

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 23, 2001

**TO:** K. Fortenberry, Technical Director

**FROM:** D. Grover and M. Sautman, Hanford Site Representatives

**SUBJ:** Activity Report for the Week Ending November 23, 2001

Plutonium Finishing Plant (PFP): The Department of Energy (DOE) Operational Readiness Review (ORR) for Project W-460 Stabilization and Packaging Equipment identified 6 pre-start and 7 post-start findings along with several observations. Two pre-start and 2 post-start findings dealt with procedure problems, including a finding that the procedure inadequacies show that the verification and validation process is not working. The team identified a post-start finding that the Corrective Action Management System is ineffective in correcting identified problems and concluded that there were inadequate evaluations and corrective actions for items identified during the contractor ORR. The team further noted that the method the contractor used for closing the contractor ORR findings was insufficient to adequately close the findings and that the process has shown through past reviews that the closure of findings has not accomplished the required results. There were also pre- and post-start findings related to the locations and testing of criticality alarm detectors. (III-A, I-C)

Tank Farms: Facility representatives have identified a number of concerns with safety equipment used to satisfy Technical Safety Requirements. For example, valves needed to vent flammable gases were found shut, uncalibrated gauges were used for 5 months, and pressure differential indicator transmitters that failed calibration continued to be used. An Office of River Protection (ORP) letter questioned whether operations were occurring outside the bounds of the safety basis because of the identified noncompliances and how they were handled by the Unreviewed Safety Question process. ORP is requiring that CH2M Hill Hanford Group (CHG) validate the implementation of their safety basis requirements. CHG and ORP have also identified several discrepancies between field conditions and the Final Safety Analysis Report, some of which represent a potential USQ involving a Potentially Inadequate Safety Analysis. A contributing cause to many of the discrepancies is that there is not a documented set of appropriate functional requirements, performance criteria and a documented evaluation of the safety equipment against these requirements and criteria. This has been discussed with ORP and the CHG Chief Engineer since it will be hard to address authorization basis issues and perform satisfactory Rec. 2000-2 Phase 2 assessments until the requirements and criteria are defined. The Site Rep is encouraged that CHG has started developing system description documents for 8 systems and hopes to get funding for more. In addition, the new CHG Systems Engineering program has several positive attributes: weekly routine and quarterly comprehensive walkdowns, system performance monitoring programs, and system health and condition assessment reports. (I-B, I-C)

233-S: A pipefitter using a portable bandsaw in a high contamination area cut his finger while size reducing equipment inside the process hood. Although a critique has not been held yet, preliminary indications are that there were low levels of plutonium and americium contamination in the wound, but not enough to require chelation. Several metal filings with undetectable levels of contamination were removed from the wound. (III-B)

cc: Board Members