



Department of Energy

Idaho Operations Office
1955 Fremont Avenue
Idaho Falls, ID 83415

June 1, 2009

The Honorable A. J. Eggenberger, Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, NW Suite 700
Washington, D.C. 20004-2901

SUBJECT: Response to Defense Nuclear Facilities Safety Board (DNFSB) Concerns on Work Planning and Control Implementation and Oversight at the Department of Energy, Idaho Operations Office (EM-NSPD-09-045)

REFERENCE: A. J. Eggenberger, Chairman, DNFSB, letter to Dr. Inés R. Triay, EM-1 (Acting), dated March 23, 2009

Dear Mr. Eggenberger:

The referenced letter forwarded an evaluation performed by your staff of work planning and control processes and implementation by the CH2M♦WG Idaho, LLC (CWI), and the Department of Energy, Idaho Operations Office (DOE-ID) Idaho Cleanup Project (ICP) oversight of the same. Dr. Triay asked me to respond to that letter for the Department. Both CWI and DOE-ID understand your staff's concerns and have taken deliberate action to address the issues identified in the referenced letter.

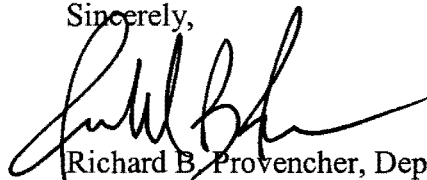
In order to improve CWI's work planning and control (WPC) process, CWI has developed a Work Control Improvement Plan to comprehensively address issues identified by multiple reviews of their WPC process. In addition to the Defense Nuclear Facilities Safety Board (DNFSB) staff review conducted in December 2008, CWI also chartered a corporate review of work control in March 2009 to review existing processes and recent events, and provide recommendations for improvement. The results of these two reviews, along with an EM-62 review (March 2009) and a root cause analysis report, provided the basis for development of the comprehensive Work Control Improvement Plan. This plan directly addresses the WPC issues identified by your staff (reference).

Although your staff determined that DOE-ID ICP Facility Representatives were actively providing daily oversight of work activities in the field, they determined that WPC programmatic oversight was lacking. I have reviewed all of the issues identified by your staff regarding DOE-ID oversight of contractor WPC processes, and have developed several actions that will significantly improve DOE-ID programmatic oversight of those processes. Foremost in these actions is to immediately begin the hiring process for a dedicated subject matter expert (SME) to provide programmatic oversight of ICP contractor WPC processes.

Further, the Office of Environmental Management (EM) anticipates that it will utilize this dedicated SME as a resource to provide mentoring and review of work planning and control programmatic oversight at other EM sites.

The enclosure to this letter provides an overview of the actions planned or taken in response to the WPC issues identified by your staff. I am confident that these actions will strengthen the work planning and control program at the ICP. These actions were discussed with your staff on May 14, 2009, and I am scheduled to brief you as well in early June 2009.

Sincerely,

A handwritten signature in black ink, appearing to read 'Richard B. Provencher', written over a faint, illegible typed name.

Richard B. Provencher, Deputy Manager
Idaho Cleanup Project

Enclosure

Enclosure

DOE-ID and Contractor Actions in Response to DNFSB Work Planning and Control Issues

The following table provides a summary of the issues identified in the DNFSB letter to EM-1 dated March 23, 2009, along with the actions being taken to address each issue. An approximate completion date is also provided for information. These corrective actions have been entered into the respective DOE-ID and contractor corrective action management systems.

DOE-ID Actions

DNFSB Issue:

DOE-ID was not aware of DNFSB-identified issues, was not providing adequate work planning and control (WPC) programmatic oversight, and did not provide written assessments of WPC oversight results.

DOE Actions:

- a. Strengthen DOE-ID integrated assessment schedule to include formal WPC assessments—completed
- b. Accelerate technical qualification of SME for WPC—completed
- c. Establish DOE-ID WPC oversight tools and mentoring—in progress—June 2009

DNFSB Issue:

Single subject-matter expert (SME) for WPC as a collateral duty was insufficient.

