

**Department of Energy**

Washington, DC 20585

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DHF SAFETY BOARD

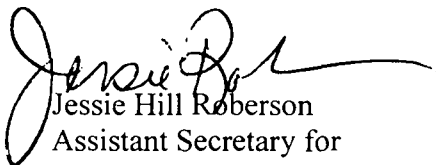
The Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, NW, Suite 700
Washington, D.C. 20004

Dear Mr. Chairman:

The purpose of this letter is to report completion of Quality Assurance Improvement Plan (QAIP) deliverable 3.8. In addition, your letter of June 12, 2003, requesting additional detail specific to QAIP action 1.1.2 will also be addressed.

We will use the results of this deliverable to continue to provide direction to the sites and to continue to improve our operations and operational performance. If you have further questions please call me or my Chief Operating Officer, Mr. Paul Golan at (202) 586-0738.

Sincerely,



Jessie Hill Roberson
Assistant Secretary for
Environmental Management

Attachment

cc: Mark Whitaker, DR-1



QAIP 3.8

Commitment: EM will integrate assessment of vital safety systems into DOE oversight and contractor self-assessments for ISMS and QA to ensure quality of design, procurement, fabrication, construction and safe operation of Safety Systems.

Deliverable: EM oversight and Self Assessment Schedules, and performance measures and assessment of performance and effectiveness of Action 1.2.2.

EM senior management is committed to improve operational performance of the organization by first improving upon its safer, quality driven work environment. Improved quality and safety improves the organization's ability to do more work in addition to its ability to perform. To meet the accelerated cleanup goals of EM, line managers have been challenged to implement an acquisition strategy where performance is driven through site contracts. Line managers establish performance expectations for their contracts and through their oversight and assessment program, will monitor the operational performance of the contractors completing work and use appropriate contract mechanisms to incentivize, reward, and correct deficiencies.

Through the following policies, memorandums, and correspondence EM senior management is reinforcing Integrated Safety Management (ISM) across line organizations.

- Submittal of Annual Integrated Safety Management Systems Declarations: December 19, 2002.
- Integrated Safety Management Program Declarations: April 7, 2003.
- Environmental Management Project Oversight and Assessment Policy: May 23, 2003.
- Improved Safety Performance: May 23, 2003.

EM senior management has established ISM line management expectations that will:

- Focus resources on those activities that reduce or eliminate risk, or accelerate cleanup; and,
- Assure that the implementation of ISM and Quality Assurance (QA) is linked, incorporates Vital Safety Systems (VSS), and is integrated into mission related project management. EM views QA as an integral part of everything its does and does not regard QA as a single component of the organization but as an integral part of ISM. Improved quality improves the organizations ability to do work.

By institutionalizing ISM within the corporate structure, EM expects to improve productivity by identifying the hazards and identifying and implementing the controls that permit the completion of work. Therefore, ensuring the reduction of risk provided by EM work activities is accomplished safely and efficiently. Since the purpose of the ISM program is to improve safety performance, meaning do more work and do it safely,

managers are expected to answer the following four questions before effectively declaring their ISM implemented:

- What are the important indicators they are measuring relative to safety performance;
- What are those indicators telling them about safety performance;
- What have they done or what are they going to do to improve safety performance; and,
- What work have they not performed because analysis of the risk determined a safer course of action, and how do they monitor those decisions.

Field managers will be required to submit their site ISM declarations on an annual basis. Declarations will document implementation changes, effectiveness, and improvement. EM senior management is committed to holding line managers accountable for maintaining ISMS by including the declaration as part of the annual budget evaluation process. In addition, to improve safety performance and ISM, field managers in EM will also be expected to:

- Spend more time in their facilities;
- Establish objective, meaningful, and measurable commitments;
- Redirect federal resources to perform oversight where performance deficiencies have been noted; and,
- Hold their contractors accountable for performing under the provisions of the contract.

EM senior management will hold field managers accountable to meet these, and all other, expectations through their annual performance reviews.

Using previous QAIP deliverables, the discussion that follows describes the expectations, performance measures, assessment schedules, and feedback and improvement mechanism EM has established to implement vital safety systems as part of its integrated safety management program.

a) Provide oversight and self-assessment schedules for vital safety systems.

