

## DEFENSE NUCLEAR FACILITIES SAFETY BOARD

March 29, 1994

**MEMORANDUM FOR:** G. W. Cunningham, Technical Director**COPIES:** Board Members**FROM:** Timothy J. Dwyer, Hanford Site Program Manager**SUBJECT:** Report on Review of Hanford Facility Representatives Program

1. **Purpose:** This report documents DNFSB staff observations from a review of the DOE Richland Operations Office (DOE-RL) Facility Representative Programs conducted on site on February 10, 1994.
2. **Summary:** For purposes of this report, the terms DOE-RL Facility Representative and *Richland Operations Office Site Representative* are synonymous. (DOE-RL continues to dispute the title of this program with the Office of the Associate Deputy Secretary for Field Management (FM-1).)

The DOE-RL site-level implementing directive is improved over the previous revision, but still has significant shortcomings; it is being revised again for reissue in April 1994. DOE-RL division-level implementing directives, which contain the directly implementable requirements of the program, lag significantly behind the site program in level of development. Further, division-level directives are developed without a central DOE-RL authority responsible for review and approval, leading to (in some cases) flatly contradictory division-level program guidance. It is not clear why the program cannot be run from the site level, negating the need for the division level documents.

DOE-RL management expects an additional 14 Site Representative candidates to be hired in the near future. However, even rudimentary planning for their subsequent training and qualification has not been initiated, and those qualification tools (i.e., written and oral examination banks) currently in use are admittedly inadequate. For example, observation of an oral examination board by DNFSB Staff revealed a glaring lack of facility specific questions. One positive note, however, is the fact that the Manager, DOE-RL has chaired every oral examination board conducted under the new program.

Two Site Representative candidates were observed in the performance of their duties. Neither candidate demonstrated an integrated knowledge of their facility; nor a strong understanding of the concept of nuclear safety inspections. Neither candidate could answer specific questions concerning technical safety requirements (TSRs) for their facilities. One candidate was not familiar with the physical layout of his facility.

3. **Background:** On February 10, 1994, Timothy J. Dwyer and Robert F. Warther of the DNFSB Staff reviewed DOE-RL implementation of the Facility Representative Program as promulgated by the DOE headquarters Office of Field Management (FM) in response to DNFSB Recommendation 92-2. At the time of the review, two Fast Flux Test Facility (FFTF) Site Representatives had been qualified to the new program, as well as one additional Site Representative who had completed his qualifications for T-Plant in the preceding weeks. Two candidate DOE-RL Site Representatives, both in final preparation for their comprehensive written examination, were accompanied on their rounds by the review team, at each of their respective facilities: 242-A Evaporator, and Building 325. The review team also observed the conduct of an oral examination board for final qualification of a candidate DOE-RL Site Representative.

DNFSB Recommendation 92-2 (Reference 1) was issued on May 28, 1992 to recommend improvements to DOE's Facility Representative Programs. The DOE Implementation Plan (Reference 2) and subsequent Action Plan (Reference 3) specified that each field organization would conduct a self-assessment using the recently issued standard DOE-STD-1063-93, *Establishing and Maintaining a Facility Representative Program at DOE Nuclear Facilities* (Reference 4). DOE headquarters Office of Operations Assessment (EM-25) also issued an assessment (Reference 5) of the Facility Representative Programs at DOE-RL in October 1993. A DOE-RL response to the assessment findings was forwarded to FM-1 in November 1993. DOE-RL also provided a comparison (Reference 6) of local Site Representative Program instructions/directives with DOE-STD-1063-93, as required by FM-1 per the Recommendation 92-2 Implementation Plan.

4. **Discussion:** Observations from this review are provided in three categories: program documentation, program implementation, and program personnel.
  - a. **Program Documentation.** DOE-RL issued RLID 1300.1A, *Richland Operations Office Site Representative Program*, on October 21, 1993. (Note that the EM-25 review conducted October 04-08, 1993 encompassed this directive, which had been issued in DRAFT form at that time while awaiting signature by the Manager, DOE-RL.) This revision to the directive offers significant improvements over the original program promulgated on September 17, 1992, but still does not meet the requirements of DOE-STD-1063-93; discrepancies were [self-] reported by DOE-RL in Reference 7. Regarding these discrepancies, the DNFSB Staff observed that DOE-STD-1063-93 was issued in August 1993; several of the [self-] reported discrepancies were cited in the October 1993 EM-25 report. However, as of February 1994, these discrepancies still have not been corrected.

