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Part II

Department of Energy

10 CFR Parts 850 and 851 Chronic Beryllium Disease Prevention Program; Worker Safety and Health Program; Final Rule

DEPARTMENT OF ENERGY

10 CFR Parts 850 and 851

[Docket No. EH-RM-04-WSHP]

RIN 1901-AA99

Chronic Beryllium Disease Prevention Program; Worker Safety and Health Program

AGENCY: Department of Energy

ACTION: Final rule.

SUMMARY: The Department of Energy (DOE) is today publishing a final rule to implement the statutory mandate of section 3173 of the Bob Stump National Defense Authorization Act (NDAA) for Fiscal Year 2003 to establish worker safety and health regulations to govern contractor activities at DOE sites. This program codifies and enhances the worker protection program in operation when the NDAA was enacted.

EFFECTIVE DATE: This rule is effective February 9, 2007. The incorporation by reference of certain publications listed in this rule is approved by the Director of the Federal Register as of February 9,

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Introduction

This final rule implements a worker safety and health program for the Department of Energy (DOE or the Department). This program establishes the framework for a worker protection program that will reduce or prevent occupational injuries, illnesses, and accidental losses by requiring DOE contractors to provide their employees' with safe and healthful workplaces. Also, the program establishes procedures for investigating whether a requirement has been violated, for determining the nature and extent of such violation, and for imposing an

appropriate remedy. În December 2002, Congress directed DOE to promulgate regulations on worker safety and health regulations to cover contractors with Price-Anderson indemnification agreements in their contracts. Specifically, section 3173 of the National Defense Authorization Act (NDAA) amended the Atomic Energy Act (AEA) to add section 234C (codified as 42 U.S.C. 2282c), which requires DOE to promulgate worker safety and health regulations that maintain "the level of protection currently provided to * * workers." See Public Law 107-314 (December 2, 2002). These regulations are to include flexibility to tailor implementation to reflect activities and hazards associated with a particular work environment; to take into account special circumstances for facilities permanently closed or demolished, or which title is expected to be transferred; and to achieve national security missions in an efficient and timely manner (42 U.S.C. 2282c(3)). Section 234C also makes a DOE contractor with such an indemnification agreement that violates these regulations subject to civil penalties similar to the authority Congress granted to DOE in 1988 with respect to civil penalties for violations of nuclear safety regulations. Section 234C also directs DOE to insert in such contracts a clause providing for reducing contractor fees and other payments if the contractor or a contractor employee violates any regulation promulgated under section 234C, while specifying that both sanctions may not be used for the same violation.

On December 8, 2003, DOE published a notice of proposed rulemaking (NOPR) to implement section 3173 of the NDAA (68 FR 68276). The December proposal was intended to codify existing DOE practices in order to ensure the worker

safety and health regulations would give DOE workers a level of protection equivalent to that afforded them when section 3173 was enacted. Specifically, under the December proposal, a contractor would comply with either a set of requirements based primarily on the provisions of DOE Order 440.1A "Worker Protection Management for DOE Federal and Contractor Employees," March 27, 1998 (the current DOE order on worker safety and health) or a tailored set of requirements approved by DOE. The contractor would implement these requirements pursuant to a worker safety and health program approved by DOE.

On January 8, 2004, DOE held a televideo conference to allow DOE employees, DOE contractors, contractor employees, and employee representatives to become familiar with the proposal. DOE held public hearings on the proposal in Washington, DC, on January 21, 2004, and in Golden, Colorado, via televideo on February 4, 2004. In addition to the oral comments at the public hearings, DOE received approximately 50 written comments on the December proposal.

After becoming aware that the Defense Nuclear Facilities Safety Board (DNFSB), which has safety oversight responsibility with regard to DOE nuclear facilities, had concerns about the proposed rule, DOE suspended the rulemaking by publishing a notice in the Federal Register on February 27, 2004 (69 FR 9277). DOE stated in that notice that DOE would consult with the DNFSB in order to resolve its concerns, and also that it would consider views received from other stakeholders on its proposal.

As a result of its consultation with the DNFSB and consideration of other comments, DOE published a supplemental notice of proposed rulemaking (SNOPR) in the Federal Register (70 FR 3812) on January 26, 2005. The SNOPR proposed to (1) codify a minimum set of safety and health requirements with which contractors would have to comply; (2) establish a formal exemption process which would require approval by the Secretarial Officer with line management responsibility and which would provide significant involvement of the Assistant Secretary for Environment, Safety and Health; (3) delineate the role of the worker health and safety program and its relationship to integrated safety management; (4) set forth the general duties of contractors responsible for DOE workplaces; and (5) limit the scope of the regulations to contractor activities and DOE sites.

On March 23, 2005, DOE held a televideo forum to provide DOE contractors, contractor employees, and their representatives with the opportunity to ask questions and receive clarification on the provisions of the supplemental proposed rule. The public comment period for the supplemental proposal ended on April 26, 2005. During this period, DOE received 62 comment letters from private individuals, DOE contractors, other Federal agencies, and trade associations in response to the supplemental proposal. In addition, public hearings were held on March 29 and 30, 2005, in Washington, DC. Responding to a request from the Paper, Allied-Industrial, Chemical and Energy Workers International Union, DOE also held a public hearing on April 21, 2005, in Richland, Washington, via televideo.

DOE has carefully considered the comments and data from interested parties, and other information relevant to the subject of the rulemaking.

II. Legal Authority and Relationship to Other Regulatory Programs

A. Legal Authority

DOE has broad authority to regulate worker safety and health with respect to its nuclear and nonnuclear functions pursuant to the Atomic Energy Act of 1954 (AEA), 42 U.S.C. 2011 et seq.; the Energy Reorganization Act of 1974 (ERA), 42 U.S.C. 5801-5911; and the Department of Energy Organization Act (DOEOA), 42 U.S.C. 7101-7352. Specifically, the AEA authorized and directed the Atomic Energy Commission (AEC) to protect health and promote safety during the performance of activities under the AEA. See Sec. 31a.(5) of AEA, 42 U.S.C. 2051(a)(5); Sec. 161b. of AEA, 42 U.S.C 2201(b); Sec. 161i.(3) of AEA, 42 U.S.C. 2201(i)(3); and Sec. 161p. of AEA, 42 U.S.C. 2201(p). The ERA abolished the AEC and replaced it with the Nuclear Regulatory Commission (NRC), which became responsible for the licensing of commercial nuclear activities, and the Energy Research and Development Administration (ERDA), which became responsible for the other functions of the AEC under the AEA, as well as several nonnuclear functions. The ERA authorized ERDA to use the regulatory authority under the AEA to carry out its nuclear and nonnuclear function, including those functions that might become vested in ERDA in the future. See Sec. 105(a) of ERA, 42 U.S.C. 5815(a); and Sec. 107 of ERA, 42 U.S.C. 5817. The DOEOA transferred the functions and authorities of ERDA to DOE. See Sec. 301(a) of DOEOA, 42

U.S.C. 7151(a); Sec. 641 of DOEOA, 42 U.S.C. 7251; and Sec. 644 of DOEOA, 42 U.S.C. 7254.

B. Relationship to Other Regulatory Programs

DOE (like its predecessors, AEC and ERDA) has implemented this authority in a comprehensive manner by incorporating appropriate provisions on worker safety and health into the contracts under which work is performed at DOE workplaces. During the past decade, DOE has taken steps to ensure that contractual provisions on worker safety and health are tailored to reflect particular workplace environments. In particular, the "Integration of Environment, Health and Safety into Work Planning and Execution" clause set forth in the DOE procurement regulations requires DOE contractors to establish an integrated safety management system (ISMS). See 48 Code of Federal Regulations (CFR) 952.223-71 and 970.5223-1. As part of this process, a contractor must define the work to be performed, analyze the potential hazards associated with the work, and identify a set of standards and controls that are sufficient to ensure safety and health if implemented properly. The identified standards and controls are incorporated as contractual requirements through the "Laws, Regulations and DOE Directives" clause set forth in the DOE procurement regulations. See 48 CFR 970.0470-2 and 970.5204-2.

Currently DOE Order 440.1A, "Worker Protection Management for DOE Federal and Contractor Employees," establishes requirements for a worker safety and health program. A DOE contractor with DOE Order 440.1A in its contract must have a worker protection program as stipulated by the Contractor Requirements Document (CRD) that accompanies the order. DOE applies these requirements through the incorporation of the CRD into relevant DOE contracts. In accordance with the CRD, contractors must implement a written worker protection program that integrates the performance-based requirements outlined in the CRD. A series of implementation guides and technical standards are available to assist DOE contractors in developing and implementing a worker protection program that will meet the intent of the performance-based requirements.

Also, DOE contractors are required to implement a worker safety and health program that is consistent with the "Integration of Environment, Health and Safety into Work Planning and Execution" clause set forth in the DOE

procurement regulations. See 48 CFR 952,223–71, 970.5223–1.

Overview of DOE Order 440.1A. DOE Order 440.1A establishes a comprehensive worker protection program that provides the basic framework necessary for contractors to ensure the safety and health of their workforce. In short, the Order provides a well-integrated, cost-effective, performance-based program designed to ensure contractors recognize hazards, prevent accidents before they happen, and protect the lives and well-being of their employees.

Such "corporate" programs have long been recognized by private industry as the most effective and efficient means to protect worker health and safety on the job. Where applied, these programs have consistently resulted in enhanced worker protection, decreased worker's compensation premiums, increased productivity and employee morale, declines in absenteeism and employee turnover, and decreased employer liability. The Occupational Safety and Health Administration (OSHA) recognized the effectiveness of such programs in its Safety and Health Program Management Guidelines (published in 1989), which were derived from the safety and health programs of private industry firms with the best safety and health performance records. DOE Order 440.1A program requirements are organized and consistent with the four basic program elements of OSHA's Guidelines on Workplace Safety and Health Management (i.e., (1) management commitment and employee involvement, (2) worksite analysis, (3) hazard prevention and control, and (4)

DOE Order 440.1A specifically requires contractors to implement a written worker protection program that describes site-specific methods for complying with the requirements of the order; establish written policies, goals, and objectives to provide a focus for, and foster continual improvement of, their worker protection programs; and identify existing and potential workplace hazards, evaluate associated risks, and implement appropriate riskbased controls. In addition, the order establishes (1) worker rights and responsibilities that are consistent with those afforded to private industry employees through Federal regulations and (2) baseline safety and health requirements in specific technical disciplines.

The order encompasses all worker protection disciplines, including occupational safety, industrial hygiene, fire protection (worker protection

aspects only), construction safety, explosives safety, contractor occupational medical care, pressure safety, firearms safety, and motor vehicle safety. Where necessary, the order cross-references related elements of other orders—such as training, accident investigation, and safety and health reporting orders—without duplicating their respective requirements.

Overview of Integrated Safety Management (ISM). A major concept of ISM is the integration of safety awareness and good practices into all aspects of work conducted at DOE. Simply stated, work should be conducted in such a manner that protects workers and other people, and does not cause harm to the environment. Safety is an integral part of each job, not a stand-alone program.

