



Release date: January 11, 2002
For more information contact:
Colleen Clark, (509) 373-5985
Manny Van Pelt, (509) 376-1590

DOE, EPA Resolve Issues Relating to Faulty Waste Analysis

The Department of Energy's (DOE) Richland Operations Office has concurred with a recommendation by Bechtel Hanford, Inc. (BHI) to dispose of a waste box in Hanford's low level burial grounds because its radioactivity level may not meet the acceptance criteria for the Environmental Restoration Disposal Facility (ERDF).

The box contains contaminated items from the cleanout of Hanford's 233-S Plutonium Concentration Facility. It had been disposed of in the ERDF earlier this year based on a faulty analysis of its radioactive content. In that analysis, called a "non-destructive assay" containers of contaminated materials have their radioactivity levels measured to determine if they qualify as low-level waste, which can be disposed of in the state-permitted ERDF, or as transuranic waste, which must eventually be sent to the Waste Isolation Pilot Plant (WIPP) in New Mexico.

Earlier this year, Fluor Hanford, Inc. (FH), which did the non-destructive assay work for the 233-S facility cleanout under contract to BHI, discovered errors in its analysis of the data on hundreds of waste items assayed over the past two years. Because of the faulty analysis, seven of 28 waste containers from the project that had already been buried in ERDF became suspect -- it was possible that their actual radioactivity content would have qualified them as transuranic waste, requiring them to go to WIPP instead of ERDF.

In consultation with the Environmental Protection Agency (EPA), which regulates ERDF and Hanford cleanup, DOE and BHI agreed to dig up the box with the highest potential level of radioactivity and re-assay it to determine its actual radioactivity concentration. BHI retrieved the box from ERDF, performed a series of new measurements using a suitable detector system and approved procedures, and determined that its radioactivity concentration is just within the ERDF acceptance limit. However, because the measurement method was different (the entire box was assayed as opposed to the ERDF-

required method of assaying each item placed in the box), and the result was so close to the ERDF limit, EPA, DOE and BHI agreed to rebury the box in the low level burial grounds where the accepted methods include the assay of the entire box.

DOE and EPA have agreed that the remaining six boxes should remain in ERDF because their concentration levels are significantly lower than the box in question, and are clearly within the acceptance criteria for ERDF.

"We cannot have an issue like this come up again," said Mike Schlender, deputy manager for site transition of DOE's Richland Operations Office. "It's imperative that waste disposal activities are performed accurately and in compliance with procedures. We've made it absolutely clear to Fluor that we expect a rock-solid program in place to ensure the reliability of Hanford's waste analyses. We, our regulators, and the public must have a high degree of confidence in our waste disposal practices at Hanford."

Over the last six months, the EPA has worked closely with DOE and BHI to determine the appropriate response to the issue and to reassess the analytical methods used for transuranic elements. In addition, EPA has carefully reviewed and approved the procedures currently in use by the new contractor BHI has brought on board to perform non-destructive assay services at the 233-S facility cleanout.

"DOE should expect a Notice of Violation for inadequate procedures at the 233-S facility," said Doug Sherwood, EPA's Hanford Project Manager. "But the bottom line is we are confident that the waste boxes that remain in ERDF are properly disposed. This matter is resolved."

###

RL 02-016

[\[Hanford Home Page\]](#) [\[Press Index\]](#)

For questions or comments about this page, please send email to manny_van_pelt@rl.gov

