

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 28, 2007

**MEMORANDUM FOR:** J. Kent Fortenberry, Technical Director  
**FROM:** M. P. Duncan and M. T. Sautman, SRS Site Representatives  
**SUBJECT:** SRS Report for Week Ending December 28, 2007

**H Tank Farms:** After performing dip sampling and turbidity level measurements on Tank 51, contamination was found on the skin of two of the workers' heads (45,000 and 60,000 dpm  $\beta$ - $\gamma$ ) and lesser amounts on their modesty clothing. The contamination likely occurred while removing, bagging, and then reinserting a tank riser plug with a jib crane, whose hook was later found to be highly contaminated (300,000 dpm  $\beta$ - $\gamma$ ). The contractor is pursuing several corrective actions to improve contamination control during tank sampling and may do a mock-up before resuming.

**Year in Review:** SRS accomplished the following (values provided are from the start of the contract extension 12/1/06 through 11/30/07 unless otherwise noted):

- processed forty-five 3013 cans through H-Canyon (9% of that scheduled through 2014),
- shipped approximately 22,000 kg of low enriched uranium offsite,
- reduced the high-level waste volume generated at H-Canyon since early 2007 by more than 50% compared to the original projections (based upon historical performance),
- examined thirty-eight 3013 cans nondestructively and ten 3013 cans destructively since June 2007,
- received 13% of Hanford's total inventory of plutonium in 3013 cans since September 2007,
- extracted tritium from 234 Tritium Producing Burnable Absorber Rods,
- fielded two new tritium reservoir designs (W76 and W88),
- shipped 3297 transuranic waste drums to the Waste Isolation Pilot Plant,
- remediated 1463 transuranic waste drums,
- completed shipping all legacy mixed waste offsite for treatment and disposal,
- received and stored approximately 700 foreign and domestic research reactor fuel assemblies,
- produced 186 Defense Waste Processing Facility canisters (equivalent to 246 due to increased waste loading per canister),
- increased the Defense Waste Processing Facility pour rate to 0.9 gpm compared to the historical average of 0.5 gpm, and
- transferred 787,831 gallons of waste from Tank 50 and grouted it at Saltstone.