



Oregon

Theodore R. Kulongoski, Governor



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Matt McCormick
U.S. Department of Energy
Richland Operations Office
P.O. Box 550 MS A7-75
Richland, WA 99352

Dear Mr. McCormick:

We appreciate the efforts taken by the U.S. Department of Energy (DOE) to begin an early dialogue with the public on issues related to Hanford's Radioactive Solid Waste Burial Grounds (200-SW-2 Burial Grounds). Between Oregon Department of Energy staff and Oregon Hanford Cleanup Board members, we were able to participate in the all-day workshop in Richland and the Hood River and Portland public meetings. DOE staff also presented at the Cleanup Board meeting in Hood River.

Oregon was consulted repeatedly throughout the planning process for the workshop, the evening meetings, and the Cleanup Board meeting. We are pleased with the level and detail of information that was provided in each forum.

DOE and its regulators have asked for input to consider as they revise the 200-SW-2 Remedial Investigation/Feasibility Study (RI/FS) Work Plan. Through information provided at the workshop and in the meetings, it is clear that much more needs to be done to fully understand where the mobile and long-lived contaminants reside within these burial grounds, so that informed decisions can be made about the level of risk posed by these wastes. Acceptable methods to mitigate that risk can then be determined. As DOE and its regulators move forward in revising the RI/FS Work Plan, we strongly encourage the Tri-Parties to detail an aggressive and thorough characterization program so that we are able to answer those fundamental questions about where the "hot spots" are located.

Both the Oregon Department of Energy and the Cleanup Board have previously encouraged DOE not to overly rely on surface barriers. However, we fully expect that much of the waste disposed in these burial grounds over the years will not likely present a threat to people or the environment, and will be safe to leave beneath an engineered surface barrier. At the same time, we expect there is waste that either through its mobility, or because of the long-term hazard it poses, or both, will have to be retrieved. Unfortunately, the level of knowledge about the location of these types of waste is limited, especially in those burial grounds used in the 1940s and 1950s.

We have particular concerns about the Alpha Dry Waste Landfills, where, with the exception of one landfill, generally few records exist. The Alpha Dry Waste Landfills are believed to account for the vast majority of plutonium and uranium that was disposed in the entire 200-SW-2 complex. In addition, almost no records exist for waste disposed in the Dry Waste Landfills, and it is estimated that a considerable amount of uranium and some plutonium was disposed in these two landfills. While these are the most extreme examples, detailed knowledge of the location of various wastes in many of the other burial grounds is also lacking.

Sampling and characterization should focus initially on those burial grounds where it is believed that mobile long-lived radioactive materials and mobile chemicals were disposed. We assume the disposal containers may provide some clues as to the location of where the more hazardous wastes were disposed. The use of cardboard boxes or burlap bags may indicate that the waste was not particularly hazardous. However, as remediation of other Hanford burial grounds have demonstrated, drums and casks more often contain wastes that pose a greater hazard.

While ground penetrating radar and surface radiation scans can provide some level of information about the location of these metal containers, we don't believe it provides nearly enough information to determine the actual location of the wastes that pose long-term environmental or health risks.

Oregon recommends that more intrusive characterization occur, such as digging into the trenches themselves. The goal would be to gain reasonable assurance that the location of the hot spots is known within all of the burial grounds. Conversely, we also need to have some level of certainty that wastes that would remain in the burial grounds would not pose a long-term health or environmental hazard.

In addition, Oregon recommends that DOE intensify the groundwater monitoring program surrounding the burial grounds to ensure adequate delineation of the areas of potential contamination from the burial grounds. Vadose zone characterization and monitoring should also occur beneath some of the burial grounds, especially below the known hot spots, to determine whether the disposed waste could have a potential future impact on groundwater.

We look forward to continuing discussion of the burial grounds as the work proceeds in the coming months and years. If you have questions or wish to discuss any of our comments, please contact either of us or Dale Engstrom of the Oregon Department of Energy staff at 503-378-5584.

Sincerely,



Ken Niles
Nuclear Safety Division Administrator



Max Power
Oregon Hanford Cleanup Board Chair

cc: Dennis Faulk, U.S. Environmental Protection Agency
Jane Hedges, Washington Department of Ecology