ISM has seven guiding principles and five core functions. The seven guiding

principles of ISM are:

(1) Line management responsibility. Line management is directly responsible for the protection of the public, the workers, and the environment. As a complement to line management, the Office of Environment, Safety and Health (EH) provides safety policy, enforcement, and independent oversight functions.

(2) Clear roles and responsibilities. Clear and unambiguous lines of authority and responsibility for ensuring safety must be established and maintained at all organized levels within the Department and its contractors.

(3) Competence commensurate with the responsibility. Personnel must possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities.

(4) Balanced priorities. Resources must be effectively allocated to address safety, programmatic, and operational considerations. Protecting the public, the workers, and the environment must be a priority whenever activities are

planned and performed.

(5) Identification of safety standards and requirements. Before work is performed, the associated hazards must be evaluated and an agreed-upon set of safety standards and requirements must be established which, if properly implemented, will provide adequate assurance that the public, the workers, and the environment are protected from adverse consequences.

(6) Hazard control tailored to work being performed. Administrative and engineering controls to prevent and mitigate hazards must be tailored to the work being performed and the

associated hazards.

(7) Operations authorization. The conditions and requirements to be satisfied for operations to be initiated and conducted must be clearly established and agreed-upon.

The five core functions of ISM are: (1) Define the scope of work; (2) identify and analyze hazards associated with the work; (3) develop and implement hazard controls; (4) perform work within controls; and (5) provide feedback on adequacy of controls and continue to improve safety management.

Consistency with DOE Order 440.1A and Integrated System Management. This final rule builds on existing contract practices and processes to achieve safe and healthful workplaces. The rule is intended to be complementary to DOE Order 440.1A and ISM. Accordingly, DOE expects contractors to comply with the requirements of this rule in a manner that takes advantage of work already done as part of DOE Order 440.1A and ISM and to minimize duplicative or otherwise unnecessary work.

As a general matter, DOE expects that, if contractors at a DOE site have fulfilled their contractual responsibilities for DOE Order 440.1A and ISM properly, little, if any, additional work will be necessary to implement the written worker safety and health program required by this regulation. Contractors should undertake new analyses and develop new documents only to the extent existing analyses and documents are not sufficient for purposes of this regulation. In determining the allowability of costs incurred by contractors to develop approved worker safety and health programs, the Department will consider whether the amount and nature of a contractor's expenditures are necessary and reasonable in light of the fact that the contractor has an approved ISM system in place.

III. Overview of the Final Rule

This final rule codifies the Department's worker protection program requirements established in DOE Order 440.1A, "Worker Protection Management for DOE Federal and Contractor Employees." Consistent with the intent of Congress, DOE Order 440.1A forms the basis for the rule's substantive requirements. The Conference Committee for the NDAA recognized that contractors currently operate under this order, "which provides an adequate level of safety." (Conference Report 107–772, November 12, 2002, at 797.)

The Department has structured the final rule this way for three main reasons: (1) To take advantage of

existing and effective comprehensive worker protection programs that have been implemented by contractors at DOE sites; (2) to minimize the burden on DOE contractors by clarifying that contractors need not establish redundant worker protection programs to comply with the proposed rule; and (3) to build on a successful program, given that DOE Order 440.1A has been successfully and effectively implemented by DOE contractors for close to a decade. DOE believes that basing this rule on DOE Order 440.1A is consistent with section 234C of the NDAA which directs the Department to promulgate regulations which provide a level of protection that is "substantially equivalent to the level of protection currently provided to" these workers (41 U.S.C. 2282c(a)(1)). Consistent with DOE Order 440.1A, this final rule establishes requirements for an effective worker safety and health program that will reduce or prevent injuries, illnesses, and accidental losses by providing DOE contractors and their workers with a safe and healthful workplace.

In basing the final rule on DOE Order 440.1A, DOE intends to take advantage of the existing series of implementation guides developed to assist DOE contractors in implementing the provisions of DOE Order 440.1A. Shortly after publication of this rule, DOE expects to publish updated implementation guides revised to specifically address the provisions of the final rule. Consistent with their use under DOE Order 440.1A, these updated guides will provide supplemental information and describe acceptable methods for implementing the performance-based requirements of the rule. DOE contractors are free to use the guidance provided in these nonmandatory documents or to develop and implement their own unique methods for compliance, provided that these methods afford workers a level of protection equal to or greater than that which would satisfy the rule's requirements. DOE believes that the availability of these updated guides will also further assist in ensuring a seamless transition from coverage under DOE Order 440.1A to regulation under 10 CFR part 851.

To ensure appropriate enforcement of the worker safety and health program the rule also establishes requirements and procedures for investigating the nature and extent of a violation, determining whether a violation has occurred, and imposing an appropriate remedy.

The Department has made changes in this final rule after considering the

concerns of the commenters with the supplemental notice of proposed rulemaking published in the **Federal Register** on January 26, 2005 (70 FR 3812). The principal changes are as follows:

(1) The final rule codifies key worker safety and health standards from DOE Order 440.1A with which contractors

must comply.

(2) The final rule establishes a formal variance process that requires approval by the Under Secretary with line management responsibility for the contractor that is requesting the variance, after considering the recommendations of the Assistant Secretary for Environment Safety and Health. The rule adds detailed procedures in (Subpart D) whereby a contractor can obtain a variance from a specific worker safety and health standard or a portion of the standard. These procedures will ensure that variances are only granted where warranted and where an equivalent level of protection is provided through other means.

(3) The final rule establishes updates to functional areas. These updates are intended to ensure the function areas more closely reflect the requirements of DOE Order 440.1A.

(4) The final rule recognizes the value of a central technical authority and the importance of senior DOE management involvement. The Assistant Secretary for Environment, Safety and Health has played a central role in the development of the final rule and will continue to play a central role in its implementation and enforcement. In addition to providing technical guidance and assistance, the Assistant Secretary is responsible for recommending to the Under Secretary whether to grant or deny a variance. The Office of Price-Anderson Enforcement, which reports to the Assistant Secretary, is responsible for investigating potential violations and deciding whether to take certain enforcement actions against the contractor, including the imposition of civil penalties for all facilities. The final rule makes the Under Secretary with line management responsibility for a contractor responsible for deciding whether to grant a variance to the

The provisions of the rule are presented in five main subparts. Subpart A describes the scope, purpose, and

applicability of the rule, defines terms that are critical to the rule's application and implementation, and establishes contractor responsibilities for executing the rule. Subpart B establishes program requirements to develop and maintain a worker safety and health program and to perform safety and health activities in accordance with the approved program. Subpart C establishes provisions that focus on management responsibilities and worker rights, protecting the worker from the effects of safety and health hazards by requiring hazard identification and assessment, hazard prevention and abatement, specific regulatory requirements, functional areas provisions, recordkeeping and program evaluations. Subpart D establishes the criteria and procedures for requesting a variance. Subpart E establishes the enforcement process.

To ensure that the Department captured the entire list of contractor requirements specified in DOE Order 440.1A, the Department developed a "crosswalk" of the requirements in the current DOE order and the final provisions of 10 CFR part 851. See Table 1.

TABLE 1.—CROSSWALK OF DOE ORDER 4401.1A REQUIREMENTS AND 10 CFR 851 FINAL RULE REQUIREMENTS

DOE order 440.1A requirements	Corresponding 10 CFR 851 provisions			
1. Objective	.1 Purpose .1 Scope			
3.c. Exclusions	.2 Exclusions			
Attachment 2—Contractor Requirements Document				
The contractor shall comply with the requirements below; however, the requirements for the specific functional areas that are addressed in paragraphs 14 through 22 apply only if the contractor is involved in these activities.	.24 Functional areas.			
1. Implement a written worker protection program that:	.11(a), .12 Preparation and submission of worker safety and health program Implementation.			
1.a. Provide a place of employment free from recognized hazards that are causing or are likely to cause death or serious physical harm to employees; and.	.10(a)(1) General requirements.			
1.b. Integrates all requirements contained in this attachment and other related site-specific worker protection activities.	.11(a)(3) (ii) Preparation and submission of worker safety and health program.			
Establish written policy, goals, and objectives for the worker protection program.	.20(a)(1) Management responsibilities.			
3. Use qualified worker protection staff to direct and manage the worker protection program.	.20(a)(2) Management responsibilities.			
 Assign worker protection responsibilities, evaluate personnel per- formance, and hold personnel accountable for worker protection per- formance. 	.20(a)(3) Management responsibilities.			
Encourage employee involvement in the development of program goals, objective, and performance measures and in the identification and control of hazards in the workplace.	.20(a)(4) Management responsibilities.			
6. Provide workers the right, without reprisal, to:	.20(a)(6) Management responsibilities.			
6.a. Accompany DOE worker protection personnel during workplace in- spections;.	.20(b)(5) Worker rights.			
6.b. Participate in activities provided for herein on official time;	, , , , , , , , , , , , , , , , , , ,			
6.c. Express concerns related to worker protection;	.20(b)(7) Worker rights.			

Table 1.—Crosswalk of DOE Order 4401.1A Requirements and 10 CFR 851 Final Rule Requirements— Continued

DOE order 440.1A requirements	Corresponding 10 CFR 851 provisions
6.d. Decline to perform an assigned task because of a reasonable be-	.20(b)(8) Worker rights.
lief that, under the circumstances, the task poses an imminent risk of death or serious bodily harm to that individual, coupled with a reasonable belief that there is insufficient time to seek effective redress through the normal hazard reporting and abatement procedures established in accordance with the requirements herein;	.20(b)(o) Worker rights.
6e. Have access to DOE worker protection publications, DOE-pre- scribed standards, and the organization's own protection standards or procedures applicable to the workplace;.	.20(b)(2) (i)–(ii) Worker rights.
6.f. Observe monitoring or measuring of hazardous agents and have access to the results of exposure monitoring;.	.20(b)(4) Worker rights.
6.g. Be notified when monitoring results indicate they were over- exposed to hazardous materials; and.	.20(b)(3) Worker rights
6.h. Receive results of inspections and accident investigations upon request.	.20(b)(6) Worker rights
7. Implement procedures to allow workers, through their supervisors, to stop work when they discover employee exposures to imminent dan- ger conditions or other serious hazards. The procedure shall ensure that any stop work authority is exercised in a justifiable and respon- sible manner.	.20(a)(9) Management responsibilities.
8. Inform workers of their rights and responsibilities by appropriate means, including posting the appropriate DOE Worker Protection Poster in the workplace where it is accessible to all workers.	.20(a)(10) Management responsibilities.
 Identify existing and potential workplace hazards and evaluate the risk of associated worker injury and illness. 	.21(a) Hazard identification and assessment.
9.a. Analyze or review: (1) Designs for new facilities and modifications to existing facilities and equipment; (2) Operations and procedures; and (3) Equipment, product and service needs.	.21(a)(4)–(5) Hazard identification and assessment.
9.b. Assess worker exposure to chemical, physical, biological, or ergonomic hazards through appropriate workplace monitoring (including personal, area, wipe, and bulk sampling); biological monitoring; and observation. Monitoring results shall be recorded [Documentation shall describe the tasks and locations where monitoring occurred, identify workers monitored or represented by the monitoring, and identify the sampling methods and durations, control measures in place during monitoring (including the use of personal protective equipment), and any other factors that may have affected sampling results.].	.21(a)(1)-(3) Hazard identification and assessment [Moved to guidance document.]
9.c. Evaluate workplaces and activities (accomplished routinely by workers, supervisors, and managers and periodically by qualified worker protection professionals).	.21(a)(5) Hazard identification and assessment.
 Report and investigate accidents, injuries and illnesses and analyze related data for trends and lessons learned (reference DOE Order 210.1). 	.26(d) Recordkeeping and reporting.
 Implement a hazard control prevention/abatement process to ensure that all identified hazards are managed through final abatement or control. 	.22(a) Hazard prevention and abatement.
10.a. For hazards identified either in the facility design or during the development of procedures, control shall be incorporated in the appropriate facility design or procedure.	.22(a)(1) Hazard prevention and abatement.
10.b. For existing hazards identified in the workplace, abatement actions prioritized according to risk to the worker shall be promptly implemented, interim protective measures shall be implemented pending final abatement, and workers shall be protected immediately from imminent danger conditions.	.22(a)(2) (i), (ii), & (iii) Hazard prevention and abatement.
10.c. Hazards shall be addressed when selecting or purchasing equipment, products, and services.	.22(c) Hazard prevention and abatement.
10.d. Hazard control methods shall be selected based on the following hierarchy: (1) Engineering control (2) Work practices and administra- tive controls that limit worker exposure (3) Personal protective equip- ment.	.22(b)(2)–(4) Hazard prevention and abatement.
11. Provide workers, supervisors, managers, visitors, and worker protection professionals with worker protection training.	.25 Information and training.
12. Comply with the following worker protection requirements:	.23(a) Safety and health standards23(a)(3) Safety and health standards.
12.b. Title 29 CFR, Part 1915, "Shipyard Employment"	.23(a)(4) Safety and health standards23(a)(5) Safety and health standards23(a)(6) Safety and health standards.
Longshoring".	

