DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 12, 2001

MEMORANDUM FOR: J. Kent Fortenberry, Technical Director

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

SUBJECT: SRS Report for Week Ending October 12, 2001

2H Evaporator: After receiving authorization from DOE-SR, the 2H evaporator was restarted on October 5th. Shortly thereafter, problems with a solenoid valve in the back-pressure regulator system caused the evaporator to be shutdown and placed into warm standby mode. Efforts to replace the solenoid valve identified the presence of an electrical jumper not captured on the system drawings. Further investigation by WSRC concluded that the un-expected jumper was an artifact of poor documentation of older modifications and not indicative of a systemic problem with current configuration management processes. The jumper was removed and restart activities proceeded.

While preparing for subsequent restart, WSRC found that a design change to an instrument cabinet temperature alarm, executed as a temporary modification (i.e., less rigorous independent verification), was improperly implemented. A review was initiated to identify similar design changes and assess their propriety. No further problems were found. The specific issue with the instrument cabinet temperature alarm has been corrected (i.e., the ambient temperature set-point for by-passing the alarm is being raised) and consideration is being given to augmenting the independent verification requirements for temporary modifications. Upon repair of the alarm, the evaporator restarted on Friday.

HB-Line Phase II: This week, WSRC concluded their facility evaluations as a part of the Operational Readiness Review (ORR) for start-up of HB-Line Phase II. The contractor ORR began last week and the ORR team plans to issue a report by the end of next week. In parallel, DOE-SR is conducting a line management validation to ensure the facility is ready for the DOE ORR. The most significant findings appear to be related to operator proficiency and level of knowledge. Similar findings were identified by the WSRC Management Self-Assessment (MSA) team last month (site rep weekly 9/21/01). Based on the MSA team findings, WSRC conducted senior management observation and coaching to improve operator performance. While these activities were successful in improving operator performance, it appears that additional training may be appropriate. To resolve this issue, facility management will likely conduct additional training and coaching to ensure facility personnel are ready. The DOE ORR is currently scheduled to begin October 29, 2001; however, the ORR may be delayed a week because of these issues.

Tank 49: This week, DOE-SR signed the Authorization Agreement to return Tank 49 to HLW service. On Friday, Authorization Basis controls were implemented and the tank was declared ready to receive high level waste. Returning this tank to HLW service is a DOE commitment in the Recommendation 2001-1 implementation plan. WSRC currently plans to transfer waste from Tank 38 to Tank 49 late next week depending on 2H evaporator operation. Tank 38 is the drop tank for the 2H evaporator.