the integrity of many of the other double-shell tanks.

Given this situation, it is difficult for us to advocate that certain cleanup projects have a lesser priority when it is clear that pushing them farther into the future will almost certainly result in more instances of failure and the potential risk of a serious accident and spread of contamination. Nevertheless, we agree that it is necessary to prioritize the work.

Throughout the Hanford cleanup, Oregon has advocated for an aggressive and expansive cleanup of the groundwater. We continue to support ongoing groundwater remediation efforts and endorse an expansion of these treatment systems.

As a Trustee of Hanford's Natural Resources, we also support an increase in funding for Natural Resource Damage Assessment and Restoration work, to help move that process forward.

## Oregon's near-term priorities (now through December 2019) for DOE-RL

- Complete demolition of the Plutonium Finishing Plant to slab-on-grade
- Begin moving the cesium/strontium capsules from pool storage at WESF to dry storage
- Complete installation of the extended apatite barrier at N Area
- Begin and complete sludge movement from K West Basin
- Begin remediation of the high-dose soil contamination beneath 324 Building
- Interim stabilize the PUREX tunnels
- Expand groundwater extraction wells into the 200 East Area
- Complete the River Corridor Records of Decision

## Oregon's mid-term priorities (2020 through 2022) for DOE-RL

- Complete transfer of cesium/strontium capsules to dry storage (upon completion, core and evaluate the concrete at WESF to develop a database of dry concrete properties from prolonged exposure to gamma radiation)
- Complete remediation of soil beneath the 324 Building and demolish the building
- Resume retrieval/treatment of retrievably stored waste from the solid waste burial grounds and resume shipments of transuranic waste to the Waste Isolation Pilot Plant
- Demolish the K-West basin
- Develop a more robust program to characterize and remediate contamination in the deep vadose zone
- Begin Interim Safe Storage of K East and K West reactors
- Begin characterization of the solid waste burial grounds

## Oregon's longer-term priorities (2023 through 2026) for DOE-RL

- Begin additional characterization/treatment in the deep vadose zone
- Complete Interim Safe Storage of K East and K West reactors
- Begin remediation of the 618-11 burial ground
- Continue retrieval/treatment of retrievably stored waste from the solid waste burial grounds and continue shipments of transuranic waste to the Waste Isolation Pilot Plant
- Construct or acquire necessary treatment facilities to begin treatment of the K-Basin sludge at T-Plant.
- Begin characterization of waste sites near PUREX and other canyons

## DOE-RL work that Oregon believes can be delayed until after 2026 (unless substantial additional funding is received)

- PUREX tunnel remediation
- U Plant closure

- S Pond barrier
- B Pond barrier
- Non-Radioactive Dangerous Waste Landfill (NRDWL) barrier
- Outer Area soil cleanup

For DOE-ORP, Oregon supports continued progress towards Direct-Feed Low-Activity Waste treatment; a continuation of tank waste retrievals; and continued resolution of technical issues so that work can resume on the full Waste Treatment Plant complex. We do not believe funds should be dedicated towards tank closure until tank waste treatment is well underway.

Oregon has previously advocated on behalf of new underground waste storage tanks. Since the beginning of cleanup, it has been a race as to whether treatment could begin before the tank storage situation became untenable due to tank failures or inadequate available tank space to continue single-shell tank retrievals. We are concerned that the degradation of the tanks is such that more tank failures are likely – even if DOE is able to successfully begin Direct-Feed LAW treatment on or close to schedule.

While the issue of new tanks has been much debated, it seems as though there has been little external discussion as to what new tanks should look like. We suggest that new tanks at Hanford be much different than what are there now. They should not be million plus gallon tanks that are built in place on site. New Hanford tanks should be smaller, so they can be fabricated in controlled conditions and barged to the site; appropriate alloys need to be used to ensure the tanks' durability; they need to be seismically qualified; and the entire tank needs to be easily inspected.

Should you have questions or if you want to discuss our comments, please contact me at 503-378-4906.

Sincerely,

Vur Mila

Ken Niles Assistant Director for Nuclear Safety

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