

Directive Number and Title: O 440.1A Worker Protection Management for DOE Federal & Contractor Employees

Originating Office: Office of Worker Protection Policy and Programs (EH-52)

Review Team Members:

GC-52	S-3.1	
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Background

In 1994, under the direction of Secretary O'Leary, the four digit Orders were consolidated, reviewed for duplicative requirements, updated to include a Contractor Requirements Document, and issued as three digit Orders. DOE O 440.1 combined into a single order hundreds of existing requirements from the following previous DOE Orders: 5480.4 (ES&H standards); 3790.1B (FEOSH); 5480.7A (Fire Protection); 5480.8A (Occupational Medical); 5480.9A (Construction); 5480.10 (Industrial Hygiene); 5480.16A (Firearms); and 5483.1A (S&H at GOCO Facilities). DOE O 440.1 consolidated the Safety and Health (S&H) requirements to make them more performance-based and the actual page count was reduced from 239 pages to the current 26 pages. Stakeholders including: DOE Headquarters, Field Elements, contractors, and the DNFSB were involved in producing this Order, published in September 1995. Two Changes (in 1995 and 1996) and a Revision in 1998 were made to incorporate provisions for suspect and counterfeit parts, an expansion of fire watch procedures, the requirements for selecting protective clothing for welding and cutting operations and additional occupational medicine requirements.

Scope: DOE O 440.1A applies to all federal employees engaged in work activities. The order clearly states that the CRD applies only to contracts and subcontracts performing work for DOE on DOE-owned or leased facilities involved in these activities. The requirements of DOE O 440.1A apply to any type of contract work which involves the specific type of hazard described i.e., Explosives, Construction, etc.

Overview of Requirements

DOE O 440.1A serves as the top-level document to establish the requirements for a Federal Occupational Safety and Health Program (FEOSH) as required by Executive Order 12196 and 29 CFR 1960. The Order also establishes the Departments expectations for an acceptable contractor S&H program by setting forth the Contractor Requirements.

Just as the Order establishes consistent worker protection requirements for federal employees, the CRD establishes the minimum requirements for the contractor's S&H program through compliance with OSHA regulations found at 29 CFR Parts 1910, 1917,

1918, 1926, and 1928; and, the following consensus standards: ACGIH (Threshold Limit Values); ANSI Z136.1 (Lasers), ANSI Z88.2 (Respirators), ANSI Z49.1 (Welding), and NFPA 70 (Electrical). In addition, the CRD Establishes performance standards for DOE site Occupational Medical programs and prescribes the use of the DOE Explosive Safety Manual for which no standards exist in the public or private sector.

The contractors' S&H program is then instituted through written programs (see below), administered by qualified staff, using contractor specific requirements to identify and abate work hazards.

Federal and Contractor S&H Programs Established by DOE O 440.1 A

Construction Safety	Pressure Safety
Firearms Safety	Motor Vehicle Safety
Explosive Safety	Suspect and Counterfeit Items
Industrial Hygiene	Fire Protection
Occupational Medicine	

Analysis

Of the four sets of field comments on this Order, three (Idaho, Oakland, and Oak Ridge Operations Offices) indicated that the order is necessary to ensure worker safety and health and to define the DOE expectations for S&H Programs.

The fourth comment (Brookhaven Science Associates, BSA) stated that the Order was duplicative of OSHA standards and that it primarily lists federal (OSHA, ANSI, ACGIH, and NFPA) consensus standards as contractor requirements. BSA concludes that the Order should be cancelled and the consensus standards be imposed directly.

In addition to these comments EFCOG provided the following comment: "Requirements less prescriptive than the Orders it replaced, providing the contractor(s) with an increased ability to develop processes and programs appropriate for the scope of work while maximizing worker protection. However, requirements may already be covered in State Laws and some coverage in Federal Laws. Avoid redundancy." The EFCOG further indicates that the Order is "Unnecessary" and "Duplicative." EFCOG's comment appears to indicate that this is a good order in that it is less prescriptive and provides requirements for programs appropriate to the work, but continues to request its elimination due to their desire to eliminate Orders.

