

HSS Independent Activity Report - Rev. 0**Report Number:** HIAR-LANL-2013-04-08**Site:** Los Alamos National Laboratory**Subject:** Office of Enforcement and Oversight's Office of Safety and Emergency Management Evaluations Activity Report for Coordination Meeting with National Nuclear Security Administration Los Alamos Field Office Safety Basis Review Team Leader for Transuranic Waste Facility Preliminary Documented Safety Analysis Report**Dates of Activity :** 04/08/13**Report Preparer:** James O. Low**Activity Description/Purpose:**

The Office of Health, Safety and Security (HSS) staff visited the Los Alamos National Laboratory (LANL) to coordinate with the National Nuclear Security Administration (NNSA) Los Alamos Field Office (NA-00-LA) Safety Basis Review Team (SBRT) Leader for review of the revised preliminary documented safety analysis (PDSA) for the Transuranic Waste Facility (TWF) project. HSS has identified this project as meriting focused independent oversight (Ref. 1) in fiscal year 2013. The TWF will be sited at Technical Area (TA)-63 and will provide LANL with a capability for staging of newly-generated transuranic waste and certify the waste as meeting Waste Isolation Pilot Plant (WIPP) waste acceptance criteria (WAC). These capabilities are currently available at TA-54 Material Disposal Area G, which is targeted for closure in 2015 due to consent agreements with the State of New Mexico. NA-00-LA reviewed a previous LANL submittal of the TWF PDSA and made a significant number of technical comments (Ref. 2). LANL is developing a revised PDSA and intends to submit it to NA-00-LA by mid-summer 2013. HSS intends to perform a concurrent review of the revised PDSA, focusing on selected safety systems and their implementation in the TWF design. This approach is consistent with other HSS safety basis reviews (e.g., Savannah River Site Salt Waste Processing Facility) conducted in calendar year 2013 (Ref. 3).

Result:

Summarized below are the salient discussions from the coordination meeting:

- HSS staff shared a copy of an HSS Office of Safety and Emergency Management Evaluations (HS-45) approved review plan (Ref. 3) for the Salt Waste Processing Facility with the NA-00-LA Safety Basis Supervisor, the TWF SBRT Leader, and the NNSA Federal Project Director (FPD). The review plan approach focuses on a "vertical cut review," which evaluates the safety basis development and the resulting design through selected active safety systems. This approach would minimize potential redundancy with the NA-00-LA SBRT review areas.
- The FPD provided a briefing on the TWF project and specified that LANL will transmit the revised PDSA to NA-00-LA by July 15, 2013. Approximately 2 months are allocated for the SBRT to conduct the PDSA review, resolve technical comments, and issue a safety evaluation report (SER) to the safety basis approval authority (nominally the NA-00-LA Manager).
- Based on the revised safety design strategy (Ref. 4), the only active safety systems for the TWF are the fire suppression system (currently designated as safety significant) and the seismic power cutoff system (currently designated as safety class).
- The TWF fire suppression system is being redesigned to be a "dry pipe" system because of freeze protection issues. The 90 percent design package for the redesigned fire suppression system will not be submitted until the end of July 2013.
- The HSS independent oversight review report will not be available until sometime after NNSA's approval of the SER. A notional target date of 2 months after PDSA SER approval was discussed.

After the coordination meeting, HSS staff toured the operational processes intended to be moved from TA-54 Area G to the TWF. Tours of the High Efficiency Neutron Counter (HENC), super HENC, and Real Time Radiography Trailers were also provided. The process operators for these trailers were knowledgeable of WIPP WAC certification requirements and were well versed in the equipment they were operating. The gas sampling trailer was not toured because process operators were unavailable. The NA-00-LA Facility Representative (FR) conducting the tour was knowledgeable of TA-54 operations and demonstrated good rapport with TA-54 Area G process operators. A plastic drinking water bottle within the Area G site was confiscated by the FR and submitted to the Area G access control manager for follow-up action because bringing food or drink into the area is contrary to standing radiological control requirements.

A quick tour of the TA-63 site was provided. However, other than the fact that the site has been cleared and leveled, the only observation is that the site is very close to the intersection of Pajarito Road and the TA-52 access road. The storage buildings would be approximately 10 feet below the intersection's road grade, and a retaining wall has been built to support the vehicle barriers adjacent to the intersection. The SBRT Leader also noted that because Air New Mexico has started commuter flights from Albuquerque to Los Alamos, the aircraft crash calculation may have to be revisited. NOTE: A potentially inadequate safety analysis (PISA) was declared the following day (04/09/13) on the increased likelihood of aircraft crash and is being tracked on the DOE Occurrence Reporting and Processing System (ORPS) as: NA--LASO-LANL-LANL-2013-0004 (Ref. 5).

HSS Participants	References
James O. Low	1. DOE/HQ HS-1 Letter, GS Podonsky to Distribution, <i>Implementation of Independent Oversight for Nuclear Facility Projects</i> , dated 10/17/12.
	2. NA-00-LA Letter, KW Smith to CE Anderson, <i>Transuranic Waste Facility (TWF) – Direction on Preliminary Documented Safety Analysis</i> , dated 12/06/12.
	3. DOE/HS-45 Approved Review Plan – <i>Plan for Independent Oversight Review of the Salt Waste Processing Facility Safety Basis and Design Development</i> , dated 2/4/13.
	4. NA-00-LA Letter, JL Greigo to CE Anderson, <i>Approval of the Transuranic Waste Facility, Safety Design Strategy, Revision 4</i> , dated 2/26/13.
	5. DOE ORPS Report NA--LASO-LANL-LANL-2013-0004, <i>PISA: New Commuter Air Service Potentially Impacts Documented Safety Analysis at LANL Facilities</i> , dated 4/9/13.

Were there any items for HSS follow up? Yes No

HSS Follow Up Items

- Develop and issue independent oversight review plan for LANL TWF PDSA.