TABLE 1.—CROSSWALK OF DOE ORDER 4401.1A REQUIREMENTS AND 10 CFR 851 FINAL RULE REQUIREMENTS—Continued

DOE order 440.1A requirements	Corresponding 10 CFR 851 provisions		
12.e. Title 29 CFR, Part 1926, "Safety and Health Regulations for Construction".	.23(a)(7) Safety and health standards.		
12.f. Title 29 CFR, Part 1928, "Occupational Safety and Health Standards for Agriculture".	.23(a)(8) Safety and health standards.		
12.g. American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices" when the ACGIH Threshold Limit Values (TLVs) are lower (more protective) than permissible exposure limits in 29 CFR 1910. When the ACGIH TLVs are used as exposure limits, contractors must nonetheless comply with the other provisions of any applicable expanded health standard found in 29 CFR 1910.	.23(a)(9) Safety and health standards.		
12.h. American National Standards Institute (ANSI) Z136.1, "Safe Use of Lasers".	.23(a)(11) Safety and health standards.		
12.i. ANSI Z88.2, "American National Standard Practices for Respiratory Protection".	.23(a)(10) Safety and health standards.		
12.j. ANSI Z49.1, "Safety in Welding, Cutting and Allied Processes," sections 4.3 and E4.3 (of the 1994 edition or equivalent sections of subsequent editions).	.23(a)(12) Safety and health standards.		
12.k. National Fire Protection Association (NFPA) 70, "National Electrical Codes".	.23(a)(14) Safety and health standards.		
 12.I. NFPA 70E, "Electrical Safety in the Workplace"	.23(a)(15) Safety and health standards.		
14. Construction Safety	Appendix A section 1.		
15. Fire Protection	Appendix A section 2.		
16. Firearms Safety	Appendix A section 5.		
17. Explosives Safety	Appendix A section 3.		
18. Industrial Hygiene	Appendix A section 6.		
19. Occupational Medicine	Appendix A section 8.		
20. Pressure Safety	Appendix A section 4.		
Motor Vehicle Safety	Appendix A section 9. Section moved to DOE Order 414.1C, Quality Assurance (June 17, 2005).		

Many provisions have been reformatted and renumbered in this final rule, creating differences between it and the published supplemental notice of proposed rulemaking. To aid in tracking the provisions of both documents, the Department has included a table comparing sections in

the final rule to the corresponding sections in the supplemental notice of proposed rulemaking. See Table 2.

TABLE 2.—COMPARISON OF FINAL 10 CFR 851 RULE SECTIONS WITH THE SUPPLEMENTAL NOTICE OF PROPOSED RULEMAKING (SNOPR)

	Final rule section		Corresponding supplemental proposal section		
	PART 850—Chronic Beryllium Disease Prevention Program				
Author 850.1 850.4	ity Scope Enforcement	Notice	of Proposed Rulemaking December 8, 2003, N/A. of Proposed Rulemaking December 8, 2003, N/A. of Proposed Rulemaking December 8, 2003, N/A.		
	PART 851—Worker Safety and Health Program				
	Subpart A—General Provisions		Subpart A—General Provisions		
851.1	Scope and purpose	851.1 851.2	Scope and exclusions. Purpose.		
851.2	Exclusions	851.1	Scope and exclusions.		
851.3	Definitions	851.3	Definitions.		
851.4	Compliance Order	851.5	Compliance Order.		
851.5	Enforcement	851.9	Enforcement.		
851.6	Petitions for generally applicable rulemaking	851.6	Interpretations.		
851.7	Requests for a binding interpretive ruling	851.6	Interpretations.		
851.8	Informal requests for information	851.6	Interpretations.		

TABLE 2.—COMPARISON OF FINAL 10 CFR 851 RULE SECTIONS WITH THE SUPPLEMENTAL NOTICE OF PROPOSED RULEMAKING (SNOPR)—Continued

Final rule section	Corresponding supplemental proposal section		
Subpart B—Program Requirements	Subpart A—General Provisions Subpart B—Worker Safety and Health Program		
851.10 General requirements	 851.4 General rule. 851.100 Worker safety and health program. 851.101 Approval and maintenance of the worker safety and health program. 851.100 Worker safety and health program. 		
851.13 Compliance	851.8 Compliance.		
Subpart C—Specific Program Requirements	Subpart A—General Provisions Subpart B—Worker Safety and Health Program Subpart C—Safety and Health Requirements		
851.20 Management responsibilities and worker rights and responsibilities.	851.10 Worker rights.		
851.21 Hazard identification and assessment 851.22 Hazard prevention and abatement 851.23 Workplace safety and health standards 851.24 Functional areas 851.25 Training and information 851.26 Recordkeeping and reporting 851.27 Incorporation by reference.	851.100 Worker safety and health program. 851.200 Worker safety and health requirements. 851.201 Worker safety and health standards. 851.200 Worker safety and health requirements. 851.100 Worker safety and health program.		
Subpart D—Variances	Subpart D—Exemption Relief		
851.30 Consideration of variances 851.31 Variance process 851.32 Action on variance request 851.33 Terms and conditions 851.34 Requests for conferences.	851.301 Exemption criteria. 851.300 Exemptions.		
Subpart E—Enforcement Process	Subpart E—Enforcement Process		
851.40 Investigations and inspections	851.402 Preliminary notice of violation. 851.403 Final notice of violation. 851.404 Administrative appeal.		
APPENDIX A TO PART 851—WORKER SAFETY AND HEALTH FUNCTIONAL AREAS.	Subpart C—Safety and Health Requirements (Sections 851.202 to 851.210)		
A.1 Construction safety A.2 Fire protection A.3 Explosives safety A.4 Pressure safety A.5 Firearms safety A.6 Industrial hygiene A.7 Biological safety A.8 Occupational medicine A.9 Motor vehicle safety A.10 Electrical safety. A.11 Nanotechnology—Reserved. A.12 Workplace Violence Prevention—Reserved.	851.203 Fire protection. 851.204 Explosives safety. 851.205 Pressure retaining component safety. 851.208 Firearms safety. 851.209 Industrial hygiene. 851.207 Biological safety. 851.210 Occupational medicine.		
APPENDIX B TO PART 851—GENERAL STATEMENT OF ENFORCEMENT POLICY	APPENDIX A TO PART 851—GENERAL STATEMENT OF ENFORCEMENT POLICY		

IV. Section-by-Section Discussion of Comments and Rule Provisions

This section of the Supplementary Information responds to significant comments on specific proposed rule provisions. It contains explanatory material for some final rule provisions in order to provide interpretive guidance to DOE contractors that must comply with this rule. All substantive changes from the supplemental notice of proposed rulemaking are explained in

this section. However, some nonsubstantive changes, such as renumbering of paragraphs and minor changes clarifying the meanings of rule provisions are not discussed. DOE has determined that the requirements set forth in this rule are those which are necessary to provide a safe and healthful workplace for DOE contractors and their workers.

The majority of the comments received during the public comment period addressed specific provisions or subparts (e.g., scope and exclusions, enforcement process, program requirements, exemption process, and consensus standards) of the supplemental proposed rule. Each of these comments is discussed in detail below in the discussion of the corresponding section of the rule.

Several commenters, however, expressed more general concerns regarding the entire proposed rule. For instance, a few commenters (Exs. 20, 27, 48) expressed concern regarding a perceived lack of detail in the proposed rule. One of these commenter (Ex. 20) felt that terms such as "reasonable," "any," "all," "significant," "adequate," "near miss," "potential," "comprehensive," and "general" used throughout the rule were too subjective to ensure consistency in contractor programs and enforcement. Another commenter (Exs. 48) believed that the proposed rule was not sufficiently developed and many processes and required guidance materials have either not yet been developed or have not been adequately described. This commenter also felt that the proposed regulation as currently written would represent a shift in safety emphasis from the positive influence, as described by the Integrated Safety Management System (ISMS), to a negative, enforcementbased culture. The commenter recommended that DOE consult with safety and health professionals within DOE, in other government agencies such as OSHA, and in private industry when preparing the final rule. The third commenter (Ex. 27) argued that the "level of protection" required under section 3173 of the NDAA must be defined in the rule to allow contractor compliance.

DOE has carefully reviewed the rule in light of these comments and other more specific comments received during the public comment period and has attempted to address those requesting clarification or further detail through either revisions to the text of the final rule or through clarification in this preamble discussion. DOE also intends to publish appropriate guidance materials to further assist contractors with implementation. DOE notes that this final rule is the result of extensive coordination within the DOE safety and health community and the careful consideration of all comments received

during the pubic comment period including those comments received from health and safety professionals from other organizations.

Two commenters (Ex. 44, 60) urged DOE to begin the process of staffing, training, and setting forth resource requirements in order to implement this rule in a timely manner. DOE notes, however, that the rule is based largely on the provisions of DOE Order 440.1A. As a result, existing staff within DOE will be capable of performing Departmental actions necessary to implement the rule.

One commenter (Ex. 37) asserted that the health and safety framework established under the rule is unlike the health and safety provisions applicable to all other facilities in the country that are subject to OSHA jurisdiction. This commenter felt that such a discrepancy would discourage talented health and safety professionals from working at DOE facilities because of the prospect of learning a regulatory scheme that does not apply elsewhere. The commenter argued that "the best and the brightest" health and safety professionals would be hoping to acquire transferable skills. DOE disagrees with this commenter. The provisions of the final rule stem directly from DOE Order 440.1A which was modeled after OSHA's Safety and Health Program Management Guidelines. OSHA derived these guidelines from the safety and health program of private industry firms with the best safety and health performance records. OSHA encourages all employers to implement these guidelines and recognizes the accomplishments of the best performers in safety and health through its Voluntary Protection Program (VPP). As a result, DOE believes that the safety and health program required under this rule will continue to promote safety and health excellence among DOE contractors and will in fact attract "well qualified" safety and health professionals.