The following deliverables have been previously provided to the Board. They address the oversight and self-assessment schedules for both field and HQ line management of vital safety systems.

- Ed Blackwood's December 2, 2002, memorandum to the Board committed EM to provide a follow-up as to how safety system assessments would be institutionalized by October 31, 2003.
- A May 2, 2003, letter from EM-1 to Chairman Conway discussed EM's plans and progress toward the October 31, 2003, goal of institutionalizing vital safety system assessments and schedules. The conclusion drawn was that

implementation of action 1.2.2 under the DOE QAIP was on schedule. A site-by-site review of the institutionalization of EM safety system assessments was provided as an attachment. EM plans to provide a further update in a December 2003 briefing, in response to the Board's June 12, 2003, reporting requirements on Board recommendation 2000-2 implementation.

- QAIP deliverable 1.2.2 of May 13, 2002, stated a schedule for follow-on "site" VSS reviews has been developed by EM and would be provided to the Board upon request. A June 12, 2003, letter from the Board requested the assessment schedules be provided as soon as possible. Larry Bailey (EM-3) met with Dan Burnfield and Tim Dwyer on Tuesday June 24, 2003, and provided copies of the detailed site schedules.
- In addition, EM HQ will perform oversight reviews of its field offices' implementation and institutionalization of VSS reviews. HQ VSS assessment schedules were included in the July 17, 2003, QAIP deliverable 1.3.3. Additional detail concerning the VSS review dates is provided below. The assessments will implement, through inclusion, the recommendations provided under QAIP deliverable 1.1.2.
 - Week of August 25-29, 2003 Carlsbad Field Office (CBFO)
 - Week of September 8-12, 2003 RL & ORP
 - Week of September 22-26, 2003 SRS & ORO
 - Week of October 6-10, 2003 ID
 - October 2003 (tentative) Mound (Miamisburg)

b) Establish performance measures to determine the effectiveness of vital safety systems.

HQ and field line oversight performance measures have been established through a series of EM memorandums, policies, and programs directed by EM-1 and the Chief Operating Officer (COO).

- On May 23, 2003, EM-1 policy to field managers established line management expectations for oversight and assessment of EM activities. The oversight and/or assessment systems both in the field and at HQ must have the following core criteria:
 - i. Integrated principles of ISM and principles of Program and Project Management of the Acquisition of Capital Assets,
 - ii. Provide independent performance analyses of the descending level of the line organization,
 - iii. Utilize simple systems with graded applications grounded in a few critical indicators, adding value by analyzing trends in the descending line organization's performance,

- iv. Evaluate all aspects of project from planning to work performance and improvement focused on performance trends against the projects own performance and demanding positive project trend,
- v. Design to self-identify major issues, and not rely on external organizations for problem identification,
- vi. Identify performance trends and demand correction by responsible line organizations,
- vii. Based on project structure of Project Baseline Summary (PBS) and Work Breakdown Summary (WBS),
- viii. Based on, integrated with, contracts and systems that facilitate appropriate contract actions.

The policy states line management functions flow from EM-1 through the COO to the field and then site contractors. Each level of EM line management is to establish systems, based on the above measures that add value through increased EM work productivity, by independently evaluating the performance of the next descending level within the line organization. Oversight systems, by design, should facilitate improvement.

- In an April 7, 2003, memorandum to the field managers concerning ISM declarations, four performance measures were established by the COO to improve the implementation of safety at the field level. HQ line oversight will use the following criteria and expect the field sites to be able to address the following for effective implementation of their ISMS:
 - i. What are the important indicators, relative to safety performance, that you are measuring,
 - ii. What are those indicators telling you about safety performance,
 - iii. What have you done or what are you going to do with the data to improve safety performance, and
 - iv. What work have you not done because analysis of the risk determined a safer course of action and how do you monitor these decisions.
- QAIP deliverable 1.3.4 of June 30, 2003, discusses how EM sites have integrated VSS into ISMS and establishes appropriate performance measure.
 - i. All sites (Carlsbad Field Office, Idaho Operations Office, Oak Ridge Operations Office, Office of River Protection, Richland Operations Office, and the Savannah River Operations Office) have developed Integrated Safety Management Systems (ISMS) that are in place for FY 03 and are being updated, as needed. The Vital Safety System assessments and other assessments planned for FY 03 have been incorporated into the ISMS.
 - ii. All sites establish priorities for performing assessments based on worker safety, systems that are mission critical, and special circumstances. Results of the assessments are also used to plan and schedule when the next assessment will be performed on a specific system.
 - iii. The sites review their ISMS monthly or more frequently based upon conditions and special circumstances that arise to determine whether additional assessments are needed.