DOE Actions:

- a. Review staffing analysis and position description for SME for WPC—completed
- b. Evaluate options to establish a dedicated SME for WPC—completed
- c. Issue vacancy announcement and hire a dedicated SME for WPC programmatic oversight—July 2009

DNFSB Issue:

DOE-ID needs to evaluate the effectiveness of oversight through periodic self-analysis.

DOE Actions:

- a. Include management self-assessment of oversight in the annual self-assessment schedule—completed (first management self-assessment scheduled to be completed in May 2009)

Contractor (CWI) Actions

DNFSB Issue:

The CWI manuals and codes of practice that are used to implement ISM for activity-level work planning and control are not well-written, contain complex and confusing language, and routinely rely on overly generalized instructions.

CWI Action:

Rewrite and reformat CWI work control manual to remove ambiguity, eliminate confusion, and

to include process flow-charting for each work type; training on the revisions will be provided to those who plan, review, approve, release, perform, supervise, and accept work—July 2009.

DNFSB Issue:

“Backgrounding” process, used when the planner determines that work is to be performed “on the same equipment, with the same work instructions, hazards, and controls,” allows the planner to make administrative changes to a previously approved package without requiring additional SME approval.

CWI Action:

Discontinue use of the “backgrounding” process and remove process from work control manual—completed; manual to be revised by July 2009.

DNFSB Issue:

The training and qualification program for some positions responsible for work planning and control need improvement. For example, the nuclear facility managers are ultimately responsible for hazard identification and control for operational activities, but their Qualification Checklist does not specifically require training in this area.

CWI Action:

Develop and provide a training course for hazard identification and analysis to include workers, planners, subject matter experts, job supervisors/foremen, reviewers, and approvers of work; add the training requirements for hazard identification and analysis to those positions ultimately responsible for hazard identification and control of operational activities—July 2009.

DNFSB Issue:

The staff is concerned about the unusually high voltage limits allowed by STD-101, *ICP Integrated Work Control Process* (“work control manual”) for expedited work on energized equipment.

CWI Action:

Revise the work control standard to require formal work planning processes prior to work on or near energized electrical circuits—July 2009.

DNFSB Issue:

The planner’s use of the Hazard Profile Screening Checklist (HPSC) automatic tool may not involve workers and necessary SMEs, and may not include all hazards.

CWI Action:

Revise the work control standard to clarify the various layers of hazard analyses for a given scope of work, the required involvement of workers and SME’s, and to flowchart existing processes to eliminate confusion—July 2009. (Note: the last action associated with clearly defining when workability walkdowns are required also addresses this issue.)

DNFSB Issue:

CWI does not always use DOE Guide 440.1-8 or equivalent methodologies during the planning of complex and high-hazard work to analyze hazards using a systematic approach and using “what if” scenarios.

CWI Action:

Revise the work control manual to include contingency planning techniques, such as, “what if scenarios,” “error likely situations,” and “worst case estimates” as tools for hazard analysis for complex and high-hazard work—July 2009.

DNFSB Issue:

Work controls were identified as late as the pre-job brief and controls identified in Material Safety Data Sheets (MSDSs) had not been incorporated into work packages.

CWI Action:

The work control manual will be revised to improve the hazards identification and analysis by including a requirement to include and analyze all chemicals to be used on a job regardless of quantity or controls—July 2009. Additionally, as noted in an action above, the “backgrounding” process that led to these errors has been discontinued.

DNFSB Issue:

Workability walkdowns prior to job execution are left to the discretion of the work supervisor and workers.

CWI Action:

Specific criteria will be established and implemented in company procedures to ensure workability walkdowns are performed according to management expectations, using an approved checklist, which includes a review of hazards at the job site prior to beginning work (additional identified hazards will require re-planning)—July 2009.