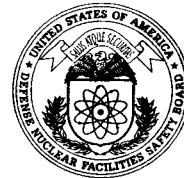


John T. Conway, Chairman  
A.J. Eggenberger, Vice Chairman  
John E. Mansfield  
R. Bruce Matthews

# DEFENSE NUCLEAR FACILITIES SAFETY BOARD

625 Indiana Avenue, NW, Suite 700, Washington, D.C. 20004-2901  
(202) 694-7000



January 29, 2004

The Honorable Robert Gordon Card  
Under Secretary of Energy, Science and Environment  
U.S. Department of Energy  
1000 Independence Avenue, SW  
Washington, DC 20585-1000

Dear Mr. Card:

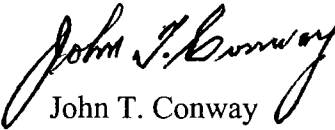
The Bob Stump National Defense Authorization Act, Public Law 107-314, directed the Department of Energy (DOE) to promulgate regulations on worker safety and health, rather than rely exclusively on a contractual approach to establish safe and healthy workplaces. Specifically, Section 3173 (codified at 42 U.S.C. § 2282c), requires DOE to promulgate worker safety and health regulations. On December 8, 2003, DOE provided notification of a proposed Rule on worker protection, Title 10 Code of Federal Regulations, Part 851, *Worker Safety and Health*, in the Federal Register.

The Defense Nuclear Facilities Safety Board (Board) is required by law (42 U.S.C. § 2286a(a)(1)) to review and evaluate the content of all applicable DOE Orders, regulations, and requirements. The Board has conducted a detailed review of the proposed Rule. The comments developed during that review are provided as an enclosure to this letter.

DOE personnel have indicated that DOE Order 440.1A, *Worker Protection Management for DOE Federal and Contractor Employees*, will be cancelled. Currently, DOE Order 440.1A and its associated manuals and guidance documents, provide specific safety requirements for several areas of interest to the Board (e.g., explosives safety, pressure vessel safety, and suspect/counterfeit items). They also serve as the implementing directives for Integrated Safety Management at the activity level. The Board is concerned that many requirements and guidance, painstakingly developed during 50 years of experience across the complex, may be lost unless these requirements and guidance are formally implemented in a new set of directives to be issued concurrently with the new Rule.

Therefore, pursuant to 42 U.S.C. § 2286b(d), the Board requests that the responsible DOE personnel brief the Board within 30 days of receipt of this letter detailing how DOE plans to address the Board's comments on the proposed Rule.

Sincerely,

A handwritten signature in black ink that reads "John T. Conway". The signature is written in a cursive style with a large, sweeping initial "J".

John T. Conway  
Chairman

c: The Honorable Beverly Ann Cook  
Mr. Mark B. Whitaker, Jr.

Enclosure

## ENCLOSURE

**Defense Nuclear Facilities Safety Board**  
**Comments on Proposed**  
**Title 10 Code of Federal Regulations, Part 851, *Worker Safety and Health***

1. The Department of Energy (DOE) has identified that DOE Order 440.1, *Worker Protection Management for DOE Federal and Contractor Employees*, will be cancelled. However, several requirements from this Order that affect nuclear safety are not retained as requirements in the proposed Rule. The preamble to the Rule must specify the directive in which the redacted requirements of DOE Order 440.1 will be retained (e.g., suspect/counterfeit items, boiler and pressure vessel safety, fire protection, and explosive safety). In addition, the appendix to the Rule is not referenced in the main body and does not contain the complete set of guidance necessary to implement Integrated Safety Management (ISM) at the activity level. Finally, that portion of DOE Order 440.1 that is to be relegated explicitly to guidance, as well as the current guidance documents to DOE Order 440.1, should be compiled in a comprehensive set of implementation guides for the Rule and used as a safe harbor similar to the safe harbor system used with Title 10 Code of Federal Regulations (CFR), Part 830, *Nuclear Safety Management*, (10 CFR 830). These guides must be prepared and issued concurrently with the Rule.
2. DOE Order 440.1 currently provides requirements for the protection of DOE personnel. If this Order is cancelled, it is not clear how these requirements will be maintained; DOE personnel are not addressed in the proposed Rule. DOE must maintain requirements for the DOE work force that incorporate Executive Order 12196, *Occupational Safety and Health Programs for Federal Employees*.
3. Currently, DOE Order 440.1 is referenced in the DOE Standard 1098-99, *Radiological Control*, and is the only mechanism available to allow the integration of radiological protection under a comprehensive ISM system. If this Order is cancelled, the guidance documents for either Title 10 CFR, Part 835, *Occupational Radiation Protection*, or the proposed Rule, Title 10 CFR, Part 851, *Worker Safety and Health*, (10 CFR 851), must be revised to indicate how the five core functions of ISM are to be implemented.
4. The preamble to proposed 10 CFR 851 states that the requirements of the Rule are risk based. In contrast, the implementation of ISM at the activity level, as well as the standards of the Occupational Safety and Health Administration, focus on elimination or mitigation of hazards. Determining the consequences and calculating a frequency of occurrence for hazard scenarios at the activity level is discouraged in the guidance to 10 CFR 830. The requirements in 10 CFR 851 should continue to be based on the elimination of or protection from hazards, not on risks.
5. The proposed Rule dictates that the Program Secretarial Officer approve the site-specific worker safety and health programs. However, line management personnel do not typically have the technical experience necessary to conduct a detailed review of the

programs. Therefore, the 10 CFR 851 guidance documents should include requirements similar to those in DOE Guide 421.1-2, *Implementation Guide For Use In Developing Documented Safety Analyses To Meet Subpart B of 10 CFR 830*, which states, “Alternative methods or significant deviations from the safe harbor methods, if proposed, must have the approval of the responsible DOE organization as defined in the DOE FRAM [*Safety Management Functions, Responsibilities, and Authorities Manual*] including where applicable NNSA [National Nuclear Security Administration], and the concurrence (or comment if an NNSA facility is involved) of the DOE Office of Environment, Safety and Health.”

6. The preamble to the proposed Rule describes Orders and manuals as guidance documents. In accordance with the DOE Directives System, Orders and manuals contain requirements, not just guidance. The preamble should be revised using appropriate terminology from DOE Policy 251.1, *Directives System*, and DOE Order 251.1, *Directives System*.
7. Section 851.8 proposes restrictions on DOE inspections or investigations. Especially in light of the use of terminology inconsistent with the DOE Directives System, this section is unclear and should be modified to avoid placing undue restrictions on DOE’s ability to enforce safety and health requirements.
8. The term “standard,” as used in the preamble to the proposed Rule, is not congruent with the term “standard” as defined in DOE Order 251; it appears to mean “control” as described in the five core functions of ISM described in DOE Policy 450.4, *Safety Management System Policy*. This terminology in the Rule should be modified to be consistent with existing DOE terminology to avoid confusion when implementing the Rule.
9. In Section 851.103.h, tasks may only be declined if they pose an imminent risk of death or serious bodily harm—uncontrolled exposures to carcinogens or radionuclides are excluded from this discussion. This is different than the description of stop work authority, Section 851.103.I, and the difference is not adequately described. The difference should be redressed or explained in the proposed preamble or Rule.