DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 9, 2012

TO: T. J. Dwyer, Technical Director

FROM: W. Linzau and R. Quirk, Hanford Site Representatives

SUBJECT: Hanford Activity Report for the Week Ending March 9, 2012

Board staff members J. Troan and L. Zull were on-site observing a readiness assessment (RA) at the Canister Storage Building (CSB).

<u>Tank Farms</u>: The Office of River Protection (ORP) performed a follow-up assessment of the contractor's unreviewed safety question (USQ) determination process to determine if the contractor had resolved a finding noted last year. One of the previous findings involved not applying a USQ review to a procedure for work inside the Tank Farms. The contractor revised their process as a result of last year's assessment, and at the outbrief for this assessment, ORP noted that in general the problem had been resolved. However, the site rep questioned if the definition of routine maintenance in the contractor's USQ procedure was too broad and as a result some facility changes could still be excluded from a USQ review.

The contractor completed a two-week assessment of their engineering processes, and at the outbrief they noted nine preliminary findings and 28 observations. Despite the identification of a large number of engineering issues during the last few years, the contractor has not completed a common cause analysis for the insufficient technical rigor.

<u>Waste Treatment Plant (WTP)</u>: The site reps attended contractor training for hazards identification and evaluation techniques. The training highlighted the use of systematic methods and appropriate design media for hazard identification. Unfortunately, the training failed to improve the rigor of the next hazard analysis session observed by the site rep.

The contractor completed a plan to modify the Safety Requirements Document (SRD) to allow it to be removed from the WTP Authorization Basis. The SRD will continue to be used to document the codes of record and will be maintained as a controlled document by engineering, but content with a direct nuclear safety function will be transferred to the DSA. In addition, future changes to the SRD will still be subject to a USQ-like evaluation. It is interesting to note that in many instances, the modification plan deletes the facility-specific safety requirements as listed in the SRD and instructs the project to follow the appropriate existing code or standard, such as 10 CFR 830 Subpart B and DOE-STD-3009. The change to the SRD is part of the overall changes to the WTP regulatory construct as directed in a recent contract modification.

<u>Canister Storage Building (CSB)</u>: The contractor completed an RA for receiving Multi-canister Overpacks (MCOs) with legacy spent nuclear fuel at the CSB. The RA team identified one prestart and one post-start finding. The pre-start finding concerned the need for verifying personnel from the Hanford support contractors, such as riggers and teamsters, are qualified to work at the CSB. Additionally, the site rep identified that contrary to the requirements in DOE O 425.1D, Richland Operations Office is not planning to perform a DOE RA.

Emergency Preparedness (EP): The site rep observed an EP drill that tested a new process to deploy boats to control portions of the Columbia River if there were a major emergency at the Cold Vacuum Drying facility. The contractor successfully met the drill objectives.