However, the requirements in this Order are not covered by state or federal laws that are directly applicable to Federal operations at DOE sites and, therefore, the Order is not duplicative or redundant. The Order is the only mechanism to implement the OSHA requirements for the protection of DOE Contractor employees. Specifically:

- Section 4 (b)(1) of the OSH Act of 1970, as amended, exempts Federal agencies from OSHA regulation when they exercise statutory authority for occupational safety or health.
- Title 42 United States Code (USC) Chapter 23 Atomic Energy Act provides statutory authority for DOE to regulate occupational safety and health matters relating to private sector employees at facilities subject to the Atomic Energy Act. So, DOE is self-regulating for the occupational safety and health of its workers.

We concur with the field comments that the Order is necessary to define the minimum DOE performance expectations for the Federal employee and Contractor S&H Programs. Without DOE O 440.1A there would be no mechanism in place to have contractors implement the consensus standards for the protection of their workers. The order is not overly broad or duplicative of OSHA, instead it provides the contract requirements to implement the appropriate OSHA Standards at the DOE Contractor sites.

One concern raised by the review team was the potential duplication of the OSHA requirements for controlling exposure to ionizing radiation in 29 CFR 1910.1096 and the 10 CFR 835 that defines the DOE worker radiation protection program. A published interpretation (Response Line request #D97-06-001 and Office of General Counsel Ruling 1995-1) exists which states that 10 CFR 835 supercedes any requirements in 29 CFR 1910 and thereby eliminates this potential for redundancy.

The use of ACGIH Threshold Limit Values (TLV) in place of the often less stringent OSHA Permissible Exposure Limits (PEL) has been brought to question. While the TLV's are not legal limits imposed on industry by OSHA, they are the values most commonly used by industrial hygienists to provide day-to-day protection to the worker population. Due to the difficulties OSHA experiences in modifying its regulations for private industry, the majority of OSHA PEL's currently in their regulations are based on 1968 TLV's, which do not reflect the past 33 years of understanding of health hazards. DOE has implemented the use of the current TLV data through DOE O 440.1A to provide a level of protection to our workers consistent with current scientific knowledge and understanding of the health effects of exposure to hazardous materials. This ability of DOE to update worker protection policy and directives provides enhanced protection to the DOE workforce.

Summary Recommendations

DOE O 440.1A has been significantly reduced in size and scope with the 1995 update and provides the necessary performance based requirements for the S&H Programs for Federal and Contractor employees. The Office of Worker Protection Policy and Programs (EH-52) is in the process of reviewing this Order. The review committee will be instructed to focus on eliminating redundant and unnecessary requirements such as multiple references to hazard analysis. The most recent requirements for biohazards (currently DOE Notice 450.7) will be incorporated into 440.1A during this update.

Other Views¹

View of J. Bennett McRae:

After reviewing the 01/14/02 draft report, Ben McRae, Assistant General Counsel for Civilian Nuclear Programs, provided the following additional views regarding an alternative approach to that being recommended by the group.

The Performance Based Contracts DOE Order Review was established to re-assess the nature and extent of DOE Order requirements on DOE contractors and determine whether there are opportunities to reduce their impact, consistent with performance based contracting concepts. The overall objective of the Review is to eliminate "how to" type requirements as well as requirements which are determined to be unnecessary, non-value added, inappropriate, or duplicative, and to identify changes that would mitigate the impact of overly bureaucratic procedural requirements, or substitute less costly or more effective approaches or standards.

DOE Order 440.1A and the related manuals and guides contain numerous "how to" requirements and thus present excellent candidates for revision in the direction of performance based contracting. While the recommendation of the group acknowledges the possibility of some changes through the normal review process, it appears to view fundamental changes in the Order and related manuals and guides as neither necessary nor appropriate. If this business as usual approach is accepted, an opportunity for meaningful improvement will be lost and the status quo will continue.

