

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

August 23, 1994

MEMORANDUM: G.W. Cunningham, Technical Director

COPIES: Board Members

FROM: Matthew B. Moury, Pantex Program Manager

SUBJECT: Trip Report - Pantex - Status of Order Compliance

1. **Purpose:** This report documents the results of a review by Defense Nuclear Facilities Safety Board (Board) Staff member M. Moury to assess the status of order compliance by the Department of Energy (DOE) Amarillo Area Office (AAO), and Mason and Hanger - Silas Mason (M&H) at Pantex during the period May 24-25, 1994, in support of Board Recommendation 93-1. Mike Mitchell (DOE-HQ, DP-24) was also conducting a review in support of the DOE response to 93-1.
2. **Summary:** Many of the deficiencies identified during a Board staff review in May 1993, continue to exist at AAO. The following specific observations were developed:
 - a. AAO developed a procedure to formalize the order compliance self-assessment program; however, the procedure is not in accordance with DP-AP-202, Rev 2, *Order Compliance Self-Assessment*, or subsequent draft *Standards/Requirements Implementation Assessment Instructions (S/RIAI)*, Rev 3, dated January 23, 1994. Specifically, the requirements for objective evidence of compliance are not consistent with the requirements in DP-AP-202 or S/RIAI.
 - b. Because of the above deficiency, many entries in the RSAD database for objective evidence do not reference specific procedures or programs, contrary to the requirements of the DOE Headquarters guidance.
 - c. An independent review process has not been developed by AAO as required by both DOE Order 5700.6C, *Quality Assurance*, and DP-AP-202, nor have any plans been formalized by AAO for conducting independent reviews.
 - d. AAO provided no formal plans or procedures for Phase 2 assessments. The manager responsible for the order compliance program has no information on how other sites, including Oak Ridge Y-12 (Y-12), are planning to conduct Phase 2 assessments. Significant effort in upgrading the AAO order compliance program will be required to meet the 93-1 commitments.
 - e. The M&H personnel involved in the order compliance self-assessment program are making significant strides towards upgrading their compliance assessment program and integrating standards into daily operations. Deficiencies identified during the staff review, that M&H planned to correct, included lack of plans to verify compensatory measures were in place until the Phase 2 assessments were performed, and minimal involvement by line management in the facility-specific order compliance effort.

3. **Background:** The Board staff conducted a review of AAO and M&H order compliance in June 1993. The results of the review were forwarded to DOE on June 15, 1993. The trip report noted the following deficiencies with the AAO program: the order compliance program was ad hoc, objective evidence lacked reference to specific procedures or programs, there was no independent review, and the training to personnel conducting order compliance assessments was weak. The staff review found M&H's objective evidence was not in accordance with the Headquarters guidance, compensatory measures to address known deficiencies were not addressed or were inadequate, and Requests for DOE Approval (RFAs) had not been prepared to address many order compliance deficiencies. The 93-1 Recommendation Implementation Plan committed to addressing the deficiencies in the trip report as a part of Action 5 to upgrade and expedite order compliance efforts at Pantex.

4. **Discussion:**

- a. AAO developed a procedure to formalize the order compliance self-assessment program; however, it is not in accordance with DP-AP-202, Rev 2 or subsequent revisions. Specifically, the requirements for objective evidence in the local instruction AAO-AP-202 Rev 0, *Order Compliance Self-Assessment Instruction*, allow reference to observed work in progress, interviews, review of recent internal or external audits, evaluations, or assessments as evidence of Phase 1 compliance. S/RIAI specifies that for Phase I objective evidence "the requirement is identified by reference, quotation, or corrective paraphrase, and the actions or conditions that constitute effective compliance with the requirement are specified, in written policies, programs, and procedures"; and they are "subject to an effective document control system." As a result, many entries in the AAO RSAD database for objective evidence did not reference specific procedures or programs, as evidence of Phase I compliance. The RSAD entries were more consistent with the requirements for Phase 2 order compliance assessments, sometimes called adherence.
- b. An independent review process has not been developed as required by both DOE Order 5700.6C, and DP-AP-202, nor have any plans been formalized by AAO for conducting independent reviews. During the meeting, the DP-24 representative committed to providing personnel to conduct an independent review of the AAO process in the future. A quality assurance process has been documented in AAO-AP-202, Rev 0; however, discussions with the compliance coordinator, and also staff review of the assessment packages, suggested limited success with ensuring reviews were carried out in a rigorous fashion.
- c. The 93-1 Implementation Plan states a corrective action plan and milestones for expediting and upgrading the Order Compliance Self-Assessment Program at Defense Programs facilities that assemble, disassemble, and test nuclear weapons, consistent with the requirements of DP-AP-202, will be developed by September 30, 1993. AAO has no plans or procedures for Phase 2 validations nor were the individuals responsible for the AAO order compliance program aware of how any other site, including Y-12, was planning to conduct Phase 2 assessments.

- d. On a positive note, the M&H personnel involved in the order compliance self-assessment program appear to be making significant strides towards upgrading their compliance assessment program and integrating standards into daily operations. The staff noted several deficiencies during the meeting that M&H committed to review and incorporate corrections as required. First, at the time of the briefing the M&H program had no plans to verify that compensatory measures were in place until the Phase 2 compliance assessments were performed. Since the Phase 2 program is a continuous program, it could realistically be several months before the compensatory measures were verified to be in place. M&H personnel agreed that prompt verification of compensatory measures was a more logical approach, and stated they would update their plans accordingly. Secondly, As part of the 93-1 compliance upgrade, M&H committed to performing facility-specific order compliance assessments in the disassembly bays and cells and in Zone 4. M&H planned to use outside support contractors to perform these assessments. During the meeting the advantages of having line management, as the individuals responsible for applying DOE Orders and directives, intimately involved in the facility specific order compliance process were discussed. M&H stated they would ensure the effort was led by line management with the support contractor providing administrative assistance.

5. Future Staff Actions:

- a. The staff had planned to conduct a follow-on order compliance review in August 1994, to assess the progress being made in support of Recommendation 93-1. However, discussions with AAO personnel indicated there was little change in the AAO program from the review documented in this report. Additional resources were provided to AAO in August 1994, to assist in upgrading their program. Therefore, the Staff delayed the review until October 1994, after Phase 2 assessments and the DOE validation work are underway.
- b. The staff will review the revised AAO and M&H procedures for conducting order compliance self-assessments.