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DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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July 20,2000

Mr. Theodore Wyka, Jr.
Director, Safety Management Implementation Team
Department of Energy
1000 Independence Avenue, SW
Washington, DC 20285-0104

Dear Mr. Wyka:

During the public meeting on May31, 2000, the Defense Nuclear Facilities Safety Board (Board) received testimony and written material from you and other Department of Energy (DOE) witnesses. At the time, Board Members advised the witnesses that additional questions might be forwarded to DOE after the Board had an opportunity to review the recorded testimony and submitted material.

Enclosed are the additional questions that the Board has developed. The Board would appreciate response to these questions within 45 days of receipt of this letter.

Sincerely,

John T. Conway

Chairman

c: Mr. Mark B. Whitaker, Jr.

Enclosure

Recommendation 95-2

Facility Status

- The *Department of Energy (DOE) Institutionalization Workshop Results Summary* report submitted for the public record provided several options for institutionalizing the integrating and Integrated Safety Management (ISM) championing function performed by the Safety Management Implementation Team (SMIT). Once a decision has been made as to which option will be implemented, what process or mechanism will be used to ensure that this vital fiction is institutionalized such that it continues through administration changes?
- It appears that Lawrence Livermore National Laboratory is at risk of not meeting the September 2000 implementation goal. What is being done to accelerate its implementation?
- On May 19,2000, the Secretary announced a new initiative designed to boost contractor performance management throughout DOE. The program emphasizes the use of performance measures in contracts to determine performance fees. How does this new initiative support ISM implementation and the use of performance measures associated with the Department of Energy Acquisition Regulations (DEAR) clause?
- In DOE's response to the last set of questions on ISM performance measures from the Board's public meeting, it was stated that the performance measures would be revised to improve their usefulness. What is the plan for revising the measures, who is involved, and what is the time frame?
- What have been the results of using the current **performance** measures? It is not clear how the current set will provide information on the effectiveness of **ISM**. Can you explain what a variance from the current control band on each of the measures will tell you about a site's ISM program?

Lessons Learned

- The SMIT Director sent a memorandum to the field emphasizing several **points** relative to lessons learned. Have any actions been taken in response to this memorandum?
- The response to the Board's previous questions on how DOE-Headquarters measures the effectiveness of the lessons learned program for the individual sites and across the complex was not very specific. It stated only that the responsibility resides in the program and field offices. Please provide more specifics on what organization or individuals in DOE-Headquarters are responsible for the complex-wide program and how that office evaluates and ensures the effectiveness of lessons learned.
- The inadequate involvement of management at all levels in institutionalizing an effective lessons learned program is stressed in a letter from the Board dated May 25,2000, in DOE's Office of Independent Oversight's (EH-2) Topical Analysis Report on Lessons Learned, and in the DOE Verification Report on Effectiveness of Implementation of the Process of Issue Resolution, completed as a deliverable under Recommendation 98-1. What steps will be taken to accelerate management involvement in the lessons learned program and to improve its effectiveness?
- What is the role, if any, of the Secretary's Safety Council or Field Management Council in reinforcing the need for greater management involvement in the lessons learned program?
- What steps have been taken in the complex to link corrective action programs to the lessons learned program?

Recommendation 98-1

• What has been the response to the first Secretary's Quarterly Report on the Corrective Action Tracking System (CATS)? Describe the actions being taken to ensure the accuracy of the data.

- How will a corrective action plan be developed for the issues identified in the implementation report that was recently issued? Will they be tracked in the CATS, and if not, how will they be tracked to closure?
- In response to a question from the Board about the Integrated Corrective Action Management (I-CAM) team and CATS at the January ISM meeting, it was stated that the Director of the SMIT "will ensure that this central coordinating role is institutionalized . . . to ensure the corrective action process fictions as needed." In the intervening 4 months, what steps have been taken to clarify and institutionalize this function?
- What further steps have been taken to regularize and institutionalize the development of corrective action plans for issues that involve multiple sites and multiple Cognizant Secretarial Officers?

Defense Programs and Environmental Management, Headquarters

- A February 22,2000, memorandum **from** the Deputy Secretary tasked all DOE Operations Offices, contractor organizations, and the management of every facility with taking the time to critically evaluate ISM at every level and to take whatever actions are necessary to promote timely and effective implementation. What is the status of these reviews for DOE sites, and have any ISM implementation plans been changed as a result?
- The federal personnel performance standards were to be modified to incorporate ISM performance language. What is the status of incorporating these changes into DOE managers' performance standards?
- The Deputy Secretary initiated a set of five ISM **performance** measures. What have these measures told you about the effectiveness of ISM programs at DOE sites? How is DOE involved in refining the performance measures?
- What do you see as the role of DOE-Headquarters in implementing ISM?
- What is the status of revising and implementing DOE's *Functions, Responsibilities, and Authorities Manuals?*
- What ISM training have DOE managers received?

