

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 25, 2008

TO: K. Fortenberry, Technical Director
FROM: R. Quirk and W. Linzau, Hanford Site Representatives
SUBJECT: Activity Report for the Week Ending January 25, 2008

Plutonium Finishing Plant: The contractor identified multiple instances of noncompliance with the 9975 shipping container safety analysis requirements for packaging (SARP). A procedural requirement to "ensure compliance with SARP Table 1.2" was not adequately performed. Richland Field Office (RL) personnel noted that although the total grams of Pu-242 were within the analyzed limits in the SARP, the isotopic mix percentage requirement was not met. These errors resulted in the entry into a Technical Safety Requirement (TSR) Limiting Condition for Operation until some of the affected containers were moved to an acceptable location. The error may be related to a lack of clarity in the associated step in the administrative procedure. A human performance initiative (HPI) review was initiated to assist in determining the cause of this problem. The contractor identified a preliminary apparent cause as the lack of a process to verify adequate implementation of SARP requirements.

Solid Waste Operations Complex (SWOC): A contractor management assessment of TSR and conduct of operations (Con Ops) in SWOC identified nine TSR-related and nine Con Ops issues. The team noted that the TSR compliance matrix was confusing and not useful. Procedures used to show compliance with TSRs had a number of problems. The Solid Waste Storage and Disposal project, which includes TRU retrieval operations in the low-level burial grounds, was noted to be noticeably weaker in Con Ops than other parts of SWOC, such as T Plant and the Waste Receiving and Packaging (WRAP) facility. Considering these issues, the site rep questioned RL's decision to limit their oversight of upcoming startup activities for the 12B burial ground.

River Corridor Closure Project: The site rep met with the contractor to discuss the shipment of a waste container to the Environmental Restoration Disposal Facility (ERDF) with contact dose rates exceeding the allowable limit (see Hanford Activity Report 1/11/08). The project has issued two standing orders as initial compensatory measures. The first order requires dose rate surveys to be done immediately prior to shipment to ERDF to check for shifting of high dose debris that could cause elevated dose rates on the exterior of the container. This order also limits external contact dose rates to below 100 mrem/hr, and excludes any items with contact dose rates exceeding 300 mrem/hr from being shipped in these containers until further evaluation is conducted. The second standing order gives instruction on the performance of dose rate surveys to ensure consistent and adequate surveys. DOE and the contractor are evaluating long-term controls on shipment of high-dose items from field remediation sites to ERDF.

Waste Treatment Plant: The first module of the Pretreatment Engineering Platform arrived in Richland from the fabricator in Carlsbad, New Mexico.

Office of River Protection: H. Taylor assumed the position of Deputy Manager.