

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 15, 2002

TO: K. Fortenberry, Technical Director
FROM: D. Grover and M. Sautman, Hanford Site Representatives
SUBJ: Activity Report for the Week Ending March 15, 2002

Mr. Sautman was out of the office this week attending a professional development course.

Spent Nuclear Fuel Project (SNFP): The SNFP continues to recover from multiple equipment problems experienced since the last maintenance outage. The project continues to have difficulty in calibrating a flow meter for the primary cleaning machine sufficiently to permit unrestricted operations. Until this can be performed, 100 percent of the fuel must be visually examined rather than only a 4 percent sample to verify cleanliness. The project is also pursuing a path forward to relax the calibration requirements of the process standard which would limit the calibration to the normal operating range (which has passed the current calibration check). This process standard was based on validation testing of fuel cleaning parameters to comply with TSR administrative controls for particulate content of a bounding Multi-Canister Overpack (MCO). The site reps will review the adequacy of the SNFP engineering organization's resolution of this safety related issue. (III-A)

Mr. Grover attended a critique to investigate the circumstances leading to 3 Integrated Water Treatment System valves being misaligned. The critique was well conducted and the workers were honest and forthcoming about their roles in the event. This resulted in a fairly conclusive determination of the direct and contributing causes of the event. This included operator unfamiliarity with the process being conducted, a change in the formality of repeat-back communications just prior to the event, and the use of uncontrolled copies of the procedure by the operator manipulating the valves. This event clearly demonstrated how multiple minor conduct of operation lapses can result in plant upsets. Typically, these types of events at the SNFP have been determined to be caused solely by inattention to detail leading to ineffective corrective actions. Mr. Grover will continue to observe the project's response to this event through the deficiency evaluation group. (I-C)

Corrective Action Management: Mr. Grover has attended deficiency evaluation group (DEG) meetings at T-Plant and SNFP in the past few weeks. A common observation of these meetings is the apparent lack of rigor in determining the impact of the event on requirements of DOE or contractor standards. This determination is often made by a consensus opinion of meeting attendees without prior review or reference during the meeting of the subject standards. This has led to errors in activity level requirements documents not being recognized, e.g. training requirements discussed in the November 30, 2001, Hanford Activity Report. Also, in a recent Canister Storage building DEG meeting, no subject matter experts were present to discuss recent occurrence reports involving degradation of safety class equipment. For the occurrence involving loosening of the MCO Handling Machine rail clips, the DEG team focused on the commendable operator performance in identifying the loose clips, but never addressed the root cause of the deficiency (an inadequate TSR surveillance interval of the clip bolts). The evaluation of the potentially galled MCO set screw was halted when Site Rep questions could not be answered without the presence of a subject matter expert. (I-C)

cc: Board Members