One commenter (Ex. 6) expressed concern that the proposed rule did not respond to past Inspector General (IG) and Government Accountability Office (GAO) reports recommending that DOE National Laboratories transition to external OSHA regulation. The commenter recommended that DOE compare the proposed rule with previous external IG and GAO reports regarding regulation of DOE National Laboratories. This same commenter also asserted that there is a need for a centralized enforcement (compliance) agency, and suggested that DOE follow the Great Britain model and combine the Environmental Protection Agency

(EPA), OSHA, DOE, Nuclear Regulatory Commission (NRC), Defense Nuclear Facilities Safety Board (DNFSB), Price-Anderson Amendment Act (PAAA), DOE's Office of Independent Oversight and Performance Assurance, etc., compliance groups to form an "Agency of Oversight and Compliance" to provide coordinated, synergistic, and comprehensive oversight. Both suggestions, however, go beyond the statutory mandate of section 3173 of the NDAA and the scope of this rulemaking effort. Moreover, the Department lacks the authority and jurisdiction to implement these suggestions.

A. Subpart A—General Provisions

Section 851.1—Scope and Purpose

The worker safety and health program required by this rule establishes the framework for a comprehensive program that will reduce or prevent injuries, illnesses, and accidental losses by providing DOE contractors and their workers with a safe and healthful workplace. DOE has structured the rule this way for two main reasons: (1) To take advantage of existing and effective comprehensive worker protection programs that have been implemented at DOE facilities and (2) to minimize the burden on contractors by clarifying that they need not establish redundant worker protection programs to protect workers from occupational safety and health hazards.

Section 851.1(a) establishes the scope of this regulation. The worker safety and health requirements in this part govern the conduct of activities by DOE contractors at DOE sites. As clarified in the definition of "contractor" (section 851.3), DOE's intent is that the contractors covered under this rule include any entity under contract to perform activities at a DOE site in furtherance of a DOE mission, including subcontractors at any tier.

One commenter (Ex. 6) suggested the rule should apply only to defense nuclear facilities. DOE notes that the legislation, section 3173 of the NDAA is not limited to defense nuclear facilities.

A few commenters (Exs. 28, 45, 51) observed that section 3173 of the NDAA only applies to contractors covered by agreements of indemnification under section 170d. of the AEA. The commenters suggested that part 851 should not exceed this statutory mandate and should only apply to such contractors. Presumably since "contractual enforcement under proposed rule section 851.4(b) would only be available against prime contractors and not subcontractors," these commenters argued that, "the rule

should only apply to contractors covered by agreement of indemnification," amending the Nuclear Hazards Indemnity Agreement (NHIA) in order to put contractors on notice of civil and contract penalties for violation of DOE worker safety and health rules. Although DOE recognizes that section 234C of the AEA only mandates contractors covered by agreements of indemnification, DOE has decided to cover all of its contractors to ensure consistency in the protection of workers throughout the DOE complex. As described in Section II of this Supplementary Information, DOE has broad authority to regulate worker safety and health with respect to nuclear and nonnuclear functions, and it is not limited to the authority in section 234C. While the regulations cover all contractors, the authority to impose civil penalties is limited to those covered by agreements of indemnity.

Several commenters (Exs. 39, 49, 61) questioned who would be held responsible for worker safety and health on DOE-leased sites in those areas outside the control of the contractor but where the contractor may perform work. One commenter (Ex. 49) suggested that under the rule, facility worker safety and health requirements should not apply to leased facilities to the extent they are regulated under State or local regulations. However, the commenter argued, the rule's program requirements should continue to apply to DOE contractors at these leased facilities. DOE intends for all contractors on a work site to establish and maintain a worker safety and health program for the workplaces for which each contractor is responsible as required in final rule section 851.11(a)(2)(ii). In addition, contractors on a site must coordinate with other contractors responsible for work at the covered workplaces to ensure that there are clear roles, responsibilities and procedures that will ensure the safety and health of workers on multi-contractor workplaces. DOE further intends to develop **Enforcement Guidance Supplements** based in part on OSHA's multiemployer worksite policies to guide enforcement efforts on multi-employer worksites. DOE notes that final rule section 851.1(a) clarifies that the rule applies to the conduct of contractor activities at DOE sites, and section 851.3 clarifies that DOE sites include not only locations leased or owned by DOE, but also locations controlled by DOE through the exercise of its regulatory authority.

Two commenters (Exs. 15, 37) expressed concern over application of the rule to subcontractors and favored

deleting "subcontractors" from the applicability or reducing the impact of the rule on subcontractors.

Subcontractors must implement the requirements of the rule for covered workplaces for which they are responsible and, in other situations, act consistently with applicable regulations and worker safety and health standards.

One commenter (Ex. 39) suggested that the rule could be interpreted as applying to employees of DOE tenant organizations performing work on a DOE site. The commenter observed that contractors cannot impose or enforce the worker safety and health requirements of this rule on tenants if they do not maintain a contractual relationship with them. DOE does not intend the rule to cover persons who are not performing work in furtherance of a DOE mission. To clarify this intent, DOE has revised the definitions of "covered workplace" and "contractor" to limit their scope to situations in which work is being performed in furtherance of a DOE mission. Thus the rule does not apply to a person restocking a vending machine. Likewise, the rule does not apply to DOE tenant organizations, except to the extent it had a contractual obligation to perform work in furtherance of a DOE mission.

One commenter (Ex. 39) sought clarification of whether "work done on public or private property off the reservation by a DOE Prime Contractor" is covered under the rule. The rule applies to work performed at a DOE site. DOE has clarified in the definition of "DOE site" to include a location that DOE controls through exercise of its AEA authority, even if DOE does not own or lease the location. If DOE does not exercise control under the AEA section 4(b)(2) exemption of the OSHA Act would not apply and OSHA would be responsible for regulating safety and health. DOE has also clarified the scope section to make clear that off-site transportation is not covered by the

One commenter (Ex. 29) sought clarification of whether the rule would apply to Federal employees at a covered worksite. DOE notes that the rule will not apply to Federal employees since Federal employees are covered under OSHA standards at 29 CFR 1960 (Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters) as well as Executive Order 12196 (Occupational Safety and Health Programs for Federal Employees). Another commenter (Ex. 20) suggested the rule include provisions for resolving conflicts between Part 851 and the Federal occupational safety and health program.

DOE sees no cause for concern, however, since both programs stem from DOE Order 440.1A, and there has been no need for such conflict resolution provisions under that order. DOE believes both programs are consistent with and complementary to each other.

One commenter (Ex. 29) raised the question of whether DOE would consider "exempting" management and operating contractors from civil penalties for violations committed by other site contractors. DOE notes that the rule requires identification, evaluation and abatement of identified hazards, so that contractors are aware of the hazards in the covered workplace and respond appropriately. In addition, future enforcement guidance supplements will provide voluntary reporting thresholds. If the Office of Price-Anderson Enforcement becomes involved with a specific noncompliance, they will evaluate the circumstances surrounding the noncompliance, determine responsibility, and take appropriate enforcement actions in accordance with provisions of this rule. The process of discovery and evaluation of evidence has been used in the enforcement of nuclear safety requirements and is conducted in accordance with the rule of law. As a result, there is no need for exemptions from penalties as requested by the commenter.

One commenter (Ex. 40) recommended broadening the applicability of the rule to include construction workers employed by subcontractors that come onto DOE sites for limited periods of time to perform maintenance, renovation, repair and demolition tasks. DOE notes that Appendix A section 1, "Construction Safety" covers construction contractors (including subcontractors) and their employees in situations suggested by exhibit 40.

Section 851.1(b) establishes the purpose of the rule, which is to delineate the requirements and procedures associated with the worker safety and health program. Section 851.1(b)(1) clarifies that the rule establishes the requirements for an effective worker safety and health program, which will reduce or prevent injuries, illnesses, and accidental losses by providing workers with a safe and healthful workplace.

Two commenters (Exs. 36, 42) contended that the purpose of the proposed rule—is to provide "reasonable assurance" that workers are "adequately protected" from identified hazards—is distinctly different from supplemental proposed rule section 851.4(a) which requires a contractor to

"ensure" that the workplace is "free from" recognized hazards. The commenters expressed concern that the phrase "free from recognized hazards" differed from "adequate protection," and favored use of the term "reasonable assurance" as an appropriate and achievable standard. DOE notes, the reference to "adequately protected" is to emphasize that the rule is intended to fulfill DOE's responsibilities under the AEA. The reference to "reasonable assurance" is to identify the standard to be achieved. In revising the rule, DOE has moved these references from the section on purpose to the section on the general rule and specifically to the subsection on the worker safety and health program.

One commenter (Ex. 16) noted that the phrase "a contractor responsible for a covered workplace," which occurs in several proposed rule sections, could result in confusion on sites where DOE uses multiple contractors. The commenter recommended replacing the phrase with the following language, "a contractor responsible for activities in a covered workplace." DOE acknowledges the commenter's concern. The purpose section is revised in the final rule and no longer makes reference to "a contractor responsible for a covered workplace." DOE also notes that applicability of the rule is defined under section 851.1(a), which clarifies that the final rule applies to the conduct of contractor activities at DOE sites.

Two other commenters (Exs. 39, 49) also expressed concern about the reference in supplemental proposed rule section 851.2(a) to a "covered workplace." The commenters noted that the term was not defined, leaving readers to assume that it refers to DOE facilities not excluded from the scope of the rule. One of the commenters (Ex. 49) suggested replacing the term "covered workplace" with "DOE site" since the supplemental proposed rule did not include a definition for "covered workplace." DOE has responded to these comments by including a definition of the term "covered workplace" in final rule section 851.3.

One commenter (Ex. 27) pointed out that while supplemental proposed rule section 851.2(a) made no distinction in the severity of hazards covered by the rule, supplemental proposed rule section 851.4 included references to both "hazards causing or likely to cause serious bodily harm" and "adequate protection from hazards identified in the workplace." As noted previously, the rule is intended to fulfill DOE's responsibility under the AEA to ensure adequate protection from all workplace hazards. The rule also is intended to

achieve the objectives in the OSHA Act and DOE Order 440.1 to have workplaces free from hazards causing or likely to cause serious bodily harm or death. DOE views these objectives as complementary and has rewritten the general rule to clearly identify both objectives.

Section 851.1(b)(2) clarifies that the rule establishes appropriate provisions for investigating the nature and extent of a violation of the requirements, for determining whether a violation of a requirement has occurred, and for imposing an appropriate remedy. DOE received no comments on the corresponding provision of the supplemental proposed rule during the public comment period.

Section 851.2—Exclusions

As in the supplemental proposal, section 851.2 continues to emphasize that these regulations apply to activities performed by DOE contractors at DOE sites. Two commenters (Exs.13, 39) sought clarification that transportation was not covered under this rule. As discussed previously, "scope" section (851.1) of the final rule has been modified to make it clear that transportation to or from a DOE site is not covered by the rule.

