

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 27, 2009

TO: T. J. Dwyer, Technical Director
FROM: M. P. Duncan and M. T. Sautman, Site Representatives
SUBJECT: Savannah River Site Weekly Report for Week Ending February 27, 2009

Transuranic (TRU) Waste: The Central Characterization Project (CCP) qualifies the Transportation Certification Official (TCO), who uses CCP procedures to package TRU waste at SRS for shipment to the Waste Isolation Pilot Plant (WIPP). This week, a TRUPACT-II container in transit to WIPP was forced to return to SRS when it was realized that it contained the wrong standard waste box. An operator had staged the incorrect box and the TCO missed the discrepancy during his container identification verification. CCP revised its procedure last November to require an operator to perform second person verification (SPV), but neither the TCO nor any of the operators were aware of this requirement despite this change being part of an assigned required reading. The TCO in charge of procedure implementation did not understand the SPV action, who was to perform it, and which containers were subject to it. As a result, operators had not performed SPV on any of the payloads shipped since the procedure was revised. Shipments may resume next week after a CCP representative retrains the TCO and operators and is on-site to personally observe TRUPACT-II loading.

DOE Staffing: In order to minimize impacts to mission critical staff, DOE-SR management has proposed allowing staff subject to accretion of duties to maintain their current grade level until their positions can go through a competitive process. In addition, DOE-SR has requested that retention incentives continue through the one year anniversary. (See 2/20/09 report).

Salt Waste Processing Facility: From a visual inspection, a DOE subcontractor noted an obvious lack of proper fusion in a basemat drain pipe weld. Some of that piping is designed to perform a safety significant function. During the extent of condition evaluation, four more welds were inspected using radiographic examination. Three failed. All other welds by this person will now have to be examined. In addition, the contractor plans to perform ultrasonic testing on drain pipe welds performed by other welders prior to upcoming concrete placements to determine whether the problem is isolated to the individual welder.

Tank Farms: By manipulating lines lowered through a tank riser like a puppet, the vendor was able to attach a slipper assembly to the Tank 18 sand mantis swing arm. This assembly is the same size as the tilt wheel that failed (2/13/09 report) and should allow additional waste to be removed. Modular Caustic-Side Solvent Extraction Unit operations were limited as contractor and vendor engineers performed troubleshooting on a flow transmitter to fix salt solution feed tank flow anomalies.

Fire Department: SRS staff are developing a modified security plan to reduce the response time of off-site mutual aid apparatus (e.g., ladder truck) to the H, K, L and tritium limited areas (5/2/08 report). In addition, a new standing order requires the notification of K-Area when the site ladder truck is out-of-service. The Site Rep also observed a training drill at the Aiken live burn facility. Burning bales of hay provides realistic training for search and rescue and glovebox fires.