

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 23, 2004

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
J. J. McConnell, Deputy Technical Director
FROM: R. T. Davis/ T. D. Burns
SUBJECT: SRS Report for Week Ending April 23, 2004

TRU Waste Activities: In January, E-Area personnel determined that over 300 solid waste drums were potentially mis-characterized as having less than 20 plutonium equivalent curies (site rep weekly, 1/16/04). A Potential Inadequacy in the Safety Analysis was declared and a path forward was developed that included re-assaying the drums to accurately determine their actual radionuclide content. Subsequent investigation indicated that over 2,000 solid waste drums were of questionable content and will need to be re-assayed.

The assay facility, Building 724-8E, is a Hazard Category-3 (HC-3) facility. However, some of the suspect solid waste drums are expected to exceed the inventory limits for a HC-3 facility. WSRC prepared a Justification for Continued Operations (JCO) to allow these drums to be assayed in Building 724-8E. A statistical analysis of probable drum inventories is used as the primary technical basis for concluding that this activity is appropriate. The JCO is currently under review by DOE-SR. This analysis may warrant additional staff review in light of the Board's April 5, 2004 letter to the Secretary of Energy concerning use of quantitative risk assessments in the DOE complex.

Depleted Uranyl Nitrate Disposition: As previously noted (site rep weekly 3/26/04), WSRC has suspended disposition of Depleted Uranyl Nitrate (DUN) during Fiscal Year (FY) 2004. Because these solutions impact on-going deactivation activities at FA-Line, WSRC is evaluating options to transfer the DUN out of FA-Line. This week, WSRC recommended transfer of the solution to existing portable containers (Hanford containers, Consani containers and HM trailers). In addition, nine shipments to the disposition contractor will be required in FY '05.

Plutonium Surveillance and Storage: To support plutonium storage at SRS, WSRC is pursuing a DOE-STD-3013 Container Surveillance and Storage Capability (CSSC) project in Building 235-F. This project will provide the capability to perform required surveillances on 3013 cans stored in K-Area and Building 235-F. The project will also provide rack storage for approximately 2000 plutonium cans. To support this project, DOE is pursuing FY '04 reprogramming of \$23.5M. WSRC estimates a 2.5 month delay if funding is not provided until FY '05. In addition, DOE-HQ restrictions on construction spending will delay the project approximately 4 months.

Until the CSSC project is complete, WSRC plans to provide Limited Extent Surveillance (LES) capability in Building 235-F. The safety basis to support this mission is scheduled to be submitted to DOE for approval in early May with startup in July. An updated Fire Hazard Analysis (FHA) for the facility was completed this week. The FHA identifies a damper modification that WSRC plans to complete prior to LES startup. In addition, as a part of the Documented Safety Analysis (DSA) upgrade effort, WSRC has identified issues with the existing safety basis that will be addressed prior to LES startup.