Section 4(b)(1) of the Occupational Safety and Health (OSH) Act (29 U.S.C. 651 et seq.) provides that OSHA regulations do not apply where another federal agency exercises its statutory authority to prescribe safety and health standards and requirements. DOE currently exercises its statutory authority broadly throughout the DOE complex to provide safe and healthful workplaces. In a few cases, however, DOE has elected not to exercise its authority and to defer to regulation by OSHA under the OSH Act. Final rule section 851.2(a)(1) continues the status quo by excluding from coverage those facilities regulated by OSHA. The OSHA-regulated facilities are: Western Area Power Administration; Southwestern Power Administration: Southeastern Power Administration; Bonneville Power Administration; National Energy Technology Laboratory (NETL), Morgantown, West Virginia; National Energy Technology Laboratory (NETL), Pittsburgh, Pennsylvania; Strategic Petroleum Reserve (SPR); National Petroleum Technology Office; Albany Research Center; Naval Petroleum and Oil Shale Reserves in Colorado, Utah, & Wyoming; and Naval Petroleum Reserves in California. See 65 FR 41492 (July 5, 2000). Work performed on such sites for DOE by DOE contractors, however, would be subject to the applicable contract

provisions outlined in the specified contract.

DOE received numerous comments on the exclusion clause for work conducted at OSHA-regulated DOE sites. Several commenters (Exs. 15, 16, 25, 29, 42, 49) proposed that facilities transferred to OSHA jurisdiction in the future should also be covered under the OSHA exclusion of the rule. DOE acknowledges the commenters recommendation and has reworded this provision in the final rule to clarify that the rule does not apply to work at a DOE site that is regulated by OSHA (i.e., as soon as a site is transferred to OSHA, work on that site no longer falls within the scope of the rule).

One commenter (Ex. 5) questioned the appropriateness of the OSHA exclusion and pointed out that the exclusion of contractors regulated by OSHA was "inherently contradictory," and asserted that "DOE's subcontractors have flowdown of PAAA liability protection when they need to work in a nuclear facility. Additionally DOE subcontractors are the responsibility of the prime contractor (per contract) but maintain their own OSHA 300 log because they are required to comply with OSHA regulations (per the industry in which they work, not because they are working at a DOE site)." DOE disagrees. OSHA's jurisdiction over subcontractor work on a DOE site is not based on the other types of workplaces or the industry in which the subcontractor works. Rather, OSHA has jurisdiction only if DOE declines to exercise its statutory authority.

Two commenters (Exs. 36, 29) sought clarification on whether privatelyowned or—leased facilities operated by contractors under a DOE contract and otherwise subject to state occupational safety and health regulation are excluded from the rule. One commenter (Ex. 29) specifically requested DOE to clarify if the exclusion applied to sites regulated by State OSHA. DOE notes that the exclusion only applies to regulation by OSHA. However, DOE notes that a location not owned or leased by DOE can be a DOE site only if DOE exercises regulatory control over the location. This is consistent with DOE's current practice. For example, some operations of Nevada Test Site contractors are not conducted on the Mercury Site, which is owned by DOE. DOE operations of these contractors conducted off the Mercury site are subject to DOE nuclear safety requirements. Part 851 will be applied in the same manner.

One commenter (Ex. 19) sought clarification from DOE that the DOE

Mixed Oxide Fuel Fabrication Facility (MFFF) would not be subject to the rule because, section 3134(c) of the Strom Thurmond National Defense Authorization Act for Fiscal Year 1999 mandates that OSHA regulate the MFFF. The commenter cited part of section 3134(c) which states that "any activities carried out under a license required pursuant to section 202(5) of the Energy Reorganization Act of 1974 (42 U.S.C. 5842) * * * shall be subject to regulation under the Occupational Safety and Health Act of 1970." The commenter requested a specific statement that the rule does not apply to a DOE site "to the extent that facilities or activities on such site are subject to licensing pursuant to section 202(5) of the Energy Reorganization Act of 1974, as amended." DOE agrees that activities undertaken pursuant to a NRC license for the MFFF are subject to OSHA regulation to that extent. DOE notes that the exact scope of such activities can only be determined by looking at the terms of the license granted by NRC. DOE further notes that the treatment of the MFFF is not the general practice with respect to DOE facilities licensed by NRC. Since NRC does not regulate non-radiological worker safety and health matters, DOE regulates these matters at DOE facilities subject to NRC licensing and thus preempts regulation by OSHA.

Section 234C of the AEA explicitly excludes activities conducted under the authority of the Director, Naval Nuclear Propulsion, pursuant to Executive Order 12344, as set forth in Public Law 106–65. Accordingly, section 851.2(a)(2) excludes workplaces regulated by the Director, Naval Nuclear Propulsion. DOE received no comments on this provision during the public comment

period.

Section 851.2(b) provides that radiological hazards or nuclear explosive operations are not covered by Part 851 to the extent that they are regulated by the existing requirements on nuclear safety and radiological protection set forth in 10 CFR Parts 20, 820, 830, and 835. These existing rules already deal with radiological hazards and nuclear explosives in a comprehensive manner through methods such as the Quality Assurance Program Plan, the Safety Basis, the Documented Safety Analysis, the Radiation Protection Program Plan, and the Nuclear Explosive and Weapons Surety Program. This regulation is intended to complement the nuclear safety requirements. Personnel responsible for implementing worker protection and nuclear safety requirements are expected to coordinate and cooperate in instances where the requirements overlap. The two sets of requirements should be integrated and applied in a manner that guards against unintended results and provides reasonable assurance of adequate worker protection.

Numerous commenters (Exs. 48, 13, 16, 29, 31, 36, 39, 47, 49) pointed out that the exclusion of radiological hazards contained in this provision was not consistent with other sections of the supplemental proposed rule, which included the term "radiological hazards" in describing certain rule provisions. Inclusion of radiological hazards was intended to stress the need to examine hazards in a wholistic context rather than in isolation. To avoid confusion. DOE has removed the term, but this should not be interpreted as negating the need to analyze hazards together so that controls do not produce unintended consequences. This is the essence of integrated safety management which is emphasized in section 851.13(b). One commenter (Ex. 28) observed that radiological hazards are "inextricably intertwined with physical, chemical, and biological hazards at most DOE sites"; and favored deletion of the radiological hazard exclusion. DOE recognizes that radiological hazards are intertwined with other workplace hazards; however, radiological hazards have historically been covered under separate programs and through separate requirements both within DOE and external to DOE. DOE believes that current rules addressing radiological safety issues-10 CFR 820, 830, and 835—are sufficient. As a result, DOE retained the exclusion of radiological hazards in the final rule.

Another commenter (Ex. 49) favored deletion of the phrase "* * * to the extent regulated by 10 CFR parts 820, 830 or 835," from the radiological hazard exclusion provision. The commenter asserted that radiological hazards were not within the scope of the rule. DOE acknowledges that existing rules already deal with radiological hazards and nuclear explosives in a comprehensive manner. This regulation is intended to complement the nuclear safety requirements. As discussed above, DOE intends for the two sets of requirements to be integrated and applied in a manner that guards against unintended results and provides reasonable assurance of adequate worker protection. Thus, personnel responsible for implementing worker protection and nuclear safety requirements are expected to coordinate and cooperate in instances where the requirements overlap. For this reason, DOE retains the phrase "* * * to the

extent regulated by 10 CFR parts 820, 830 or 835," in the final rule.

One commenter (Ex. 19) suggested that sites regulated by the Nuclear Regulatory Commission (NRC) should be excluded from coverage under the rule, since the NRC regulates some aspects of worker safety and health such as fire protection and certain aspects of chemical safety (in addition to nuclear and radiological safety). As discussed previously, the NRC does not regulate non-radiological occupational safety and health matters. As a result, in most instances, DOE has exercised and intends to continue to exercise its regulatory authority over worker safety and health at DOE facilities licensed by NRC.

One commenter (Ex. 20) recommended adding an exclusion related to nuclear explosive operations: "This part does not apply to nuclear explosive operations to the extent regulated by 10 CFR 10, 820, 830, or 835." DOE agrees with the commenter's proposal, and has incorporated the exclusion for nuclear explosive operations in final rule section 851.2(b). In addition, DOE has included definitions for nuclear explosives and nuclear explosive operations in final rule section 851.3.

Section 851.3—Definitions

Section 851.3 of the final rule defines terms used throughout the rule. Commenters on this section of the supplemental proposed rule typically requested either addition of new terms, clarification or modification of proposed definitions, or deletion of selected terms from the rule. These comments are discussed in detail below and/or in the section-by-section discussion corresponding to the specific rule sections where each term is used.

New terms. In response to public comment, and to assist in further clarification of the provisions of the rule, the following additional terms have been defined in section 851.3: "Affected worker," "closure facility," "closure facility hazard," "construction," "construction contractor," "construction manager," "construction project," "construction worksite," "covered workplace," "DOE Enforcement Officer," "Head of DOE Field Element," "interim order," "nuclear explosives," "nuclear explosives operation," "occupational medicine provider," "permanent variance," "pressure systems," "safety variance," and health standard," "temporary variance," "unauthorized discharge," and "variance." A discussion of each term is included in the alphabetical listing of definitions below.

Terms and definitions deleted. In response to public comment, the following definitions in the supplemental notice are deleted in the final rule: "Activity-level hazard analysis," "hazard control," "Site Manager," "workplace safety and health programmatic requirement," "workplace safety and health requirement," and "workplace safety and health standard." The deletions are explained in the section-by-section discussion of the rule provisions in which the terms were previously used.

Section 851.3 defines key terms using traditional occupational safety and health and Departmental terminology, as well as terminology used by the OSHA in its regulations and interpretations, in establishing and clarifying the provisions of this rule. The use of such terminology is consistent with DOE's increased emphasis on safety and health compliance through the use of accepted occupational safety and health requirements and procedures. The following discussion defines and explains each of the terms in the rule. Although some of these terms are commonly used, DOE believes these definitions will help ensure that their meaning as used in the context of the rule is clear. Section 851.3(a) presents definitions of terms as used in this part.

AEA is the Atomic Energy Act of 1954. DOE did not receive any comments on this proposed definition during the public comment period.

Affected worker is an employee who would be affected by the granting or denial of a variance, or any authorized representative of the employee, such as a collective bargaining agent. DOE added this definition to the final rule to assist in clarifying worker rights associated with the variance process.

A closure facility is a facility that is non-operational and is, or is expected to be, permanently closed and/or demolished, or title to which is expected to be transferred to another entity for reuse. DOE added this definition to the final rule to assist in clarifying which facilities qualify for the flexibility provisions established in final rule section 851.21(b).

A closure facility hazard is a workplace hazard within a closure facility covered by a requirement of final rule section 851.23 for which strict technical compliance would require costly and extensive structural/engineering modifications to be in compliance. DOE added this definition to the final rule to assist in clarifying the types of hazards that qualify for the flexibility provisions established in final

rule section 851.21(b).

