

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 9, 2001

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director

FROM: R. T. Davis/ T. D. Burns

SUBJECT: SRS Report for Week Ending November 9, 2001

HLW Evaporators. The 3H evaporator was restarted early this week and continues operation. Conversely, the 2H and 2F evaporators remain shutdown pending resolution of emergent issues including inaccurate assumptions in overpressure analyses, elevated flammable vapor concentrations in a Leak Detection Box (LDB) associated with the 2H feed line from Tank 43, and inoperability of the 2F feed pump (site rep weekly, 11/02/01).

WSRC has prepared a Justification for Continued Operations (JCO) addressing inaccurate assumptions in the 2H/2F overpressure analyses. Pressure regulators on the plant air inlet lines are proposed as near term compensatory measures, with the expectation that more realistic analyses will show the errantly assumed vent paths are not necessary.

Elevated flammable vapor levels have unexpectedly persisted in the Tank 43 LDB after water flushing. SRTC is performing analyses to determine the composition of the organic vapors, the results of which are expected early next week and should provide insight into the source of the problem and facilitate identification of appropriate corrective actions.

Efforts to run the 2F feed pump this week have proven unsuccessful. Preparations for a replacement have been initiated. To limit impacts, a maintenance outage, originally scheduled for December, has been pulled forward and entered.

HB-Line Phase II: Staff members J. Troan and R. West (outside expert) were on site this week to observe the DOE Operational Readiness Review (ORR) for the startup of plutonium solution processing at the HB-Line facility. Startup of this activity is a Recommendation 94-1/2000-1 implementation milestone for December 2001. The ORR started on Monday with field evolutions starting on Wednesday. All field work is expected to be complete early next week with a close-out scheduled for November 16. The team has currently identified about 8 issues that they continue to investigate. Several of the issues identified relate to authorization basis implementation, conduct of operations, and drawing accuracy.

Software Quality Assurance. Staff members Chip Martin and Chris Graham were on site this week to review the SRS Software Quality Assurance (SQA) program. The staff found the overall SQA program to be satisfactory and potentially useful as a model for other sites in the DOE complex.

However, several areas for improvement were noted including better procedural detail for software testing, and more thorough analysis of the potential safety impacts of software use.