

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 11, 2002

TO: K. Fortenberry, Technical Director
FROM: D. Grover and M. Sautman, Hanford Site Representatives
SUBJ: Activity Report for the Week Ending October 11, 2002

Spent Nuclear Fuel Project (SNFP): The contractor Operational Readiness Review (ORR) for the Fuel Transfer System (FTS) concluded on October 10, 2002. The contractor team identified 15 prestart and 20 post start findings. The SNFP shift operations managers and FTS field work supervisors were noted for their good performance. The performance of the equipment was considered to be adequate to complete the mission. The majority of prestart findings involved procedural adequacy issues which did not provide sufficient assurance that validated procedures could be performed with proficiency and technical accuracy. These issues affected operations, maintenance, and surveillance procedures. The findings related to these issues, as well as many of the other findings, have been identified in previous ORRs and independent assessments of the SNFP performance. The ability of the SNFP management to identify the root causes of these findings and to implement effective corrective actions is questionable considering their failure to do so over the last two years of operational activities. A late issue identified during the ORR was the incorrect incorporation of TSR requirements into a process standard and the related operating procedure. The equipment used to perform this procedure was not capable of performing its function in a manner to comply with the TSR requirements. The SNFP is working to develop a change to the TSR allowing more operational flexibility while remaining within the technical basis of the shipping cask. The ORR team recommended that independent review and closure of 9 of the prestart items was necessary before declaring readiness. (III-A)

Waste Treatment Plant: Olson Engineering recommended that an additional 6 to 12 inches of concrete be removed from portions of the Low Activity Waste facility cold joint where nondestructive testing found near-surface poor quality, weak concrete. They also recommended that 9 core samples be taken for further analysis. The Site Rep observed workers take the first core on Thursday. Field engineers indicated that they were taking nine 4" cores ranging between 15-1/2" and 50" deep that would not penetrate the bottom rebar. (I-C)

Authorization Basis (AB): A positive Unreviewed Safety Question (USQ) was declared for tank farms because the AB controls only address vehicle gasoline tank ruptures, but not the use of fuel tankers and/or pressurized fuel lines inside the tank farms to refuel equipment and vehicles. A Potential Inadequacy in the Safety Analysis was declared after it was discovered that 3-12 gallon propane tanks had been brought inside the 244-AR Wind Reduction Facility without a USQ screen. A positive USQ was also declared at the Plutonium Finishing Plant after modeling identified that during a combined loss-of-ventilation and fire scenario there is always some unfiltered release out the supply side of the ventilation during the initial fire growth period. Under certain conditions, the natural draft will be reversed out the supply side for the duration of the fire. This issue was initially brought up in a Rec. 2000-2 Phase II Assessment. (I-C)

cc: Board Members