The Cognizant Secretarial Officer (CSO) is the Assistant Secretary, Deputy Administrator, Program Office Director, or equivalent DOE official who has primary line management responsibility for a contractor, or any other official to whom the CSO delegates in writing a particular function under this part. One commenter (Ex. 32) sought clarification of the definition for the term Cognizant Secretarial Officer due to the inconsistency between the proposed rule definition of a CSO having "primary line management responsibility for a contractor" and how CSOs were assigned in DOE Manual 411.1–C, Safety Management Functions, Responsibilities, and Authorities Manual, by site or organization. The commenter recommended that the definition be made consistent with DOE Manual 411.1–C. In response, DOE modified the definition of CSO in the final rule to include reference to a DOE official with primary line management responsibility for a contractor and any other official to whom the CSO delegates a particular function under this part.

A compliance order is an order issued by the Secretary to a contractor that mandates a remedy, work stoppage, or other action to address a situation that violates, potentially violates, or otherwise is inconsistent with a requirement of this part. This provision merely codifies the Secretary's authority under the AEA to take immediate action where necessary to ensure an adequate level of safety. While the Secretary might use this authority where there is a persistent pattern of non-compliance by a contractor that warrants Secretarial intervention, a compliance order is not intended to be used as a routine enforcement device by the Office of Price-Anderson Enforcement. DOE received no comments specifically related to this definition during the public comment period. Comments on the compliance order provisions of the rule are addressed in detail in the section-by-section discussion for final rule section 851.4.

A consent order is any written document, signed by the Director and a contractor, containing stipulations or conclusions of fact or law and a remedy acceptable to both DOE and the contractor. DOE did not receive any comments on this proposed definition during the public comment period.

Construction means any combination of erection, installation, assembly, demolition, or fabrication activities involved to create a new facility or to alter, add to, rehabilitate, dismantle, or remove an existing facility. It also includes the alteration and repair

(including dredging, excavating, and painting) of buildings, structures, or other real property, as well as any construction, demolition, and excavation activities conducted as part of environmental restoration or remediation efforts. DOE added this definition to the final rule in response to public comments discussed in the section-by-section discussion for Appendix A section 1, "Construction Safety."

The construction contractor is the lowest tiered contractor or subcontractor with primary responsibility for the execution of all construction work described within a construction procurement or authorization document (e.g., construction contract, work order). DOE added this definition to the final rule in response to public comments discussed in the section-by-section discussion for Appendix A section 1, "Construction Safety."

The construction manager is the individual or firm responsible to DOE for the supervision and administration of a construction project to ensure the construction contractor's compliance with construction project requirements. DOE added this definition to the final rule in response to public comments discussed in the section-by-section discussion for Appendix A section 1, "Construction Safety."

The construction project refers to the full scope of activities required on a construction worksite to fulfill the requirements of the construction procurement or authorization document. DOE added this definition to the final rule in response to public comments discussed in the section-by-section discussion for Appendix A section 1, "Construction Safety."

The construction worksite is the area within the limits necessary to perform the work described in the construction procurement or authorization document. It includes the facility being constructed or renovated along with all necessary staging and storage areas as well as adjacent areas subject to project hazards. DOE added this definition to the final rule in response to public comments discussed in the section-by-section discussion for Appendix A section 1, "Construction Safety."

A contractor is any entity under contract with DOE, including a subcontractor, with responsibility for performing work at a DOE site in furtherance of a DOE mission. This term does not apply to contractors or subcontractors that provide only "commercial items" as defined under the Federal Acquisition Regulations (FAR). Such contractors would not be

performing work in furtherance of a DOE mission.

Several commenters (Exs. 16, 28, 31, 37, 39, 45, 48, 51) requested clarification of the role of affiliated entities, like parent corporations, in the definition of 'contractor.'' One commenter (Ex. 39) questioned the legal justification for including parent organizations within the scope of these regulations. Noting that well-established legal precedents regarding separation of parent corporations and their entities existed, a commenter (Ex. 16) recommended that DOE excise references to parent organizations or review each use of the term in the rule for unintended or inappropriate implications to ensure compliance with legal precedents.

Another commenter (Ex. 37) requested clarification of DOE's expectations of affiliates under the rule. A few commenters (Exs. 28, 45, 51) sought clarification of the circumstances under which an enforcement action may be brought against a parent corporation or affiliated entity. Some other commenters (Exs. 31, 39, 48) took issue with what they perceived as DOE's attempt to expand the scope of DOE enforcement authority to entities that are established under State laws as wholly independent of their affiliates (e.g., Č corporations, S corporations and LLCs) and operate outside the liability space of DOE authority. Many commenters (Exs. 31, 39, 48, 49, 51) recommended elimination of language referring to any affiliated entity, such as 'parent organization' in the proposed definition. Lastly, two commenters (Exs. 45, 51) noted that parent companies are expressly set up to limit liability, so it was inappropriate to attempt to circumvent established corporate structures by including them in the definition. DOE appreciates these concerns. Nevertheless, to ensure that responsible parties such as an affiliate are held responsible for the safety and health of workers, and to maintain consistency with the duties and responsibilities set forth in 10 CFR Part 820, DOE has determined not to delete the reference to affiliated entities in the definition.

Several commenters (Exs. 20, 28, 33, 42, 45, 49, 51) also sought clarification and modification of the proposed definition for contractors with respect to the inclusion of subcontractors. Some commenters (Exs. 28, 33, 45, 51) felt that the term contractor was inconsistently applied throughout the rule and variously referred to prime contractors, subcontractors, or suppliers, when distinctions were required. One commenter (Ex. 33) recommended that the definition be modified to limit

applicable entities or that the usage of the term in the rule be reviewed closely to eliminate inconsistencies, or alternatively that separate definitions be provided for "subcontractor" and "supplier." DOE has modified the definition in the final rule to make clear it covers contractors and subcontractors at any tier. DOE also has made several other revisions to the regulatory language to eliminate potential ambiguities as to which contractor(s) would be subject to a particular provision in a particular situation.

Another commenter (Ex. 28) proposed that "contractor" be defined as any entity under contract (or its subcontractors or suppliers) with DOE that has entered into an agreement of indemnification under section 170d of the AEA. As discussed previously, DOE made the decision to cover all of its contractors to ensure consistency in the protection of workers and enforcement. As a result, the definition of contractor in the final rule does not limit the term to those contractors covered by an agreement of indemnification.

Several other commenters (Exs. 20, 45, 49, 51) recommended limiting the definition of "DOE contractor" to any entity under contract to DOE whose responsibility it would be to flow-down requirements to subcontractors. Two of these commenters (Exs. 49, 51) favored eliminating references to subcontractors since they lack authority to conduct or direct work at DOE sites. Section 3173 of the NDAA requires DOE to include subcontractors within the framework of the rule. Accordingly, the Department does not have the discretion to exclude subcontractors from the rule.

A covered workplace is a place at a DOE site where work is conducted by a contractor in furtherance of a DOE mission. Several commenters (Exs. 1, 13, 29, 32, 39, 42) requested greater clarification of the term "covered workplace" and strongly supported its inclusion in the list of definitions in proposed section 851.3. For instance, one commenter (Ex. 13) sought elucidation of which workplaces were covered by the regulation (e.g., whether the term included contractor owned or leased facilities). Another commenter (Ex. 32) recommended that the definition distinguish between DOE sites and non-DOE locations. The commenter noted that non-DOE locations could include contractorowned or -leased locations, vendor locations, or other areas where DOE contractors performed activities (viz., research, installation of equipment, business, and travel). One commenter (Ex. 39) pointed out that in proposed rule section 851.2(a), the regulations

referred to a "covered workplace," but that term was not defined in proposed rule section 851.3. Consequently contractors would be left to assume that the term referred to DOE facilities not excluded from the scope of the rule. Two commenters (Exs. 36, 42) observed that supplemental proposed rule section 851.1 would limit application of the rule to contractor activities at "DOE sites" (which is defined in supplemental proposed rule section 851.3), but the term "covered workplace" was used rather than "DOE sites" throughout the rule language. In response to these concerns, DOE added a definition for "covered workplace" in final rule section 851.3. The use of "covered workplace" is intended to make clear that the focus of the rule is the specific areas where work is performed. In addition, as discussed previously, the definition of "DOE site" has been revised to provide further clarity on the scope of the rule.

One commenter (Ex. 48) also requested clarification of the term "covered workplace" with respect to the term "worker." In reference to the use of "worker," the commenter questioned whether a contractor would be held responsible for ensuring that all the work of vendors, suppliers, and fabricators not located at the contractor's work location, but who were providing goods, services, and materials for DOE work, was in compliance with the rule. As discussed elsewhere, DOE has clarified what constitutes a "DOE site" and has defined "worker" to be a contractor employee performing work in a covered workplace at a DOE site in furtherance of a DOE mission.

A *Director* is a DOE Official to whom the Secretary has assigned the authority to investigate the nature and extent of compliance with the requirements of this part. This function has been assigned to the current Director of the Office of Price-Anderson Enforcement in the Office of Environment, Safety and Health, who is the person to whom the Secretary has assigned the responsibility for enforcing the DOE nuclear safety regulations in 10 CFR parts 20, 820, 830, and 835. DOE did not receive comments on this definition during the public comment period.

DOE is the United States Department of Energy, including the National Nuclear Security Administration. One commenter (Ex. 39) sought a clarification of which entities were included under the DOE acronym. The commenter questioned if the term referred to the local site or field office or the DOE Office of Price-Anderson Enforcement. In response, DOE notes

that DOE is defined in final rule section 851.3 and includes any DOE headquarters, field, area, or site office. Where a specific office has a specific role or responsibility with respect to this rule, the specific office is referenced under the corresponding provision of the rule.

A DOE Enforcement Officer is a DOE Official to whom the Director has assigned the authority to investigate the nature and extent of compliance with the requirements of this part. DOE added this definition to assist in clarifying enforcement authorities under the final rule.

DOE site means DOE-owned or -leased area or location or other location controlled by DOE where activities and operations are performed at one or more facilities or locations by a contractor in furtherance of a DOE mission. This definition was revised to include all sites where DOE exercises regulatory control under the AEA, even if DOE does not own or lease the site.

One commenter (Ex. 5) suggested a modification of the definition of "DOE site" to include the idea that some DOE sites have multiple contractors working on them. DOE disagrees that a modification to this definition is needed to clarify this point. The current definition does not limit the meaning of the term to areas where only one contractor works.

Two commenters (Exs. 19, 48) questioned ownership and geographical issues with respect to a DOE site. One commenter (Ex. 48) suggested that DOE site should be defined as being strictly DOE-owned or directly DOE-leased areas/locations. The other commenter (Ex. 19) had contractor specific concerns about the definition's applicability, requesting clarification that the rule only intended to cover sites owned or leased by DOE as opposed to DOE sites not owned or leased where contract work is performed. DOE considered these comments in revising the definition of "DOE site."

A final notice of violation is a document that determines a contractor has violated or is continuing to violate a requirement of this part. Such document includes:

- (1) A statement specifying the requirement of this part to which the violation relates;
- (2) A concise statement of the basis for the determination:
- (3) Any remedy, including the amount of any civil penalty; and
- (4) A statement explaining the reasoning behind any remedy.

A final order is a DOE order that represents final agency action and, if appropriate, imposes a remedy with which the recipient of the order must comply.

