

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

February 22, 2002

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 February 22, 2002

Nuclear Material Storage and Stabilization: Staff member D. Ogg and outside expert R. West were on site this week to review Recommendation 94-1/2000-1 and other legacy nuclear material storage and stabilization activities. As noted previously, DOE has provided a performance based incentive for WSRC to finish PUREX processing by March 2002. WSRC is on schedule and should finish the current Sand, Slag and Crucible campaign in late-March. Although decisions have yet to be made with regard to disposition of some excess plutonium, DOE-SR and WSRC believe that the materials that come to SRS can be processed in H-Canyon and F-Canyon will not be required. It now appears likely that several DOE missions will require H-Canyon processing (e.g., HEU blend down, plutonium processing, off-spec HEU, spent nuclear fuel). This would likely extend H-Canyon processing activities well beyond 2010. If DOE decides to proceed in this direction, the potential H-Canyon processing activities need to be integrated to assess the overall canyon schedule and ensure appropriate infrastructure upgrades are implemented to support these missions.

WSRC also continues to stabilize Mark 16/22 spent nuclear fuel in H-Canyon. However, HEU storage space is limited and WSRC now estimates that the Enriched Uranium Storage tank in HA-Line and the canyon HEU storage space will be full by September 2002. Additional storage space will not be available until HA-Line tank E4-2 is available, which is currently scheduled to be ready after an October 2002 canyon outage. With the E4-2 tank, HEU space should be available through March 2003. Additional space will only be available when the HEU Blend Down project is complete and LEU is shipped.

Saltstone Restart: The contractor readiness assessment for restart of the Saltstone facility was scheduled to begin on Tuesday; however, it was postponed by WSRC due to vibration problems with a transfer pump installed earlier this month in the Salt Solution Hold Tank. Commencement of the readiness assessment is now scheduled for next Monday.

DWPF Pour Spout: Feeding and pouring operations in DWPF have been suspended four times in the last two weeks due to failed pour spout inserts (site rep weekly 2/1/2002). Recent camera inspections verified that there has been sufficient erosion on the south side of the knife edge to preclude long-term operations with the current pour spout insert design. WSRC plans to continue intermittent pouring operations until a new insert design is available for installation.

Salt Processing Activities: This week, in response to a recently submitted Actinide Removal Process Alternative Study, DOE-SR directed WSRC to proceed with actions to bring Building 512-S (the former Late Wash facility) to an operational status as a general waste treatment unit. Several processing capabilities supporting HLW disposition have been proposed for Building 512-S, including Actinide Removal. Bringing the generic aspects of the facility to operational status will facilitate the expedited implementation of any of the potential processing options without limiting flexibility.