- . What is being done to reinforce ISM implementation in the field?
- Describe the line Oversight program in accordance with DOE P 450.5, *Line Environment*, *Safety and Health Oversight*.
- The Board has consistently encouraged the fill use of lessons learned in all activities of DOE. Almost every review of site activities has identified a lack of active management support and involvement as a major shortfall in making use of past experiences to improve safety. What is the program office doing to strengthen the lessons learned program in this regard?

Site Briefings

Hanford

- Hanford appears to be having success in getting workers involved in the work planning process. What is being done to share the approaches used at Hanford with other sites?
- In DOE's February 29,2000, response to the Board's reporting requirement on the Hanford 233-S Plutonium Concentration Facility, DOE and Bechtel Hanford Inc. committed to performing a number of actions. These actions included forming a multidisciplinary task force on hazard identification and applying lessons learned from 233-S to future decontamination and decommissioning (D&D) activities. Please summarize the implementation status of the task force's recommendations and lessons learned.
- Discuss the way in which DOE's **Richland** Operations **Office** (**DOE-RL**) intends to evaluate implementation of the ISM System once the verification reviews have been completed. Specifically, discuss the roles of the **performance** assessment, engineering, and line management organizations in these assessments.
- Explain how the **Richland** integrated management system will transition the requirements in the DOE directives and the *Functions, Responsibilities, and Authorities Manual* to work processes defined in management systems and the *Roles, Responsibilities, Accountabilities, and Authorities (R2A2s)* by Richland Integrated Management Systems.

. What benefits have been derived—by DOE, the contractor, and the verification team—by including stakeholders (e.g., the Hanford Advisory Board, worker representatives) as independent observers during previous ISM System verification reviews? What feedback have you received from these stakeholders and what are DOE-RL'S plans for including them in future ISM (or similar) reviews?

Site Briefings

Oak Ridge

- What has been the role of DOE's Oak Ridge Operations Office in providing oversight of the contractor's implementation of ISM? Why was the need for additional verifications at Y- 12 recognized only recently?
- Recent incidents at Oak Ridge raise some concern about the site's feedback and improvement program and sharing of lessons learned. Can you describe what is being done to ensure that the appropriate lessons learned are being provided to the workers performing the work?
- The Board recently provided DOE with several reports prepared by the Board's staff that detail many recurring issues in the area of requirements flowdown, authorization basis improvements, and risk reduction in Building 9206. The repeated identification of the same issues raises concern about the effectiveness of the Y-12 feedback and improvement program, as implemented by its issues management system. Could you describe how issues are prioritized, tracked, and closed to prevent their recurrence at Y-12?
- In 1998, DOE approved the Y-12 contractor's ISM System Description, noting that a number of implementation issues remained to be resolved. Since then, a series of occurrences and accidents at Y- 12 have highlighted implementation deficiencies, but have also served to either validate or strengthen the underpinnings of the contractor's ISM program. Most recently, the DOE Office of Environment, Safety and Health's (DOE-EH) February 2000 investigation report on the NaK accident in Y-12 Building 9201-5 identified numerous ISM implementation issues, but did not take exception to the ISM program itself.

- In accordance with Section M of DOE's Y- 12 request for proposal (RFP), the bids are to be judged in part (12.5 percent of the evaluation criteria total) on the basis of the proposed ISM System approach. Additionally, in accordance with Section C.3, the winning contractor is to submit a proposed ISM System Description, Standards/Requirements Identification Documents(S/RIDs), and Authorization Agreements no later than 60 days after initiation of the contract transition. What is being done to ensure that the gains made in implementing ISM are not lost with the transition to the new contract? (Note that the RFP, Section C.3, requires the bidders to accept the existing DOE Oak Ridge Reservation Emergency Plan.)
- The Y-12 contractor's NaK corrective action plan (approved by DOE April 14, 2000) commits to a systematic improvement plan (SIP), which in turn commits to an independent assessment of ISM implementation. In providing the latest SIP revision to DOE, the Y-12 contractor recommended that DOE participate in this review. Given the recent history of problems at Y-12 and the close proximity of the transition to a new Y-12 contractor (July/August award, control assumed October 1), what action is DOE taking to:

Review the respective roles of DOE-Headquarters and DOE-Oak Ridge in the implementation of ISM at Y- 12?

Oversee the independence and rigor of the contractor's assessment?

Ensure that the new Y-12 contractor participates substantially in the assessment?

Questions Specific to Oak Ridge National Laboratory (ORNL) and Building 3019

- From ORNL's responses to the last set of questions from the Board, it appears that the verification review for the laboratory consisted of a review of documentation from other reviews. In contrast with what all other sites are doing, it appears that noone reviewed the implementation of the entire ISM program to determine how it isfunctioning or how various aspects of the program are integrated. Could you describe how your reviews have provided some degree of confidence that the ISM program is adequate and functioning?
- . On April 1,2000, **UT-Battelle** assumed the role of operating contractor at **ORNL**. The prior contractor, with DOE's approval, had issued an ISM System Description that utilized 36 independent division- and facility-specific ISMS program plans. Does DOE or **UT-Battelle** expect to amend the ORNL ISM program in anyway to afford better integration?