General Counsel refers to the General Counsel of DOE.

A Head of DOE Field Element is the highest-level DOE official in a DOE field or operations office who has the responsibility for identifying the contractors and subcontractors covered by this part and for ensuring compliance with this part. DOE added this definition to assist in clarifying program review and approval authorities under the final rule by identifying the DOE official responsible for these actions under the rule.

An interpretation refers to a statement by the General Counsel concerning the meaning or effect of a requirement of this part that relates to a specific factual situation but may also be a ruling of general applicability if the General Counsel determines such action to be appropriate. DOE received several comments regarding the interpretation provision of the rule. These comments are addressed in detail in the section-by-section discussion for final rule section 851.6.

NNSA is the National Nuclear Security Administration.

A nuclear explosive is an assembly containing fissionable and/or fusionable materials and main charge high-explosive parts or propellants capable of producing a nuclear detonation (e.g., a nuclear weapon or test device). DOE added this definition (see, e.g., 10 CFR section 712.3) to further clarify the exclusion provisions of section 851.2 of the final rule.

A nuclear explosive operation is any activity involving a nuclear explosive, including activities in which main charge high-explosive parts and pit are collocated. DOE added this definition to further clarify the exclusion provisions of section 851.2 of the final rule.

An occupational medicine provider is the designated site occupational medicine director (SOMD) or the individual providing medical services.

A permanent variance is relief from a safety and health standard, or portion thereof, to contractors who can prove that their methods, conditions, practices, operations, processes provide workplaces that are as safe and healthful as would result from compliance with the workplace safety and health standard required by this part. DOE added this definition to further clarify the variance process established in Subpart D of the final rule.

A preliminary notice of violation (PNOV) is a document that sets forth the preliminary conclusions that a contractor has violated or is continuing

to violate a requirement of this part. Such a document includes:

- (1) A statement specifying the requirement of this part to which the violation relates;
- (2) A concise statement of the basis for alleging the violation;
- (3) Any remedy, including the amount of any proposed civil penalty; and

(4) A statement explaining the reasoning behind any proposed remedy.

Pressure systems are all pressure vessels, and pressure sources including cryogenics, pneumatic, hydraulic, and vacuum. Vacuum systems should be considered pressure systems due to their potential for catastrophic failure due to backfill pressurization.

Associated hardware (e.g., gauges, and regulators), fittings, piping, pumps, and pressure relief devices are also integral parts of the pressure system. DOE added this definition to clarify the scope of the pressure safety provisions of Appendix A section 4 of the final rule.

A *remedy* is any action (included, but not limited to, the assessment of civil penalties, the reduction of fees or other payments under a contract, the requirement of specific actions, or the modification, suspension or rescission of a contract) necessary or appropriate to rectify, prevent, or penalize a violation of a requirement of this part, including a compliance order issued by the Secretary pursuant to this part. One commenter (Ex. 28) proposed a modification of the definition for the term "remedy" and suggested the definition should read as: "any action (included, but not limited to, the assessment of civil penalties, the requirement of specific actions, request to the DOE contracting officer for a reduction of fees or other payments under a contract, or the modification, suspension or rescission of a contract." The commenter pointed out that the DOE contracting officer was the entity that had the authority to implement contract actions. While DOE agrees that contracting officers have the authority to take contract actions, the Director has been delegated the authority to enforce Part 851. In that role, the Director coordinates with the contracting officer in effecting the appropriate contract action. DOE has determined that the definition being adopted for "remedy" is appropriate because it provides the Department the flexibility to determine the most appropriate remedy to a violation of a relevant safety and health provision.

A safety and health standard is a standard that addresses a workplace hazard by establishing limits, requiring conditions, or prescribing the adoption or use of one or more practices, means,

methods, operations, or processes, reasonably necessary or appropriate to provide safe and healthful workplaces. Two commenters (Exs. 15, 29) sought clarification of and favored elimination of the term "workplace health and safety programmatic standards" from the proposed rule since it appeared to be redundant with the terms "workplace health and safety standards" and "workplace health and safety requirements." As requested, DOE has eliminated the term "workplace health and safety programmatic standards" and also, the term "workplace health and safety requirements" from the final rule.

One commenter (Ex. 11) questioned why DOE issued a separate definition for the term "safety and health standard," which is commonly used in the safety and health community. The commenter cited the definition of an occupational safety and health standard in section 3(8) of the OSH Act 29 U.S.C. 652(8) in support of the argument and sought clarification on DOE's omission of language similar to OSHA's with respect to standards being "necessary or appropriate to provide safe or healthful employment and places of employment." DOE agrees, in general, with this comment. However, DOE has revised the definition of "safety and health standard," in the final rule to make clear that, for purposes of this rule, it includes all the standards or requirements included or referenced in subpart C.

Secretary means the Secretary of Energy.

A temporary variance is a short-term relief from a new safety and health standard when the contractor cannot comply with the requirements by the prescribed date because the necessary construction or alteration of the facility cannot be completed in time or when technical personnel, materials, or equipment are temporarily unavailable. DOE added this definition to further clarify the variance process established in Subpart D of the final rule.

An unauthorized discharge is the discharge of a firearm under circumstances other than: (1) During firearms training with the firearm properly pointed down range (or toward a target), or (2) the intentional firing at hostile parties when deadly force is authorized. DOE added this definition to further clarify provision of Appendix A section 5, "Firearms Safety," in the final rule.

A variance is an exception to compliance with some part of a safety and health standard granted by the Under Secretary. DOE added this definition to further clarify the variance

process established in Subpart D of the final rule.

A worker is an employee of a DOE contractor who performs work for DOE at a covered workplace in furtherance of a DOE mission. A few commenters (Exs. 16, 31, 39, 48) suggested that DOE modifying the proposed definition for "worker" to exclude the phrase "or any other person." Specifically, two commenters (Exs. 16, 31) remarked that the definition of worker could be interpreted to include work conducted off-site and at non-DOE locations. Furthermore, all types of activities on a DOE site (including non-DOE-related ones like those of a UPS courier delivering packages, copier service person, vending machine maintenance person, or office supply delivery driver) could be misconstrued as work under the regulation. One of these commenters (Ex. 16) further suggested the definition should be re-worded as "persons who perform work for or on behalf of DOE at a covered workplace * * *" Additionally, the commenter argued the term "work" should be defined for the purposes of the rule. In response to these comments, DOE revised the definition to make clear it applies only to contractor employees, including subcontractor employees, who are performing work at a covered workplace in furtherance of a DOE mission.

Another commenter (Ex. 39) sought clarification on whether the definition of "worker" included private tenants present on a DOE site under a lease arrangement and cautioned that the phrase "* * or any other person who performs work at a covered workplace" could be broadly interpreted to include work not being performed by a DOE contractor. Final rule section 851.1(a) clarifies that the rule applies to the conduct of contractor activities at DOE sites and final rule section 851.3 clarifies the definition of "DOE site."

A workplace hazard is a physical, chemical, biological, or safety hazard with any potential to cause illness, injury, or death to a person. DOE received numerous comments (Exs. 5, 13, 16, 20, 29, 31, 39, 45, 47, 49, 51) on the inclusion of radiological hazards in the supplemental proposed definition. Most favored the elimination of radiological hazards from the definition, citing a need for consistency across the rule and noting that radiological hazards are addressed under other existing regulations like 10 CFR Parts 820, 830, and 835. DOE acknowledges these concerns and has removed reference to radiological hazards from this definition in the final rule. However, as previously discussed, this change should not be interpreted to eliminate the need to

analyze all hazards in an integrated manner.

Many commenters (Exs. 15, 20, 28, 39) expressed concerns about the use of the term "potential" in the definition for workplace hazards. Some commenters (Exs. 15, 20, 28) suggested replacement of the proposed language "with any potential to cause illness," with the language "with the potential to cause illness" or "with any potential to cause imminent illness" in the definition for workplace hazards; this, they asserted, would account for the fact that many chemical, biological, and radiological exposures resulting from chronic exposures can, after decades, cause illness, injury, and death. Another commenter (Ex. 39) cautioned that the proposed definition of "workplace hazard" could be interpreted to preclude the mere presence of a hazardous material with any potential to cause illness and hence should be modified. DOE believes a broad definition of "workplace hazard" is appropriate to ensure that all hazards are considered in determining how to provide a safe and healthful workplace.

Section 851.3(b) provides that if a term is defined in the AEA but is not defined in this rule, it has the meaning defined in the AEA for the purpose of this rule.

Section 851.4—Compliance Order

Section 161 of the AEA grants the Secretary broad authority to order those actions deemed necessary by the Secretary to protect facility workers and the environment from any injury because of activity under the Act. Section 851.4(a) makes it clear that the Secretary has the authority to issue a compliance order to any contractor for a situation that violates, potentially violates, or otherwise is inconsistent with a requirement of Part 851 or the AEA. The compliance order will state the action or remedy that the Secretary deems necessary and the reasons for the action or remedy. One commenter (Ex. 20) inquired how compliance orders would be reconciled with contract obligations and limitations and funding. In response to this question, DOE notes compliance orders represent an exercise of Secretarial authority under the AEA and are not dependent on contractual provisions.

One commenter (Ex. 54) recommended that this provision also require posting of the compliance order as well as employer responses, corrections, or requests for rescission or modification. DOE agrees and has revised final rule section 851.4(d) to require posting of compliance orders. This provision stipulates that the

posting must remain in place until the violation is corrected. In addition, final rule section 851.42(e) requires posting of preliminary notices of violations (PNOVs) once they become final. The rule does not, however, require posting of employer responses to compliance orders or requests for recessions.

Section 851.4(a)(1) establishes that the Secretary may issue to any contractor a Compliance Order that identifies a situation that violates, potentially violates, or otherwise is inconsistent with a requirement of this part. Two commenters (Exs. 15, 42) took issue with the reference to potential violations and the phrase "otherwise is inconsistent with" in this supplemental proposed provision. The commenters expressed concern that given the gravity of a compliance order and the progressive nature of enforcement described in Appendix B section IX, compliance orders should require a more definitive determination of violation. The commenters recommended that the phrase "potentially violates, or otherwise is inconsistent with" be deleted from the provision. One commenter (Ex. 42) pointed out that OSHA does not cite employers for potential violations or inconsistencies and recommended adoption of a process similar to OSHA. DOE disagrees. This language, including the phrase "potentially violates," is consistent with the Department's longstanding procedural requirements set forth at 10 CFR 820.41. Given that these provisions have worked well in practice, DOE has determined that it would be inappropriate to modify this language.

Another commenter (Ex. 27) suggested that the phrase "violates, potentially violates, or otherwise inconsistent with" was vague (as was language throughout the rule). The commenter recommended that the entire rule be rewritten to eliminate vague standards and criteria. Although the referenced phrase is broad, DOE does not agree that it is vague, and it is retained in the final rule. As to the broader comment about vagueness in the rule, DOE has carefully reviewed the rule in light of all comments received during the public comment period and has attempted to address those requesting clarification or further detail. DOE also intends to publish appropriate guidance materials to further help contractors with implementation.

