DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 5, 2003

TO: K. Fortenberry, Technical Director

FROM: D. Grover and M. Sautman, Hanford Site Representatives **SUBJ:** Activity Report for the Week Ending December 5, 2003

Tank Farms: Operators began preparations to restart saltcake dissolution in tank S-112, but dissolution remains shut down due to management concerns about operator knowledge and software problems with the interlocks used to shut down the pump. A facility representative prevented an operator from changing a valve position that was not allowed. Furthermore, CH2M Hill Hanford Group (CHG) managers overseeing the process were concerned with the level of knowledge exhibited by operators during interviews (e.g., an operator did not know how to shut down the pump) and decided to spend several days providing additional training to the work crews. The Site Rep will observe portions of this training and has requested copies of all previous training material and training records. One issue that has already come up is that the operator last week who did not realize the valve was a manual valve had been given an exemption since he had not completed the field walkdown portion of his qualification. These concerns have been discussed with senior CHG managers. (II)

Waste Treatment Plant: The Site Rep met with the Bechtel Construction Vice President and other senior construction site managers to discuss a recent incident where two field engineers (FE) and two quality control (QC) inspectors failed to detect that the wrong size rebar had been installed. This condition was discovered shortly before the placement was to occur by an observant FE who was working on another placement. What is disappointing is that the compensatory actions put in place in response to the missing dowel event did not prevent the recurrence of a similar event. These compensatory actions included having a second FE perform a "kick and count" and a second QC inspector perform a "fresh eyes" inspection. Unfortunately, both FE's used the same work book which had the incorrect version of the drawing. The QC inspectors used the correct version of the drawing, but did not notice the discrepancy. In response to this second event, the inspection performed by the second FE and QC inspector will now be a full, independent reinspection that is documented. Furthermore, FE's will be required to use a recently developed rebar inspection checklist and use highlighted drawings to track inspection progress. Additional training is also being provided. (III)

<u>Plutonium Finishing Plant:</u> While conducting a survey of radioactive material to support facility deactivation, several bottles of plutonium solutions were identified in laboratory areas. Some containers have greater than 100 grams of plutonium in solution and would have been expected to have been processed under Recommendation 94-1. PFP is developing a disposition path for these materials, the higher plutonium content solutions are expected to be processed in the production support laboratory to a form suitable for stabilization as oxide. (II)

Cc: Board Members