John T. Conway, Chairman A.J. Eggenberger, Vice Chairman John W. Crawford, Jr. Herbert John Cecil Kouts

# DEFENSE NUCLEAR FACILITIES SAFETY BOARD



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May 28, 1992

The Honorable James D. Watkins Secretary of Energy Washington, DC 20585

Dear Mr. Secretary:

On May 28, 1992, the Defense Nuclear Facilities Safety Board, in accordance with 42 U.S.C. § 2286a(5), unanimously approved Recommendation 92-2 which is enclosed for your consideration. Recommendation 92-2 deals with DOE's facility representative program at defense nuclear facilities.

42 U.S.C. § 2286d(a) requires the Board, after receipt by you, to promptly make this recommendation available to the public in the Department of Energy's regional public reading rooms. The Board believes the recommendation contains no information which is classified or otherwise restricted. To the extent this recommendation does not include information restricted by DOE under the Atomic Energy Act of 1954, 42 U.S.C. §§ 2161-68, as amended, please arrange to have this recommendation promptly placed on file in your regional public reading rooms.

The Board will publish this recommendation in the Federal Register.

Sincerely,

John T. Conway Chairman

Enclosure

## RECOMMENDATION TO THE SECRETARY OF ENERGY pursuant to 42 U.S.C. § 2286a(5) Atomic Energy Act of 1954, as amended.

#### Dated: May 28, 1992

Department of Energy (DOE) Order 5000.3A, <u>Occurrence Reporting and Processing of</u> <u>Information</u>, establishes a policy "to assure that both DOE and DOE contractor line management, including the Office of the Secretary, [be] kept fully and currently informed of all events which could affect the health and safety of the public." As a central feature of the measures used to implement this policy, the order defines the position "DOE Facility Representative" as follows:

"<u>DOE Facility Representative</u>. For each major facility or group of lesser facilities, an individual . . . assigned responsibility by the Head of the Field Organization for monitoring the performance of the facility and its operations. This individual shall be the *primary point of contact* with the contractor and will be responsible to the appropriate Program Secretarial Officer (PSO) and Head of Field Organization. . . ." [emphasis added]

In addition, DOE Order 5480.19, <u>Conduct of Operations Requirements for DOE Facilities</u>, directs that "operations at DOE facilities be . . . conducted in a manner to assure an acceptable level of safety," and specifies that DOE Facility Representatives be "assigned responsibility [to] oversee the day-to-day conduct of operations . . . in accordance with . . . direction received from the Program Manager." Secretary of Energy Notice SEN-6E-92, <u>Departmental Organizational and Management Arrangements</u>, extends this chain of responsibility, holding Program Managers accountable to Program Secretarial Officers (PSOs), who in turn are "accountable to [the Secretary] for their respective programs, including safety of the workers and the public. . . ."

Recognizing the importance of these positions with regard to assuring adequate protection of the public health and safety at DOE defense nuclear facilities, the Board reviewed existing department-wide guidance on the selection, training and responsibilities of DOE Facility Representatives. DOE Order 5000.3A and DOE Order 5480.19 (both cited above), provide only limited details concerning DOE Facility Representative duties and responsibilities; moreover, there are no orders that prescribe any guidance for selection and training of DOE Facility Representatives, nor any effective guidance for establishing the duties and responsibilities associated with these positions. (See Attachment A)

Having made numerous reviews throughout the DOE defense nuclear facilities complex, the Board notes that the DOE managers for several facilities in the defense nuclear complex have begun to establish formal Facility Representative programs. However, these programs are operating without centralized direction. Generally, this is resulting in widely differing qualifications, duties, and responsibilities for DOE Facility Representatives from facility to facility, even at the same site. For example, DOE Facility Representatives encountered by the Board have ranged from personnel holding doctoral degrees to summer interns (college students).

This situation could result in failure by DOE to achieve the level of technical vigilance necessary to assure the safe operation of the department's defense nuclear facilities. The Board believes that the performance of the interrelated safety, technical, and management functions by DOE Facility Representatives would be enhanced if a formal qualification program for these positions, commensurate with their importance, was promulgated at the department level and implemented throughout the defense nuclear facilities complex.

Therefore, the Board recommends that for defense nuclear facilities:

- 1. The Secretary of the Department of Energy expeditiously carry out a comprehensive analysis of the existing DOE Facility Representative programs.
  - a. The analysis should be conducted under the direction of a senior individual who has demonstrated high technical and managerial ability and has demonstrated an understanding of the use of facility representatives.
  - b. The analysis should emphasize the identification of those aspects of the existing programs that either support or impede the achievement of DOE objectives for assuring the protection of public health and safety. Consideration should be given to evaluating:
    - (1) Qualification requirements and recruitment practices employed in selecting prospective DOE Facility Representatives;
    - (2) General and facility-specific training and examination requirements and practices necessary to prepare prospective DOE Facility Representatives for field assignments, and to maintain their proficiency;
    - (3) DOE Facility Representative duties and responsibilities;
    - (4) Existing supervision and management of the Facility Representative position, now provided by several individuals in some facilities, especially inquiring whether there are clear lines of responsibilities with both the contractor and DOE line management;
    - (5) Criteria and practices for assigning DOE Facility Representatives to each defense nuclear facility; and
    - (6) DOE personnel practices and procedures that provide incentives and impediments to making the position of DOE Facility Representative attractive and career-enhancing. At a minimum, restraints imposed by the practice of measuring responsibility predominantly in terms of numbers of individuals supervised should be addressed.