In many ways, DOE Order 440.1A presents many of the same issues as DOE Order 420.1 on facility safety. Accordingly, it would be reasonable to pursue a course of action with respect to DOE Order 440.1A that is similar to that being recommended for DOE Order 420.1. Namely, existing DOE Order 440.1A and related manuals and guides would be eliminated by a specified date (such as 90 days after a decision by the Panel for the Performance Based Contracts DOE Order Review (the Panel)). Existing DOE Order 440.1A would be replaced by a new Order or Policy Statement that sets forth the performance objective of achieving a level of worker protection at least equivalent to the level of protection expected in comparable private sector workplaces and the obligation, as

¹ There were no "Minority Views" in the Review Team assigned to review this Order. However, Ben McRae, Assistant General Counsel for Civilian Nuclear Programs, requested that his view be included in the Review Team's Report. This is being done on the condition that the views of the Departmental Representative to the DNFSB also be included. The team received the elaboration of Mr. McRae's view on Friday, January 25, 2002, well after the Team's review and deliberations were complete. Subsequently, one Team member expressed support for Mr. McRae's recommendation. Several other team members disagreed with the recommendation, although some were reluctant to express their disagreement candidly. One member of the Review Team elected to respond to Mr. McRae's recommendation.

part of integrated safety management (ISM), to develop and implement a worker protection plan (including, as applicable, provisions on Construction Safety, Firearms Safety, Explosive Safety, Industrial Hygiene, Occupational Medicine, Pressure Safety, Motor Vehicle Safety, Suspect and Counterfeit Items, and Fire Protection) tailored to reflect the work being performed and the associated hazards, taking into account OSHA and other relevant regulatory programs, as well as industry standards and practices. In addition, the Panel would convene a working group, with representatives from EH, GC and other interested entities, to review the provisions of the existing DOE Order 440.1A and the related manuals and guides to determine what, if any, provisions need to be set forth in a guide. The working group would be directed to complete its review expeditiously and to provide the Panel with a draft guide that sets forth in a clear and concise manner any provision to be retained, as well as a justification for any provision to be retained. The working group should be directed to avoid the creation of a guide that would function as de facto regulation. The guide would be issued if and when approved by the Panel.

View from DOE Departmental Representative to the Defense Nuclear Facilities Safety Board (DOE S-3.1)

The DOE Departmental Representative strongly recommends that the Department consults with the Defense Nuclear Facilities Safety Board (Board) before making any decision to eliminate a "Directive of Interest" to the Board. In recent meetings with Mr. Richard Hopf and Ms. Ellen Livingston, the Board has requested to be notified of any potential decisions to eliminate "Directives of Interest" to the Board. The Board's most recent list of "Directives of Interest," issued on October 16, 2001, includes this directive.

The Board has statutory responsibility to review and evaluate the content of safety-related standards for defense nuclear facilities [42 USC 2286a]. The Department management has long ago established and institutionalized an agreement with the Board for the Board to review and comment on all safety-related directives and changes prior to issuance. The Department's Order and Manual on Directives (O 251.1 and M 251.1-1A) describe the Department's process to ensure the Board has opportunity to review safety-related directives and changes prior to issuance. A sudden unilateral change in the long-established way the Department does business with the Board on review of safety requirements is likely to cause unnecessary perturbations in the Department's working relationship with the Board.

The Departmental Representative has responsibility to facilitate the Board's review of safety-related directives. If requested, the Departmental Representative will facilitate discussions between applicable Department and Board personnel to discuss potential elimination of this directive. Again, the Departmental Representative strongly recommends that this consultation with the Board needs to occur before a Department decision on elimination is reached.

Response to "View of J. Bennett McRae"

The following response to the "View of J. Bennett McRae" is provided by Robin A. Henderson, J.D., M.P.H.. Ms. Henderson is the team coordinator for the DOE O 440.1A

Review Team and a staff member of GC-52, Office of General Counsel for Civilian Nuclear Programs. The Review Team assigned to this Order had several subject matter experts who were familiar with this Order, its underlying documents and its implementation, and they reached a consensus recommending the retention of this Order after nearly three months of review and deliberation.