Additional shortfalls in the RLID were noted by the DNFSB Staff, including:

- The RLID does not reference or invoke the training standards of DOE Order 5480.20, *Personnel Selection, Qualification, Training, and Staffing Requirements at DOE Reactor and Non-Reactor Nuclear Facilities*.
- The RLID does not reference or invoke DOE-STD-1063-93.
- Significant policy and site-wide program responsibilities are delegated to the individual Division Directors, such as selecting which facilities shall have Site Representatives assigned, developing training programs, determining follow-on career paths, and establishing an "apprentice program." Assistant Manager responsibilities for the program are ill-defined.
- The RLID lists numerous specific responsibilities required to be discharged "periodically," but no frequency guidance is supplied.
- The RLID does not define procedures for, or constraints on, "interim qualification" or "disqualification" of site representatives. Nor are there limits on the number of written/oral examination failures allowed before a candidate must be removed from the program. DOE-RL management emphasized that these areas are controlled by Office of Personnel Management (OPM) regulations, and not within their purview.

DOE-RL personnel indicated that the RLID is currently being revised (the target re-issue date is April 15, 1994). The self-reported discrepancies, EM-25 comments, and DNFSB Staff discussions were all identified as input for this revision.

Division level documentation, including implementing procedures and qualification cards, exists in various stages of development. There is currently no central DOE-RL authority reviewing this documentation, thus giving rise to incomplete, inadequate, or even contradictory division-level programs. For example, PNL-93-00 [Revision 1], *PNL Onsite Office Procedure, Site Representative Implementation Plan*, has not been updated since issuance of RLID 1300.1A, references the wrong revision of DOE Order 5000.3 (A vice B), and invokes conflicting requirements for Site Representative submission of letter reports to the Manager, DOE-RL. Inspection of the other references available to the Site Representatives working out of the PNL Onsite Office revealed that most of them were superseded and out of date.

DOE-RL has contracted with the Oak Ridge Institute for Science and Education (ORISE) to develop new supporting documentation for the Site Representative Program, including:

- *DOE-RL Position Standard: Site Representative* [currently in DRAFT form]
- *DOE-RL Generic Qualification Standard: Site Representative* [currently in DRAFT form]
- *DOE-RL Generic Qualification Card* [DRAFT due March 31, 1994]
- *DOE-RL Site Representative Qualification RLID* [DRAFT due April 30, 1994]

DOE-RL has already issued RLID 3410.TST, *Conduct of Examinations and Oral Boards* (Reference 8). During the DNFSB Staff visit, DOE-RL also issued its first memorandum identifying Site Representatives and their designated facilities, and granting these Site Representatives "Stop Work" Authority (Reference 9). Given development of this additional documentation, it is not clear why the program cannot be run from the site level, negating the need for the division level documents.

- b. Program Implementation.** DOE-RL personnel indicated that although only 13 Site Representatives/candidates are onboard now, they have determined that a minimum of 27 Site Representatives are required to properly staff the program. Authorization to begin hiring additional federal employees is expected to be granted by DOE headquarters in the third quarter of FY 1994; the Manager, DOE-RL stated that he intends that the first billets filled will be these additional Site Representative positions. However, Hanford Site Representative Program management has not yet prepared facility-specific training or qualification material in preparation for this imminent influx of additional personnel. More importantly, program management personnel were not able to provide even a rough guess of the resources required to develop this additional material. As a result, it is unlikely that they will have a program in place upon arrival of the additional personnel.

Such development of a program after-the-fact is merely a continuation of Site Representative Program development to date. For example:

- EM-25 noted that qualification cards were being developed and signed by individual candidates for their own qualification;
- DOE-RL personnel stated that the written and oral examination banks currently being used to qualify Site Representatives are inadequate, specifically in the area of facility specific questions. Never-the-less, these banks are still being used to qualify Site Representatives; corrective action will be initiated at a later (as yet unspecified) date.
- Several DOE headquarters and DOE-RL personnel indicated that they understood the final written/oral examinations to be the screening mechanism that ensured only properly qualified personnel were in the program. They did not recognize that screening must also take place up front to assure only qualifiable candidates are accepted.
- No provision has been made for interim coverage of the 14 currently vacant Site Representative billets.

