

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

January 8, 2010

TO: T. J. Dwyer, Technical Director
FROM: W. Linzau and R. Quirk, Hanford Site Representatives
SUBJECT: Hanford Activity Report for the Week Ending January 8, 2010

Site Boundary: The site rep met with safety analysis managers in the Office of River Protection (ORP) and Richland Operations Office (RL) to discuss why the distance to the maximally exposed off-site individual used in safety analyses is not measured to the public access highways that cross site boundaries. The site relies on local authorities to secure access to the highways during an accident. DOE-STD-3009 requires that unless DOE or its contractors, without the aid of local authorities, controls access to public roads that cross the site, the roads are the site boundary for accident analysis. If the reduced distance to the public roads are used in safety analyses rather than the actual site boundaries, accident doses from a number of facilities could increase enough to require additional or higher pedigree safety-related controls. Examples of facilities that may be significantly impacted if the accident analyses are modified are: Plutonium Finishing Plant, 200 West tank farms, and Solid Waste Operations Complex.

Waste Treatment Plant (WTP): Last month the contractor prepared a closure plan for conditions of approval (COAs) on the control strategy addendum for the Pretreatment Authorization Basis (AB). The plan includes wording that would allow reclassification of safety-significant (SS) structures, systems, and components (SSCs) to non-safety through internal review without specific approval from ORP. In part, COA 3 was written because the addendum did not evaluate the consequences to the facility worker with the new material at risk values; therefore, reclassification to less than SS was not authorized. In October, the site rep disagreed with wording in the addendum that allowed the contractor to approve AB changes (such as downgrading the functional classification of SSCs) without specific ORP approval (see Activity Report 10/16/09). The insertion of this wording into the closure plan appears to indicate that the contractor believes that, as part of closing COA 3, the contractor is allowed to conduct a wholesale downgrade of SS SSCs without additional ORP case-by-case approval.

ORP closed COA 2 on the Pretreatment AB addendum based on the submission of the closure plan discussed above. COA 2 required the contractor to submit a schedule for resolution of the technical comments on reports used to justify the change. Although the COA has been closed, it will take months to actually resolve all the comments.

Tank Farms: The ORP Safety Review Board approved a major change to the Tank Farms DSA, including making it compliant with DOE requirements for specific administrative controls and resolving two Justifications for Continued Operation (JCOs) (Inadequate Commercial Grade Dedication and Backflow Preventer JCOs). ORP plans to extend a third JCO that addresses inadequate overpressure protection (see Activity Report 11/20/09) for three months. Unless the contractor can completely implement the DSA change by the end of January, it will have to request an extension for the two JCOs that are addressed by this DSA revision.

Plateau Remediation Contractor: In November, RL determined that the contractor's Phase II of the Next Generation Retrieval project is a major modification. RL stated that a graded approach to application of DOE-STD-1189 is appropriate because of the limited nuclear safety and programmatic risk. Examples of RL's expectations for a graded approach include the contractor creating a Safety Design Strategy and PDSA, and completing 30- and 90-percent design reviews.