

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 9, 2004

TO: K. Fortenberry, Technical Director
FROM: M. Sautman, Hanford Site Representative
SUBJ: Activity Report for the Week Ending January 9, 2004

Weather: Heavy snow, ice, and sub-zero temperatures curtailed much of the field work at tank farms and the Waste Treatment Plant construction site.

Waste Treatment Plant (WTP): On January 1, snow and dust accumulation on buss bars led to arcing in several locations and blowing the 13.8 kV inlet potential transformer fuses. Power was not restored to the construction site until January 3. Bechtel National Inc. is taking actions to address snow and dust infiltration problems and periodically clean the transformer structures to prevent recurrence. On January 4, a dump truck configured as a snowplow caught the leading edge of its raised dump truck bed against four insulated communication lines. This snapped two power poles and partially uprooted a third. The power poles held six uninsulated power lines (3-2400 volt, 1-240 volt, rest de-energized). The impact snapped one of the de-energized power lines, which fell across two 2400-volt lines, blowing two fuses at the 13.8 kV/2400 volt transformer. No energized power lines contacted the truck. The power lines were de-energized and the driver was safely removed from the truck. Last year, a Bechtel subcontractor also knocked down a pole with a dump truck, but those lines were not energized at the time. (III)

The project has used the strategy discussed in last week's report to justify eliminating all fireproofing of structural steel in the Analytical Laboratory. The staff will be reviewing the implementation of the fireproofing strategy next week. (III)

Tim Horst, the WTP Construction Manager is going to Oak Ridge. Joe Dougherty, the current WTP Construction Site Manager, will become the new Construction Manager.

Tank Farms: As a result of the recent tank S-112 transfer problem, CH2M Hill Hanford Group conducted a conduct of operations specialty assessment. While the assessment had positive findings for procedure use and operator level of knowledge, a number of training issues were identified that need further evaluation. The qualification requirements for tank farms routine operations were reviewed in detail. The job and task analysis, classroom course materials, and on-the-job qualification card had not been reviewed since 1997 or 1998 despite procedure requirements for biennial reviews and updates. Furthermore, the classroom training portion has been condensed from 120 hours to only 40 hours. The performance demonstrations for initial qualifications only cover sections from 14% of the normal operating procedures, 9% of the alarm response procedures, and 17% of the emergency procedures. For requalification, the performance demonstrations cover an even smaller percentage of the procedures: 10%, 4%, and 8% of the various procedure types, respectively. The review of proficiency requirements also identified potential problems. For instance, many operators were given credit for standing both the East and West tank farm watches on the same days "implying that the requirement is not being met." Some of the operators have been delinquent as much as eight to ten months on their proficiency requirements. (IV)