- c. The analysis should identify practices employed in successful Facility Representative programs outside of the defense nuclear facilities complex that – are appropriate for the DOE Facility Representative Program.
- d. At the conclusion of the analysis, an estimate should be prepared of the personnel and management resources that would be required to establish and maintain an effective DOE Facility Representative Program, and which reflects the results of the analysis.
- 2. Utilizing the results of the comprehensive analysis, the Secretary of the Department of Energy establish a formal program to select, train, and assign DOE Facility Representatives for the defense nuclear facilities.
  - a. In establishing this program, DOE should be prepared to modify personnel practices and programs as necessary to establish a beneficial and effective DOE Facility Representative Program.
  - b. This program should give consideration to:
    - (1) Delineating DOE Facility Representative selection requirements, including specified standards of educational achievement, professional experience, technical aptitude, and forcefulness;
    - (2) Establishing DOE Facility Representative training requirements, including a formal centralized core training program, a formal site- and facility(s)-specific training program, and a continuing education and improvement program, each including periodic objective examinations;
    - (3) Defining DOE Facility Representative duties and responsibilities, both generically and with regard to each facility in every mode of operation including transition states such as between PSO's; and
    - (4) Establishing formal requirements to specify those activities or facilities requiring the assignment of DOE Facility Representatives.

John N. Jon John T. Jonway, Chairman

### ATTACHMENT A

## REVIEW OF DOE FACILITY/SITE REPRESENTATIVE POSITION DESCRIPTIONS

The DNFSB staff has reviewed several current or proposed position descriptions, defining the duties and responsibilities of DOE Facility/Site Representatives at Savannah River, Richland, Idaho National Engineering Laboratory (INEL), Rocky Flats, and the Waste Isolation Pilot Plant (WIPP). Based on these position descriptions, there appears to be a wide disparity in the duties and qualifications for DOE Facility/Site Representatives from facility to facility. The lack of any effective guidance in establishing the duties and responsibilities associated with these positions is supported by the following observations.

The position description for the Facility Representative, WIPP Project Office, (General Engineer GM-801-13) most closely tracks the definition of a "DOE Facility Representative" as defined in DOE Order 5000.3A. The position description properly summarizes the major duties of the facility representative as follows:

"Conducts daily on-site evaluation of contractor operations with emphasis on personnel health and safety, nuclear safety, environmental protection, facility modifications and maintenance, and formality of operations. Assures safe operations at the facility at all times. This is accomplished by frequent walkthrough inspections of all facility spaces, observation of facility activities, and continuous interface with contractor personnel at all levels. Deficiencies or concerns are resolved directly with the contractor Facility Manager (with timely appropriate notification to DOE management of the actions taken) or, as necessary, are elevated through DOE line management up to the Operations Office Manager and the Headquarters Program Manager.

"Serves as the primary conduit of information concerning facility operations for DOE management. Maintains awareness of all activities, ongoing and planned, at the facility through discussions with personnel at all levels, through participation in meetings on daily operations and problem resolution, as well as short and long range planning, and through problem identification and resolution resulting from interfacing with personnel at all levels on walkthrough inspections and observation of operations. Is responsible for assuring that inspections, observations, and discussions are sufficiently frequent and timely to ensure current knowledge of operations at all times.

"Is normally the first point of contact for DOE in all event notifications and is available to respond to the facility around-the-clock. Serves as the primary DOE expert regarding operational activities and problem identification and resolution." In contrast, the position description for the Site Representative, Chemical Processing Plant Branch, INEL, includes the following definition of duties:

"Performs surveillance of the facilities to assure that work is being done in accordance with applicable safety standards and specifications, and approved operating and work control procedures. Facility shutdown authority rests with the Assistant Manager for Nuclear Programs. The Site Representative may exercise this authority, after contacting the AM/NP, when in his opinion, operations may result in undue risk to health, safety, or the environment. If time permits, such action will be coordinated with the MPD Director, AM/ES&H, and ID manager. In cases other than imminent danger, the Site Representative will first bring the matter to the attention of facility management. If resolution is not reached, the Site Representative will go through normal DOE-ID line management for directing any change in operations."

The level of knowledge required of individuals assigned to these positions varies widely among the position descriptions reviewed. All of the position descriptions suffer from a lack of specificity as to how an applicant or an incumbent in these positions will be required to demonstrate his or her proficiency in meeting any of the "Knowledge Requirements" stated in the position description. In fact, no level of educational achievement is cited in any of the position descriptions. The Facility Representative position description for the WIPP Project Office does cite a Professional Engineer license as being highly desirable, but not required. This position description also establishes several performance criteria, including:

"the ability to complete training on safety and environmental regulatory issues, and to apply general and site-specific training toward the demonstration of detailed knowledge of safety-related systems design basis, functions, and operational characteristics."

The position descriptions reviewed are not consistent in the assignment of responsibilities and compensation incentives. It is not readily discernable as to how certain DOE Facility/Site Representatives are given General Schedule classifications (e.g. GS-13) whereas selected DOE Facility/Site Representatives are included in the DOE Performance Management Recognition System. This latter system, based on the concept of pay for performance, is used for individuals assigned to supervisory or policy influencing positions. A convincing argument can be made that a DOE Facility/Site Representative influences the operational policies and procedures for assigned facilities and, therefore, should be assigned to this pay for performance incentive system.