

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 17, 1999

MEMORANDUM FOR: G. W. Cunningham, Technical Director
J. Kent Fortenberry, Deputy Technical Director
FROM: C. H. Keilers / R. T. Davis
SUBJECT: SRS Report for Week Ending December 17, 1999

R. Zavadoski of the staff was on site this week observing the K-Area Material Storage (KAMS) Operational Readiness Review (ORR).

Replacement High-Level Liquid Waste Evaporator (RHLWE): On Friday, DOE-SR formally approved radioactive operations for the RHLWE facility based on satisfactory closure of the DOE ORR pre-start findings. WSRC will likely complete system lineups this weekend and begin the startup test procedure on Monday. (3.a)

FB-Line Follow-up: Last week, WSRC partially lifted the stand-down (site rep weekly 11/12/99). Work is now permitted under increased supervision. Vault decontamination is proceeding slowly. In the process, each bagless transfer can is being radiologically surveyed, weighed, and visually inspected by a certified weld inspector. Investigation of the failed bagless transfer can is expected to be completed early in January. The facility could be operational by mid-January. (3.a)

Recommendation 94-1: On December 8, DOE-SR requested WSRC to propose alternatives for stabilizing 94-1 materials that would not be dependent on large capital projects. The scope includes plutonium, neptunium, and possibly highly enriched uranium. For plutonium, this would likely involve converting material to metal and packaging and storing it in bagless transfer cans, consistent with current practice. Effectively, this would be a third option to either building a new facility (APSF) or modifying an existing one (235-F). This action is driven by the possibility that DOE will not allocate sufficient out-year funding for such projects (site rep weekly 12/3/99). Given level funding, pursuing this course might achieve stabilization earlier but also result in insufficient longer-term capability to safely maintain a large plutonium inventory at SRS, particularly if disposition projects are delayed. The WSRC response is expected by the end of January. (3.a)

KAMS ORR: The DOE ORR was completed this week. The team identified four pre-start findings related to operator proficiency, hazard controls identified in Job Hazard Analyses, the Startup Plan, and identification of unauthorized shipping packages. The team also noted that there were numerous outstanding factors that limited their ability to completely evaluate facility readiness. For example, final security forces are not in place, only a limited set of operators were available for observation, and significant simulation was used during some ORR observations. Therefore, the team recommends that an independent validation team observe operations, with limited simulation, once security and additional operators are in place (3.a)

DOE Criticality Review: This week, a DOE-EH team reviewed criticality safety for FB-Line and H-Canyon outside facilities in response to a DOE-wide initiative (Glauthier memo, 11/3/99). Preliminary conclusions appear to be that SRS has a good program, but improvements could be made in streamlining documents and integrating operations and criticality engineering. (1.b, 1.c)