

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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December 2, 2009

The Honorable Thomas P. D'Agostino
Administrator
National Nuclear Security Administration
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585-0701

Dear Mr. D'Agostino:

The Defense Nuclear Facilities Safety Board (Board) is conducting a series of reviews to evaluate the effectiveness of efforts of the National Nuclear Security Administration (NNSA) to institutionalize Integrated Safety Management (ISM) at the activity level. Recently, the Board's staff evaluated work planning and control processes and their execution by Los Alamos National Security, LLC (LANS) at Los Alamos National Laboratory (LANL). This review assessed maintenance and programmatic work in the Plutonium Facility and the Radioactive Liquid Waste Treatment Facility. Additionally, the staff evaluated the effectiveness of the Los Alamos Site Office's (LASO) oversight of work planning and control processes. The staff's review revealed deficiencies in both of these areas, and raises concerns about the implementation of ISM core values and guiding principles at LANL.

The staff identified several instances in which LANS's work planning and control efforts were inconsistent with the NNSA guidance document *Activity Level Work Planning and Control Processes: Attributes, Best Practices, and Guidance for Effective Incorporation of Integrated Safety Management and Quality Assurance*. Of particular concern, LANS's work planning and control directives lack specificity, roles and responsibilities for work planning are not clearly defined, hazard analysis processes are not proceduralized, document control is poor, and the contractor self-assessment program has not been effective at identifying these deficiencies. As documented in the attached staff report, these shortcomings resulted in procedures and maintenance work packages that do not adequately stipulate the controls and instructions necessary to ensure worker safety.

The staff's review revealed that LASO has not institutionalized the prescribed criteria and review approach documents so that activity-level work is routinely assessed by the site office. This clearly conflicts with your memorandum to all site office managers dated January 23, 2006, in response to the Board's Recommendation 2004-1, *Oversight of Complex, High-Hazard Nuclear Operations*. Specifically, no dedicated work planning and control assessments have been conducted this year, nor are any planned for the near future. LASO does not have a work

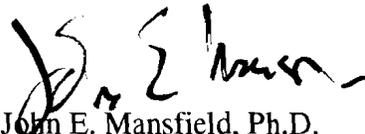
planning and control subject matter expert on its staff to direct its oversight efforts in this important area.

The Board believes that a complete reverification of the LANL Integrated Safety Management System would be appropriate based on the above deficiencies, consistent with the guidance in Department of Energy (DOE) Manual 450.4-1, *Integrated Safety Management System Manual*, and DOE Guide 450.4-1B Volume 1, *Integrated Safety Management System Guide for use with Safety Management System Policies (DOE P 450.4, DOE P 450.5, and DOE P 450.6); the Functions, Responsibilities, and Authorities Manual; and the DOE Acquisition Regulation*. This reverification would provide a necessary focus on the work planning and control efforts at LANL and would provide LASO with a solid baseline from which to provide oversight in this area.

DOE-Headquarters could enhance LASO's oversight of work planning and control by providing tools to assist in identifying problems and driving corrective actions. LASO's oversight would benefit from the issuance within the DOE directives system of a technical standard for work planning and control and a guide supporting DOE Order 226.1A, *Implementation of Department of Energy Oversight Policy*. This guide should include a criteria and review approach document for critical work activities. The need for such a technical standard and guide was previously identified in the Board's January 22, 2009, letter to NNSA regarding work planning at the Y-12 National Security Complex, and the Board's March 23, 2009, letter to the DOE Office of Environmental Management regarding work planning for the Idaho Cleanup Project at Idaho National Laboratory.

Based on the above observations, and pursuant to 42 U.S.C. § 2286b(d), the Board requests a report within 90 days of receipt of this letter outlining actions taken or planned by LASO and LANS to address the work planning and control deficiencies detailed in the enclosed report.

Sincerely,



John E. Mansfield, Ph.D.
Vice Chairman

Enclosure

c: Mr. Donald L. Winchell
Mr. Glenn S. Podonsky
Mr. Mark B. Whitaker, Jr.