

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 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 March 22, 2002

HB-Line Phase II: Staff member Troan and outside expert West were on-site this week to review HB-Line Phase II activities. The review focused on follow-up observations of issues previously identified by the staff. The staff noted that some procedures remained complex and redundant, which may lead to conduct of operations problems. This issue was identified during the DOE Operational Readiness Review and WSRC has committed to evaluate and improve procedures. During review of the Job Hazard Analysis (JHA) process, the staff noted that the criteria for performing a JHA is not well defined and may not result in appropriate identification of controls.

The Distributed Control System (DCS) for HB-Line Phase II provides automatic sequencing of process activities. During operations, the sequence may be interrupted by equipment failures or other process upsets. The DCS is not currently configured to allow easy restart of the process. WSRC noted that they plan to correct this problem. WSRC also continues to adjust process parameters to correct material hold-up problems in the precipitator. Recent changes have resulted in better precipitator efficiency.

F-Canyon Shutdown: WSRC has finished dissolving all SRS Sand, Slag and Crucible (SS&C) that will be processed in FB-Line. The last plutonium button will likely be produced in FB-Line early next week. SS&C from the last few processing operations in FB-Line will be dissolved in F-Canyon and transferred to High Level Waste (HLW). Plutonium transferred to HLW is expected to be less than 5kg. F-Canyon will then enter an outage in April. WSRC will begin system flushes in accordance with the F-Canyon suspension plan following this outage.

Evaporator Activities: The first internal inspection of the 2H evaporator pot since the chemical cleaning in July 2001 to remove unexpected scale deposits was completed on Monday (site rep weekly 8/3/01). No significant accumulation of scale was found.

Efforts to decontaminate the 3H evaporator cell this week proved successful as exposure rates in the cell were reduced from 2.5 R/hr to 0.4 R/hr (site rep weekly 3/15/02). On Thursday, cell covers were removed and the feed isolation valve gasket was replaced. Repair work on the lift line jumper continues. WSRC expects to restart 3H on Sunday.

Saltstone Restart: WSRC has completed their readiness assessment (RA) for restart of the Saltstone facility and transmitted the RA report to DOE-SR. The report contains 19 pre-start and 60 post-start findings. WSRC expects to issue a corrective action plan on March 25th and radiological operations are scheduled to commence April 10th.