

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

April 14, 2000

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

**FROM:** M. Sautman and S. Stokes, Hanford Site Representatives

**SUBJ:** Activity Report for the Week Ending April 14, 2000

A. Project W-314, Tank Farm Restoration and Safe Operations: For the last 2 months, construction work involving the offsite fabrication of safety class materials and equipment has been halted by CH2MHill Hanford Group (CHG) as a result of welding quality assurance issues associated with the W-314 Project. This decision was made after completing an event investigation which revealed that a series of management and quality assurance errors contributed to the failure. CHG has also taken actions to improve its compliance with quality assurance requirements and addressed issues involving Fluor Federal Services, CHG's subcontracted design authority for this project. Additionally, the Department of Energy - Office of River Protection (ORP) has taken action to address cost and schedule overruns with this project. In the latest of these communications, DOE-ORP requested that the contractor evaluate their decision to halt tank farm construction work involving safety class equipment (without jeopardizing safety and the environment), and to provide a schedule for when these activities will be resumed. (1-C)

B. 233-S Characterization. Mr. Sautman observed workers conduct radiation and video surveys of the 233-S process hood. All of the panels on the first floor have been removed. A large glovebag attached to scaffolding covers the front face of the process hood. There are about 200 pieces of duct tape on the gloves and at the glove/glovebag interface. According to the supervisor, these cover up holes and stress points in the plastic glovebag. The Site Rep noted that the daily glovebag inspection checklist had not been completed for the last two days. In order to move the pole-mounted detector/camera inside the hood, a worker had to balance himself on a scaffold bar about 6" off the floor in front of a ~6'X6' open section of the hood. (This is while wearing 2 pairs of canvas booties and 2 pairs of rubber boots over his shoes). The Site Rep considered this to be unsafe since there was nothing to prevent the worker from falling onto the glovebag if he lost his balance while leaning forward with his hands in the gloves. This could tear the glovebag or pull the grommets off, and possibly expose the workers in the viewing room to plutonium airborne concentrations that far exceed the protection factor of the worker's respirator hood. The Site Rep asked the supervisor if he could get a stool which he did. While this provided workers firmer footing, they still needed to lean forward to work in the glovebag. These issues were discussed with 233-S operations personnel. This issue had not been identified during mock-up training due to differences in the configuration of the equipment. This is an example of why it is important to conduct walkdowns and examine what could go wrong. (3-B)

C. Tank Waste Treatment Contract: BNFL Inc. has announced a new estimate for the high-level waste treatment facilities it is currently designing. This new estimate was reported in the local press as being near \$13.0 billion, up from the most recent estimate of \$6.9 billion. Also this week,

Mr. Mike Lawrence, BNFL Inc.'s Hanford General Manager, resigned his position. On April 24, 2000 BNFL Inc will submit a formal design package and cost estimate to the Department of Energy - Office of River Protection for review.

cc: Board members