

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 12, 2001

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director
FROM: C. H. Keilers / R. T. Davis
SUBJECT: SRS Report for Week Ending January 12, 2001

Staff member W. Yeniscavich was on site this week to observe the TEF 70 percent design review.

Tritium Extraction Facility (TEF): Remote Handling Building construction is close to starting. Also, the process system 70 percent design review began this week, is expected to run about a month, and will cover the 9 glove-boxes and their internals and interfaces. A DOE Red Team is also reviewing the design. WSRC intends to complete the process system design by end of May.

Recommendation 94-1: The Highly Enriched Uranium (HEU) Program continues to have mixed success. The DOE-TVA interagency agreement, due last August, is now expected no sooner than February 21st. The agreement was held up last November due to a leak discovered in a lead assembly irradiated in a TVA reactor (site rep weekly 11/3/00). TVA briefed the NRC staff this week and has concluded that the leak was due to a clad failure and not the DOE off-specification HEU. While this is positive, DOE also learned this week that TVA is delaying signing the agreement until late February since TVA needs to complete actions under the National Environmental Policy Act (NEPA). Locally, WSRC continues to develop the design of facility modifications for the blend-down operation. Laboratory (772-F) preparations may begin next month. Laboratory and H-Canyon outside facility modifications are scheduled to start in June.

HLW Operations: This week, WSRC completed the transition of East Hill equipment, people, and work from H-Tank Farm (HTF) operations to Waste Pre-Treatment (WPT) operations. DOE-SR signed the authorization agreement on Friday. WPT operator training for this began in early December. WPT will now become HTF East and will operate extended sludge processing, the 2H evaporator, and East Hill tanks and equipment. About 20 operators associated with the 2H evaporator system are included in the transition. WSRC believes the consolidation of East Hill operations will help balance HTF work scope, reduce interface issues, and improve efficiency.

WSRC also informed DOE this week that the Defense Waste Processing Facility (DWPF) completed it's best quarter to date last month, pouring 77 canisters. While this is good news, the operating tempo is stressing the tank farm system, particularly sludge batch 2 preparations and recycle storage. WSRC is rapidly preparing to clean the 2H evaporator so it can be used to concentrate recycle waste (site rep weekly 12/15/00). Specifically, WSRC proposed authorization basis changes to DOE on Thursday and declared readiness for the DOE readiness assessment (RA) on Friday. Elsewhere, the tank 49 heat-up is on hold, pending resolution of lower than expected ventilation exhaust flow. The tank 8 to 40 transfer is on hold pending resolution of a transfer pump mechanical binding problem.

Recommendation 2000-2: DOE-SR submitted the SRS list of vital safety systems to DOE EM-1 on Friday. SRS developed the list by reviewing authorization bases for tritium, high level waste, separations, and spent nuclear fuel facilities. The list includes hundreds of systems, and not only those classified as safety class or safety significant but also those considered defense-in-depth. SRS intends to maintain and update the list based on assessment results and headquarter's input.