The sites believe they have put into practice a positive set of written and visual techniques to measure their contractor's performance. These include reviewing and evaluating: a) system engineers qualifications, b) the material condition (aging and degradation) of systems, c) deferred and preventive maintenance schedules and findings, d) accuracy and completeness of the configuration management control system, e) system readiness reviews, f) maintenance, testing and surveillance oversight reviews, g) documented safety analysis (DSA) documentation, h) observations from walk-arounds, i) follow-up on directed actions from safety meetings, j) development and completion of corrective actions, k) available tracking systems, and l) the contractor's ability to resolve adverse trends. More emphasis has recently been placed on measuring changing protocol's documenting administrative control practices.

c) Assess the performance and effectiveness of oversight reviews.

- The EM Gold Chart standards provide site managers with site performance expectations and metrics. Without improvements, in productivity through improved safety performance and quality assurance program implementation, EM site managers will not meet the Gold Chart expectations. EM has established the 4.0 Safety Program and the following four initial indicators to monitor site safety performance.

- Skin and internal radiological contaminations,
- Lock Out/Tag Out (LO/TO),
- On-the-job injuries,
- Transportation incidents.

Safety management within EM is directly proportional to how effectively these indicators track toward zero. These indicators are tracked daily. As these indicators track toward zero the performance of the organization will improve. The COO on his weekly managers call provides a performance assessment of the organization. A specific site assessment is discussed with a site manager on an as need basis. Over the last three months occurrences in the above four areas are generally trending down.

- In a memorandum to the field on May 23, 2003, field managers were provided feedback as to what was and was not acceptable ISM implementation criteria. The following performance criteria is being used by HQ to assure beneficial implementation of ISM across the complex:

i. Acceptable:

- Federal personnel will spend more time in the facilities.
- Personalize indicators and modifying indicators through time so that they provide better and more accurate feedback.
- Use FACREPS as first-line eyes and ears.

- Charge managers with a repeat offense for similar events where lessons learned were not shared.
- Implement objective, meaningful, and measurable commitments.
- Hold the contractor accountable through provisions and clauses in the contract.
- Establish performance goals and stretch goals for federal managers and hold them accountable for performance.
- Perform only beneficial assessments. Revisit the effectiveness of safety and compliance inspections, surveillances, and assessments.
- Redirecting federal resources to perform oversight where performance deficiencies have been noted.

ii. Not acceptable:

- Having absolute belief in the indicators.
 - Safety stand downs being viewed as a positive remedy.
 - Accepting any LO/TO violation or transportation incident involving radioactive or hazardous material as being acceptable.
 - Having “no one hurt or did not violate procedures” as a mitigating factor in an incident.
 - Rationalizing that more work means more accidents.
 - Using closing out of CATS items as a measure of success.
 - Claiming that safety performance is improving without being able to back it up.
 - Over-reliance on contractor prepared information, assessments, or reports.
 - Commitment to improve processes without an objective, measurable output.
 - Viewing ISMS as fully implemented and describing safety as being satisfactory.
 - Looking at the number of assessments that were conducted as a performance metric.
 - Blaming incidents on worker inattention or poor performance.
 - Accepting that the contractor is committed to improve safety performance.
 - Contractor directing the contractor to analyze the cause of the adverse trend and develop a ‘get-well’ plan without understanding the performance objective first.
- QAIP deliverables’ 1.3.5 and 1.3.6 of June 24, 2003, stated that EM will use the Department’s Corrective Action Tracking System (CATS) to track and monitor progress toward completion and closure of CAP corrective action items, including ISM declaration CAPS.