

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

October 10, 2003

TO: K. Fortenberry, Technical Director
FROM: D. Grover and M. Sautman, Hanford Site Representatives
SUBJ: Activity Report for the Week Ending October 10, 2003

Tank Farms: CH2M Hill Hanford Group (CHG) began their independent Management Verification Assessment of the new Documented Safety Analysis (DSA) this week. Although its stated purpose and defined criteria and review approach documents give the impression of a true verification review, it really is a management tool to evaluate the progress being made for the scheduled implementation later this month. For example, there were no prerequisites or formal declarations of readiness required for commencing this review. As a result, although the review is halfway over, there are still dozens of unapproved procedures and 100+ employees still need to be trained. Furthermore, the Department of Energy (DOE) is not scheduled to issue its final safety evaluation report until 2 working days before the end of the 2 week review. Although CHG intends to do a post-implementation assessment in several months, this overall process is less rigorous than the approach used at Pantex, which the Board commented favorably on in March. In addition, it illustrates the possible need for some DOE guidance on performing authorization basis implementation reviews to ensure some degree of consistent rigor. (I-C)

Scientists reviewing the tank SY-101 data and calculations have determined that there is between 3000-4000 ft³ of retained gas in the tank. This is expected to make the tank a Waste Group A tank, which means it has the propensity to undergo a large buoyant displacement gas release event and has sufficient retained gas to achieve 100% of the lower flammability limit. While the upcoming cross-site transfer out of tank SY-101 will increase the headspace enough such that the retained gas would not be enough to still reach 100%, the Site Rep is very concerned that CHG's models and calculations did not anticipate the creation of a new Waste Group A tank. This would have been a violation of the authorization agreement if the DSA had been implemented. The Site Rep will be meeting with CHG to discuss why this occurred, what the implications are for other tanks, and how CHG plans to prevent this from recurring. (I-C)

Integrated Safety Management System (ISMS): DOE-Richland (DOE-RL) submitted their annual ISMS declaration to the DOE Office of Environmental Management. The declaration is based on an assessment of relevant data and assessments and not merely a listing of assessments as had been observed in the past. Improvement is also evident in the critical nature of the assessments which have concluded that ISMS is not adequately implemented at the Spent Nuclear Fuel Project (SNFP) and the Fluor Hanford hazardous energy control program. Specific areas of concern at SNFP are the Unreviewed Safety Question and Authorization Basis process, engineering, safety culture, OSHA safety Metrics, hazardous energy control, work planning, Operational Readiness Review performance, and corrective action management. The DOE-RL Manager also decided to withhold the declaration of implementation for DOE-RL pending a determination that corrective actions for findings regarding RL processes are determined to be implemented. These most significant findings involved problems with mission elements' responsibilities and work processes. (I-C)