

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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March 12, 2010

The Honorable Inés R. Triay
Assistant Secretary for Environmental Management
U.S. Department of Energy
1000 Independence Avenue SW
Washington, DC 20585-0113

Dear Dr. Triay:

The Defense Nuclear Facilities Safety Board (Board) is concerned the Hanford Tank Operations Contractor, Washington River Protection Solutions, LLC (WRPS), has not adequately institutionalized Integrated Safety Management (ISM) at the activity level. During the past 6 months, the Board's staff has evaluated WRPS through a series of three reviews: (1) observation of a combined Phase I and II Integrated Safety Management System (ISMS) verification conducted by the Department of Energy (DOE), (2) examination of how ISM is implemented at the activity-level to protect workers from hazards, and (3) surveillance of conduct of operations in the tank farms. These reviews identified deficiencies in the contractor's ISMS description and implementation that raise concerns about the contractor's ability to develop work instructions that assist the workforce in ensuring activity-level work is conducted safely.

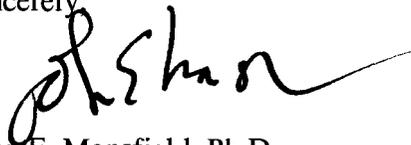
Through these reviews, the staff identified the following deficiencies, details of which are provided in the enclosed report: (1) the DOE ISMS verification was underfunded and did not thoroughly evaluate the completeness of the ISMS description; (2) WRPS's work planning directives are unnecessarily complex and confusing; (3) WRPS's hazard analysis process is not well defined or executed; (4) a team approach to walkdowns, verifications, and hazard analysis is not adequately employed; and (5) a highly skilled workforce modifies work procedures ad hoc when the procedures cannot be performed as written. These deficiencies result in work instructions that cannot be followed as written and incomplete controls for authorized work.

Until recently, DOE's Office of River Protection (ORP) had not been sufficiently involved in the oversight of WRPS's work planning and control. Facility Representatives have been active in the oversight of daily work activities, but ORP has provided little oversight by subject matter experts in this area. A recent effort by ORP to provide adequate oversight of work planning and control has the potential to help WRPS in this critical area. ORP initiatives include the recent hire of a work planning subject matter expert and a letter to the contractor noting significant problems with the development and use of work instructions. In response to these ORP efforts and the staff's reviews, WRPS has implemented revisions to improve work planning and control. Ultimately, the ISMS description will have to be updated before any changes can have real and lasting effect.

DOE-Headquarters should enhance ORP's oversight of work planning and control by providing tools to assist in identifying problems and driving corrective actions. ORP'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*. To be effective, this guide would 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 letter of March 23, 2009, to DOE's Office of Environmental Management regarding work planning for the Idaho Cleanup Project at Idaho National Laboratory. The Board also identified this need in letters to the National Nuclear Security Administration dated January 22, 2009, and December 2, 2009, regarding work planning at the Y-12 National Security Complex and Los Alamos National Laboratory respectively. Despite the previous identification of these needs, insufficient action has been taken by DOE-Headquarters.

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 WRPS and ORP to address the work planning and control deficiencies detailed in the enclosed report.

Sincerely



John E. Mansfield, Ph.D.
Vice Chairman

Enclosure

- c: Mr. Glenn S. Podonsky
- Ms. Shirley J. Olinger
- Mr. Mark B. Whitaker, Jr.