

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 8, 2013

**MEMORANDUM FOR:** Steven Stokes, Acting Technical Director  
**FROM:** Jonathan Plaue, DNFSB Site Representative  
**SUBJECT:** LLNL Activity Report for Week Ending March 8, 2013

**Waste Storage Facilities:** On March 1, 2013, the laboratory contractor submitted to the Livermore Field Office (LFO) the evaluation of safety of the situation regarding the incorrect dispersion analysis (see weekly report dated February 8, 2013). The contractor's evaluation concluded that the unmitigated radiological doses will be higher than currently reported (in no case higher than 10 rem), but that the existing compensatory measures are sufficient. However, the fact that there are currently two LFO-approved safety bases (existing and an annual update under implementation) complicates the evaluation. The contractor's evaluation primarily examined the existing safety basis. Arguably, the annual update reflects the best knowledge of the facility and utilizes the most pertinent standard, Department of Energy (DOE) Standard 5506, *Preparation of Safety Basis Documents for Transuranic Waste Facilities*. As a result, the annual update contains significant differences in assumptions and accident analysis parameters, though both documents share the same incorrect dispersion analysis.

With respect to the annual update, the contractor noted that preliminary estimates indicate the revised radiological consequences for some accidents may challenge the evaluation guideline for members of the public. However, the contractor believes that the existing compensatory measures prevent or mitigate the scenarios in question. The contractor also requested to discontinue implementation of the annual update. LFO is poised to approve the discontinuation and request a plan within 30 days for developing and resubmitting a revised annual update. In parallel, the contractor and LFO are discussing the need for a formal Justification for Continued Operations.

**Safety Culture:** LFO and the contractor are currently finalizing plans to conduct the Safety Conscious Work Environment (SCWE) self-assessment required by the DOE Implementation Plan for Recommendation 2011-1, *Safety Culture at the Waste Treatment and Immobilization Plant*. The contractor intends to conduct the self-assessment in the summer with an approach that includes the following elements:

- Benchmarking SCWE efforts at Hanford, Savannah River Site, and the Waste Isolation Pilot Plant
- A 14-person self-assessment team consisting of equal membership from corporate parent organizations and in-house members with appropriate expertise
- Four participants from the LFO
- Self-assessment methodology that includes document review, survey, interviews, and work observations