Mr. McRae, Assistant General Counsel for Civilian Nuclear Programs, advises that he re-read DOE O 440.1A once and, according to his January 28, 2002, e-mail description, "skimmed the voluminous accompanying manuals and guides" before formulating his views on this Order. Mr. McRae does not claim to be a subject matter expert in worker protection and does not have specialized training in that field. He did not participate in any of the DOE O 440.1A Review Team discussions and formulated his recommendation regarding this Order without any contribution from technical experts or the benefit of reading the Review Team's Report. (He did, however, read the Team Report subsequently). He has recommended that "DOE O 440.1A and related manuals and guides . . . be eliminated by a specified date (such as 90 days) . . . [and] be replaced by a new Order or Policy Statement that sets forth the performance objective of achieving a level of worker protection at least equivalent to the level of protection in comparable private sector workplaces." The question of what requirements are needed to protect workers is a substantive issue rather than a legal issue and, therefore, outside the purview of Mr. McRae's training and experience. Further, he has not explained, in other than cursory language, what he proposes. It is a view unsupported by the facts.

DOE O 440.1A is DOE's only non-radiological worker safety Order. It covers a broad spectrum of worker safety issues, some of which, such as explosive safety, involve very high hazards. In addition, review of statistics published by the Bureau of Labor Statistics reflect a significant risk of injury and death from some of DOE's more conventional activities such as construction, transportation and electrical hazards. In the private sector, these activities are regulated by the States and by the Occupational Safety and Health Administration (OSHA). However, for the overwhelming majority of DOE's activities, DOE is the only regulator of these hazards to our workers and DOE O 440.1A is the Department's mechanism for implementing these safety requirements.

The suggestion that the existing worker health and safety standards in DOE O 440.1A "be replaced by a new Order or Policy Statement that sets forth the performance objective of achieving a level of worker protection at least equivalent to the level of protection in comparable private sector workplaces" is untenable. What this "standard" means and how it can be reduced to a contract requirement is unclear. In fact, this proposed standard is so vague as to be no standard at all.

Mr. McRae's recommendation incorrectly presumes that there is a private sector analogue for all of DOE's activities. Much of DOE's work is performed on DOE sites specifically because there are no comparable private sector facilities or, because the National Security interests are so great that they should not be performed in the private sector. In addition, if DOE were to adopt as a standard "a level of safety comparable to the private sector," DOE would be unreasonably lowering its standards. For example, DOE O 440.1A adopts modern and more informed consensus exposure standards rather than some of OSHA's outdated, 30 year old standards. Similarly, there are no private sector standards applicable

to DOE's explosives activities and use of the private sector fire protection and pressure safety standards would simply be unsafe at DOE sites.

When considering changes to something as consequential as this, DOE's only non-radiological worker safety Order, it should be done in a manner informed by technical experts and with a great deal of circumspection. According to DOE's Policy on the Directives System, DOE P 251.1, "Directives . . . are developed through the Directives System, which provides for full participation and input from all DOE organizations and affected parties, and seeks, where possible, consensus among these interests." It also states that it is DOE's policy "to use a consistent and effective management system for the development, communication, implementation and periodic review of its directives." This is the careful, reasoned, informed approach that the DOE O 440.1A underwent in 1995, 1996, and 1998 and will undergo again, once the EH-52 review committee completes its current review of this Order. It is also the policy and process the Review Team had in mind in its "Summary Recommendations."

Whatever Mr. McRae's intentions are for proposing the 90 day "slash and burn" approach for eliminating DOE O 440.1A as well as five nuclear safety management orders, they are not consistent with DOE's policy established in DOE P 251.1. Neither are these intentions consistent with the role of the Office of General Counsel in the Department. It is critical to the integrity of the process that decision-making in the areas of worker safety be left in the hands of subject matter experts who fully understand the implications of their actions. The appropriate role of members of the Office of General Counsel is to then assure that those decisions are implemented in a manner consistent with the law.

Originating Office Comments

The Office of Safety and Health (EH-5) worked with Ben McRae to create the approach listed in "Other Views" section. EH-5 believes there is merit in this alternative approach to streamline requirements, consistent with the hazards in the workplace, into an integrated safety management system. EH-5 believes it will be productive to establish a Working Group to pursue this alternative approach using a deliberative and inclusive process that includes the DNFSB.