

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 5, 2000

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: C. H. Keilers / R. T. Davis
SUBJECT: SRS Report for Week Ending May 5, 2000

HB-Line: This week, WSRC identified a new accident scenario involving an unfiltered release from a postulated duct failure in the canyon fan house (292-H). Gamma radiation levels have been increasing on the Old HB-Line exhaust duct, upstream of the HEPA filter, so that now it is a major source. The increase may be due to canyon exhaust in the tunnel leaking into the duct as it passes through the tunnel. Potential solutions and impacts (HB-Line Phase 2) are being evaluated. (3.a)

Facility Readiness Reviews: Numerous Readiness Assessments (RAs) are scheduled this year (i.e., nearly a dozen for F-Canyon) as a result of restarts, authorization basis changes, and stricter guidance. DOE-SR is requiring graded RAs, focused on the changes, for all non-routine startups and restarts that fall below the criteria for an Operational Readiness Review. The RAs that the site reps have observed have had valuable findings affecting both safety and efficient operation. One recurring issue is that some facilities still appear to declare readiness prematurely, particularly before procedures are fully validated (site rep weekly, 1/7/00). (3.a)

H-Canyon Phase 3: The WSRC RA team has completed their review of H-Canyon 2nd Uranium cycle activities and identified 23 pre-start findings. WSRC is developing and implementing corrective action plans. The DOE RA is now expected to begin the week of May 22nd. (3.a)

F-Canyon Readiness Assessments: The DOE RA for Mark-42 dissolution was delayed to allow time for procedure improvements, but is now expected to start next week. Other RAs expected within weeks include EBR-II dissolution, 2nd Plutonium Cycle (due to an authorization basis change), and tank 13.7 disposition (the Pu-alkaline tank discussed in site rep weekly, 3/31/00). (3.a)

FB-Line Bagless Transfer System: The WSRC RA is scheduled to start next Wednesday. The DOE RA may begin at the end of May. The new weld head and improved leak tester are installed and tied to automatic data collection. The top hat with new pressure gage needs checkout. Operators have validated procedures. Relatedly, FB-Line has inspected the welds on nearly all the bagless transfer cans that have been made and expects to complete inspections next week. (3.a)

Transuranic (TRU) Waste: This week, a site representative toured a new facility for preparing TRU contaminated waste to meet the WIPP RCRA permit requirements. Operations involve removing drum contents into a glovebox for visual examination to verify that previous non-destructive examinations identified prohibited material. While Solid Waste Division has significant experience handling drums, safely handling contaminated waste in a glovebox will be a new challenge. Startup of this activity is expected in June. (3.a)

3H Evaporator: WSRC successfully installed and tested this week a modified backflush valve in Tank 30. While DOE conducted an operational readiness review and approved startup late last year, problems such as this have delayed 3H evaporator startup for several months (site rep weekly 4/14/00, 3/24/00). Testing in accordance with the startup plan should now resume with initial feed of high level waste expected to occur next week. (3.a)