

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

May 4, 2001

TO: K. Fortenberry, Technical Director
FROM: M. Sautman, Hanford Site Representative
SUBJ: Activity Report for the Week Ending May 4, 2001

Office of River Protection (ORP): Mr. Sautman met with Dr. Boston to discuss how ORP intends to set up their organization and processes for performing technical oversight of tank farms and improve ORP's field presence. A followup meeting was held with the Assistant Managers of Environment, Safety, Health and Quality and the Office of Safety Regulation as well as a facility representative to discuss weaknesses and possible improvements to ORP's assessment and surveillance programs. ORP is developing a comprehensive assessment program and an interim qualification program for staffers who will be conducting these assessments. On a related note, ORP is finally starting to develop an action plan for addressing the opportunities for improvement identified by their December 2000 Integrated Safety Management System self-assessment. (1-C)

Tank Farms: There are two teardrop-shaped stains on the inside of AY-101's primary tank. The largest stain is about 18 feet tall and 4 four feet wide and the other is about half that size. While both stains are several feet above the current waste level, the top of one of the stains is where the waste level was held for 10 years and where thinning of the wall has been found. The waste's chemistry was also out-of-specification while at this level. There is significant corrosion and evidence of water flow seen on the other side of the primary tank wall for both stain locations. One possible explanation is that water draining down the outside of the primary liner may have been sucked into the tank (which is slightly more negative) if corrosion had caused a pinhole in the tank wall. There is no evidence that any waste has leaked out of the tanks.

Hanford hosted a 4-day workshop on the technical basis for Hanford double shell tank life extension that was attended by corrosion and materials experts from around the complex. The purpose of the workshop was to identify and prioritize recommendations for chemistry control, tank inspections and corrosion monitoring. The workshop participants also identified a number of options for determining whether there are any penetrations in AY-101.

Mr. Sautman met with Double Shell Tank Farms operations and work planning personnel to discuss his concerns with how activity hazards analyses are performed and how conduct of operations expectations/lessons learned are communicated by management to the workforce. (1-C)

Department of Energy-Richland: Mr. Sautman met with Keith Klein and Mike Schlender to discuss potential budget impacts to Rec. 94-1, DOE-RL issues, and contractor performance.

Waste Treatment Plant: Bechtel National Inc. is working on their plan for how they intend to develop and verify their Integrated Safety Management System. Design work on the pretreatment plant is being slowed down because the pretreatment system optimization study nearing completion is expected to identify some significant changes to the process. (1-C)
cc: Board Members