The DNFSB staff observed an oral examination conducted for the purpose of final qualification of a Site Representative. Of note, the Manager, DOE-RL has chaired all four oral examination boards given to date under the new program. Furthermore, the

candidate successfully completed the oral examination, and was immediately awarded a certificate of qualification; while presenting the certificate, the Manager, DOE-RL stated that "this is a milestone in your career...." These actions directly meet the intent of DNFSB Recommendation 92-2.

The oral examination board also reviewed (with the candidate) all deficient answers presented by the candidate during the examination; he was directed to develop the proper answers for presentation at a Hanford Site Representative meeting, which is convened by the program manager (Assistant Manager for Waste Management) with all Site Representatives/candidates on a monthly basis.

However, several shortcomings were noted in the conduct of the board:

- None of the questions asked of the candidate required detailed technical knowledge of the facility on which he was qualifying, including integrated systems effects and formal conduct of operations.
  - RLID 3410.TST was not explicitly followed during the board. The candidate's qualification card and the program standards were not available to the board members; neither the board chair nor the board members performed the requisite review of the candidate's qualification record immediately prior to the board.
  - Several required board member signatures were not obtained at the conclusion of the board.
- c. **Program Personnel.** Two Site Representative candidates, both nearly completely qualified (i.e., within two weeks of their final written examination date), were observed during the performance of their duties:
- Neither candidate demonstrated an integrated knowledge of their facility. Integrated knowledge (or detailed technical knowledge) of facility systems and operations does not appear to be stressed during the qualification process, as was also evident during the oral examination board.
  - Neither candidate demonstrated an understanding of the concept of nuclear safety inspections. [Based on a review of two week's of individual Site Representative logs, it was subsequently determined that one of the candidates probably has a marginal understanding; the other has none.] Most of the in-facility effort was spent discussing administrative items or looking at occupational safety and health type deficiencies, including fire extinguisher tags, calibration stickers, and housekeeping.
  - Neither candidate demonstrated an understanding of the impact of tagging out a system or component on facility and system operations.

- Neither candidate could answer specific questions concerning TSRs for their facilities. In fact, one of the candidates was not completely familiar with the physical layout of his facility.
5. **Future DNFSB Staff Actions:** In the near term, DOE-RL Site Representative qualifications will be reviewed on a facility-specific basis as DOE-RL facility activity schedules dictate. The DOE-RL Site Representative written examination bank will be reviewed for adequacy. A follow-up review of DOE-RL implementation of the consolidated program will also be conducted in mid-1994 to assess overall progress against the Implementation Plan schedule.

**REFERENCES**

1. DNFSB Recommendation 92-2 dated May 28, 1992 regarding DOE Facility Representatives.
2. DOE Recommendation 92-2 Implementation Plan dated November 5, 1992.
3. DOE Recommendation 92-2 Action Plan dated April 1993.
4. DOE Standard, DOE-STD-1063-93, *Establishing and Maintaining a Facility Representative Program at DOE Nuclear Facilities*, August 1993.
5. DOE-EM-25 *Facility Representative Program Assessment, Richland Operations Office, Hanford, Washington, 4 - 8 October, 1993.*
6. DOE-RL Letter 94-AMW-009, J. R. Hunter (DOE-RL AMW) to D. W. Pearman (DOE-HQ FM-1), [undated] re: *Facility Representative Program Guidelines.*
7. DOE-RL Implementing Directive, RLID 1300.1A, *Richland Operations Office Site Representative Program.*
8. DOE-RL Implementing Directive, RLID 3410.TST, *Conduct of Examinations and Oral Boards.*
9. DOE-RL Letter 94-AMW-005, J. D. Wagoner (Manager, DOE-RL) to Distribution, dated February 07, 1994, re: *Designation of Richland Operations Office Site Representatives.*