

HSS Independent Activity Report - Rev. 0**Report Number:** HIAR LANL-2014-02-12**Site:** Los Alamos National Laboratory (LANL)**Subject:** Office of Enforcement and Oversight's Office of Safety and Emergency Management Evaluations Activity Report for Review of Corrective Actions for Findings from the Independent Oversight Review of LANL Radiological Controls Activity-Level Implementation (Published November 2013)**Dates of Activity :** 02/12/2014**Report Preparer:** Robert Freeman, Nuclear Engineer**Activity Description/Purpose:**

The Office of Enforcement and Oversight (Independent Oversight) reviewed LANL's corrective actions addressing two findings:

- Finding F-1: Two instances were identified where the Los Alamos Neutron Science Center (LANSCE) did not ensure that radiological work permits (RWPs) were developed, or that facility radiation protection requirements documents (FRPRs) used in lieu of RWPs adequately bound hazards and controls for work in radiological areas, consistent with P121 [which is a Radiation Protection Procedure] requirements.
- Finding F-2: Two instances were identified where LANSCE did not ensure that integrated work documents (IWDs) governing radiological work contained clear linkage to specific RWPs for the work, consistent with LANL Policy 300 requirements.

U.S. Department of Energy (DOE) Order 227.1, *Independent Oversight Program*, requires corrective actions to be developed in response to these findings.

Background:

On August 19-29, 2013, Independent Oversight, within the Office of Health, Safety and Security (HSS), conducted a review of radiological protection program (RPP) activity-level implementation performed by Los Alamos National Security, LLC (LANS) and its subcontractors at the LANL site, focused on the LANSCE, and Environmental and Waste Management Operations Area G facilities.

Independent Oversight conducted the review within the broader context of ongoing targeted assessments of radiological control programs, with an emphasis on the implementation of radiological work planning and control across DOE sites that have hazard category 1, 2, and 3 facilities. The purpose of this set of facility-specific reviews is to evaluate the flowdown of occupational radiation protection requirements (as expressed in facility RPPs) into work planning, control, and execution processes, such as radiological work authorizations that include RWPs and other technical work documents.

Independent Oversight found that LANL has a sound radiation protection infrastructure and has developed appropriate programmatic radiological protection documentation. Both LANSCE and Area G make effective use of robust engineering controls to mitigate hazards associated with radiological operations and appropriate levels of external and internal radiological exposure control measures are in place. The Lujan Center (one of the user facilities that is part of LANSCE) has also effectively defined and implemented a number of corrective actions to address a recent Tc-99 contamination event, including a very rigorous and comprehensive sample handling and management program to ensure positive control of all experimental samples.

While a number of positive attributes were noted during observation of LANSCE and Area G work, Independent Oversight also found examples of weaknesses in proper application of institutional and facility radiological requirements in some areas. These weaknesses included use of RWPs and FRPRs, consistency and clarity of radiological posting and labeling, proper personal protective equipment doffing and contamination control, and response to abnormal operations.

Result:

Independent Oversight concluded that LANS has identified appropriate facility-specific and LANL institutional corrective actions that, if effectively implemented, should adequately address both findings. Independent Oversight will monitor the status of completion of actions through the HS-45 LANL site lead and will schedule a follow-up activity to verify the effectiveness of implementation.

HSS Participants

1(lead). Robert Freeman

2. Mario Vigliani, CHP

3. Joseph Lischinsky, CHMM

References

1. Independent Oversight Review of Los Alamos National Laboratory Radiological Controls Activity-Level Implementation, November 2013.

2. Memorandum from M. Brandt, ADESH, LANL to J. Krepps, AMSO, NA-LA, Subject: Corrective Action Plan for Findings from Independent Oversight Review of the Los Alamos National Laboratory Radiological Controls Activity-Level Implementation, 2/10/2014.

Were there any items for HSS follow up? Yes No

HSS Follow Up Items

- HSS will schedule a follow-up operational awareness activity at a future date to verify the effectiveness of the identified corrective actions.