

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 15, 2003

TO: K. Fortenberry, Technical Director
FROM: D. Grover and M. Sautman, Hanford Site Representatives
SUBJ: Activity Report for the Week Ending August 15, 2003

Tank Farms: The Office of River Protection (ORP) Independent Review Team concluded that the frequencies and consequences of the postulated Documented Safety Analysis accidents were overly conservative and therefore technically indefensible. They believed that some of the assumptions for the flammable gas, waste transfer leak, tank bump, and chemical reaction scenarios ignored the inherent physics and chemistry of the tank farms in order to determine conservative and bounding consequence values. The team recommended that in order to reduce the long term cost of hazard controls a more realistic and plausible set of assumptions be employed for future analyses. (I-C)

Waste Treatment Plant (WTP): ORP has allowed Bechtel National Inc. to resume small concrete placements that are not important to safety.

Spent Nuclear Fuel Project (SNFP): The SNFP rescinded the declaration that the Authorization Basis (AB) controls for the Sludge Water System (SWS) have been implemented to facilitate the development of a new safety basis without the burden of additional Unreviewed Safety Question (USQ) declarations. DOE responded by rescinding all previous approvals of the SWS associated portions of the Spent Fuel AB. (I-C)

Despite the rescinding of the SWS portions of the AB and the delegation of startup authority from DOE-RL to DOE Office of Environmental Management, the SNFP continues to plan for a resumption of the suspended Operational Readiness Review (ORR) in their recovery schedule. The extent of changes has most probably invalidated the majority of work performed by the ORR team and will likely necessitate a complete reevaluation of the core requirements. (III-A)

Cesium and Strontium Capsules: The project issued a criteria document for the Waste Encapsulation and Storage Facility (WESF) capsule dry storage project safety analysis. A review of this document identified that while the project plans to use nuclear safety design criteria other than that in DOE order 420.1 for the design and analysis of the storage system. The criteria document does not contain sufficient detail on the criteria to be used or require DOE approval of such criteria as required by 10CFR830.206. DOE has also expressed concern regarding this and is working to resolve the issue.

The project management plan for capsule dry storage identifies that the project will be pursued under the assumption that the capsules will be placed in the national high level waste repository. A review of the quality assurance project plan has identified that the Office of Civilian Radioactive Waste Management quality assurance requirements and description is not a requirement document for the project. (I-C)