

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 18, 2011

TO: T. J. Dwyer, Technical Director
FROM: M. T. Sautman and D. L. Burnfield, Site Representatives
SUBJECT: Savannah River Site Weekly Report for Week Ending November 18, 2011

Tritium: Because of the potential for accident dose consequences to increase, NNSA directed SRNS to modify the current Material at Risk limits in some tritium facilities and consider existing passive and engineered features that can further reduce consequences. SRNS has initiated a backfit analysis to upgrade their vault to safety significant. (See 8/19/11 Board letter).

Plutonium Processing: DOE-SR directed SRNS to immediately initiate preparations for oxide production in HB-Line, to begin dissolution of metal in H-Canyon no later than August 2012, and to begin oxide production in HB-Line by October 1, 2012. (See 10/28/11 report).

HB-Line: Last summer SRNS issued a Justification for Continued Operations with a compensatory measure prohibiting sealed cans from being transferred outside the vault to prevent them from potentially over pressurizing during a fire. Last week, a first-line manager (FLM) noticed that a slip-lid container returning to the vault was taped shut, sealing the can. The FLM tagged the cart to prevent the cart from being once again being moved out of the vault. This week, SRNS conducted a fact-finding meeting and determined that the container had, on one other occasion, been removed from the vault and that other unanalyzed taped containers were in the vault. They also tagged these containers to prohibit their movement. SRNS and DOE determined that the removal of the can from the vault violated the technical safety requirement.

SRNS intends to extend three standpipe hose connections to allow fire fighting without propping the exterior doors open and creating a potential leak path.

H-Tank Farms: The Technical Safety Requirements include a corrosion control program that requires periodic tank waste chemistry samples. During the transition from a pilot database to the actual database, the verification of the actual database did not identify that some test "sample dates" still remained in the actual database. As a result, SRR did not sample Tank 31 as required last January. SRR is investigating the configuration management and software verification processes used for this database.

Fire Department: The fire department issued a plan for strengthening their conduct of operations and improving their response capability, training, physical fitness, and vehicle maintenance/replacement. The planned initiatives look promising.

Recommendation 2004-2: SRNS reallocated enough money to begin replacing the old secondary confinement zone exhaust process ventilation systems in Building 773-A E-Wing. This project will address seven gaps and eliminate tape-in-place high efficiency particulate air filters. The new equipment has been on-site since 2006. (See 11/5/10 and 10/28/11 reports).

Activity Level Work Planning and Control: During the Board's staff review of work planning and control this week, two radiological work permits (RWPs) were reviewed that had unrealistically high suspension guides. Since small changes in radiological conditions can often be easily measured, one purpose for including suspension guides in an RWP is to ensure proper actions are taken to determine when tasks are beginning to exceed from the planned safety envelope. In each of these RWPs, the suspension guide was significantly higher than described in DOE Standard 1098, *Radiological Control*. In one instance, it would have been impracticable to even take the measurement before the task was completed. The site rep notified senior contractor managers of this deficiency.