DEFENSE NUCLEAR FACILITIES SAFETY BOARD

December 28, 2012

TO: T. J. Dwyer, Technical Director

FROM: D. Gutowski and R. Quirk, Hanford Site Representatives

SUBJECT: Hanford Activity Report for the Week Ending December 28, 2012

R. Quirk was on leave this week.

REDOX Plant. The Central Plateau contractor performed the annual surveillance of the REDOX Plant (shut down in 1967) two weeks ago. During this surveillance, they found an unidentified white powder on the surveillance route. Similar powder has been observed in years past, but never in this location directly on the surveillance path. The material appears to be corroding through stainless steel process piping that was flushed when REDOX was shut down. The contractor is currently developing a work package to sample this material and determine if some or all of it should be removed. The contractor also determined that some of the lighting needs to be replaced in the facility. There is also significantly more rainwater entering the building than last year which indicates the roof may need repair or replacement prior to the planned start of facility D&D.

Tank Farms. The contractor retrieved sludge waste from single-shell tank (SST) C-101 to double-shell tank AN-101 this week. The site rep observed the retrieval operations on Wednesday. The morning temperature reading on a component in AN Farm (see Activity Report 12/14/2012) was too low to allow retrieval, which commenced in the afternoon when all readings were above their minimums. The contractor continued retrieval operations on Thursday and Friday.

The site rep observed a pre-job briefing for moving the Mobile Arm Retrieval System (MARS) in SST C-107 into maintenance mode. The pre-job started with a thorough and interactive briefing on the radiological conditions and required personal protective equipment for the job. However, the rest of the briefing did not display the appropriate level of rigor expected in a documented pre-job briefing for high hazard work. The brief as a whole was disorganized and key personnel were not present at the start of the brief. The work was not completed that day.