Section 851.4(a)(2) establishes that the Secretary may issue to any contractor a compliance order that mandates a remedy, work stoppage, or other action. Section 851.4(a)(3) establishes that any compliance order issued by the

Secretary to any contractor will state the reasons for the remedy, work stoppage, or other action. DOE received no comments on these provisions during the public comment period.

Section 851.4(b) establishes that the compliance order will be a final order that is effective immediately unless the order specifies a different effective date. Section 851.4(c) grants the recipient of a compliance order the right to ask the Secretary to rescind or modify the compliance order within 15 days of its issuance. The filing of a request for an appeal under this section will not automatically stay the effectiveness of such an order. The Secretary, however, could issue a compliance order that would provide an effective date after the issuance date, allowing a longer period to appeal the terms of the order.

Two commenters (Exs. 5, 31) expressed concern that the 15-calendar day appeal period was not long enough. They argued that "it takes a month for a document issued by DOE-Headquarters to reach a DOE contractor." One commenter (Ex. 31) proposed 15 calendar days from receipt of the compliance order as an alternative to this provision. One commenter (Ex. 39) felt that the appeal provision was a moot point if the contractor had to take immediate action because the Order was not staved upon submittal of the appeal. The commenter recommended that compliance orders be stayed during the 15-day window (or upon a decision of the Secretary) unless a stay posed significant safety and health consequences. In response DOE notes that a primary purpose of a compliance order is to address situations that require immediate action. DOE believes that it is inappropriate to delay corrective action unless extenuating circumstances exist. In such cases, final rule section 851.4(c) allows the Secretary to stay the Compliance Order, if appropriate, pending review of the contractor's request to modify or rescind the Order. In addition, these time frames are consistent with the procedures set forth in 10 CFR Part 820.

Section 851.5—Enforcement

This section establishes enforcement provisions for the rule. Like other Departmental regulations that apply to DOE contractors, this provision allows DOE to employ contractual mechanisms such as reduction in fees, or to assess a civil penalty when a contractor fails to comply with the provisions of this rule. These mechanisms help the Department ensure that workers receive an appropriate level of protection while performing Departmental activities that involve exposure or the potential for

exposure to workplace safety and health hazards.

DOE received two general comments recommending changes to aspects of the rule that are mandated by section 3173 of the NDAA. One commenter (Ex. 6) pointed out that DOE has already successfully incorporated OSHA requirements into its workplaces. Stating that "enforcement appears to be a DNFSB issue," the commenter recommended that "OSHA enforcement be worked/addressed between DOE and OSHA and not driven by DNFSB (except on Defense Nuclear Facilities)." The second commenter (Ex. 5) suggested that DOE "pick one way to fine the contractor" and suggested that DOE not "dilute penalty authority." DOE believes the two penalty methods give the Department greater flexibility in determining the appropriate enforcement mechanism to address specific violations of the rule. While DOE intends to use civil penalties for most enforcement actions, contract penalties will be reserved for egregious violations that indicate general worker safety and health program failure. When appropriate, the Director will coordinate with the DOE Field Element to select the most effective penalty approach.

Other commenters stated that penalties should not be imposed for an employer's own observations. One of these commenters (Ex. 16) suggested that behavior-based safety systems (in which employers report observations on at-risk behaviors) should not be subject to enforcement action. DOE notes that contractors may employ various means and methods to identify and abate noncompliances, such as behaviorbased safety programs, and that noncompliances of greater significance may be reported into the Noncompliance Tracking System (NTS). Furthermore, DOE recognizes the value that an initiative such as behavior-based safety can add to the development and implementation of a comprehensive safety and health program. Therefore, such an initiative should be an integral part of the contractor's approved safety and health program, which is subject to DOE review. During the performance of onsite inspections, for instance, the Office of Price-Anderson Enforcement may evaluate the approved safety and health program to determine the degree and depth of compliance measures taken by contractors. A second commenter (Ex. 42) believed that penalties for safety and health issues that are self-identified via NTS "will have a chilling effect on contractor's self disclosing issues." DOE agrees and intends to create reporting guidelines that will help ensure contractors

understand and are more comfortable with DOE's expectations. Future enforcement guidance supplements (EGSs) will establish reasonable NTS reporting thresholds. It is in the contractor's best interest to report self-identified noncompliances above the NTS reporting thresholds since the contractor may receive up to 50% mitigation of the base penalty for self-reporting—as specified in Appendix B section IX.b.3.

DOE received a number of comments requesting clarification regarding how various aspects of enforcement will proceed under section 851.5. For example, several commenters (Exs. 20, 29, 45, 28, 51) wondered against whom enforcement action would be directed if a subcontractor to a management and operating contractor violated a requirement. These commenters inquired how the rule would apply under several specific circumstances, such as if the subcontractor had a direct contract with DOE (Ex. 29). In general, DOE will consider enforcement actions against any and all contractors associated with a violation. All subcontractors and suppliers of an indemnified contractor are considered indemnified contractors, and as such are subject to either civil penalties or contract penalties. In order to clarify the matter, DOE expects to publish an EGS based on OSHA's multi-employer worksite policy to guide enforcement efforts on multi-employer worksites.

Another commenter (Ex. 25) wondered how the enforcement process would view legacy issues. DOE believes the provisions on "closure facilities" and "variances" provide sufficient flexibility to deal with legacy issues. A commenter (Ex. 16) suggested that, because section 851.2(a)(1) excludes applicability of this rule to sites regulated by OSHA, the OSHAregulated sites are being held to a different level of requirements and a different enforcement structure than non-OSHA-regulated sites. As an example, the commenter pointed out that OSHA does not mandate compliance with the entire set of consensus standards included in Subpart C of the supplemental proposal, nor does OSHA require the formal exemption process of proposed Subpart D. DOE acknowledges these concerns and has significantly reduced the number of consensus standards mandated under Subpart C of the final rule to be more consistent with the standards required under DOE Order 440.1A. These standards have been evaluated by the DOE safety and health community and determined necessary to address worker safety and health

hazards on DOE sites. DOE notes, as discussed above, that these requirements may be applied to DOE contractors excluded from this rule through contract mechanisms, if DOE determines that the standards are applicable to the work performed by the contractor. In addition, DOE has revised Subpart D of the rule to establish a variance process modeled after the OSHA variance process established in 29 CFR Part 1905.

Concerned about the possibility of willful employee misconduct beyond the control of the contractor, one commenter (Ex. 29) recommended that the enforcement language of the rule should include a responsibility for employees to comply, similar to section 5(b) of the OSH Act. This commenter suggested that the added provision mirror the "unpreventable employee misconduct" defense recognized by OSHA. DOE agrees with this comment and has added section 851.20(b) to the final rule to prohibit workers from taking actions that are inconsistent with the rule. In addition, DOE intends to develop enforcement guidance for the rule that will include provisions similar to OSHA's unpreventable employee misconduct defense outlined in OSHA's Field Inspection Reference Manual in Chapter III, Paragraph C.8.c(1).

In another comment related to how the section applies to subcontractors, the commenter (Ex. 33) suggested that DOE revise DEAR 952.250-70 (either through this rulemaking or a separate rulemaking) to inform contractors with an indemnification agreement that they are subject to civil penalties under the rule and to require them to flow this notice down to all lower-tier subcontractors. The commenter indicated that a similar revision was also made "when Congress added formal regulation by DOE of nuclear safety matters." DOE recognizes the commenter's concern, but notes that section 3173 of the NDAA mandates that DOE promulgate a rule to enforce worker safety and health program requirements. The statutory mandate does not stipulate nor are its provisions contingent upon rulemaking related to the DEAR. Accordingly, such a change would be beyond the scope of this rulemaking.

Section 851.5(a) implements the statutory provision of section 234C paragraph b of the AEA which provides that "a person (or any subcontractor or supplier thereto) who has entered into an agreement of indemnification under section 170d of the AEA (or any subcontractor or supplier thereto) that violates (or is the employer of a person that violates) any regulation

promulgated under [section 234C] shall be subject to a civil penalty of not more than \$70,000 for each such violation.' For continuing violations, section 234C further provides that each day of the violation shall constitute a separate violation for the purposes of computing the civil penalty to be imposed. Specifically, under section 851.5(a) a contractor (or any subcontractor or supplier thereto), whose contract with DOE contains an indemnification agreement and that violates (or whose employee violates) any requirement of the regulations will be subject to a civil penalty of not more than \$70,000 for each such violation. In the case of a continuing violation, this provision of the rule clarifies that each day of the violation constitutes a separate violation for the purpose of computing the amount of the civil penalty.

DOE received several comments related to the penalty structure described by section 851.5(a). These commenters (Exs. 16, 27, 37, 14, 39, 46) argued that the civil penalty structure under the rule, with its \$70,000 per violation maximum penalty, is 10 times higher than the OSHA penalty structure, and thus disproportionately sanctions DOE contractors compared to other U.S. industries. These commenters believed OSHA's penalty structure should be used and felt the DOE structure was excessively burdensome given the increased frequency of inspection that tends to be associated with DOE facilities. DOE points out that the penalty structure is not determined by DOE, but rather is established by statue. As a result, the Department is not free to deviate from these provisions. The Director may, however, use discretion in determining what enforcement actions may be taken and in establishing the final penalty amounts. DOE also points out that it is the responsibility of the contractor to identify and abate noncompliances, thus avoiding penalty.

One of these commenters (Ex. 27) also submitted a related suggestion that DOE should establish enforcement thresholds. DOE agrees. Since violations have varying degrees of safety and health significance, DOE has established severity level thresholds that distinguish on the basis of possible consequence and have appropriate sanctions. Such thresholds and guidance were established in supplemental proposed Appendix A and are retained in Appendix B section VI to the final rule.

Other comments on section 851.5(a) related to the definitions and obligations of contractors and subcontractors. One commenter (Ex. 48) expressed concern that language in supplemental proposed

section 851.9(a)—e.g., "contractor * * * (or any subcontractor or supplier thereto) that violates (or whose employee violates)"-expands the definitions of "contractor" and "worker" beyond those in supplemental proposed section 851.3 and beyond the scope of the rule stated in supplemental proposed section 851.1. The commenter thought that this "expanded" definition might be interpreted as including work done by suppliers and vendors on sites far removed from DOE sites. DOE disagrees with this comment. Section 851.3 defines terms such as "contractors" and "workers," while section 851.1 of the final rule describes which contractors are subject to the rule and section 851.5 describes enforcement provisions that apply to those contractors that are subject to the rule (as defined in section 851.1.). Sections 851.3 and 851.5 do not change (and are not intended to change) the scope of the rule. Furthermore, section 851.1(a) states that the rule applies to the conduct of contractor activities at covered workplaces.

Believing that "small business subcontractors are exempt from OSHA requirements," the same commenter (Ex. 48) was concerned that this rule would make small business subject to OSHA requirements, as well as DOE enforcement and penalties, and would thus have a serious impact on small businesses. DOE notes that this commenter's belief that small businesses are exempt from OSHA requirements is inaccurate. Although employers with 10 or fewer employees are exempt from most OSHA recordkeeping requirements for recording and reporting occupational injuries and illnesses, small businesses must comply with OSHA requirements and are subject to inspections (such as for accident investigations, complaint inspections, and other reasons). Because small businesses do not have the same resources as larger establishments, businesses do receive penalty reduction based on employer size. The commenter (Ex. 48) also asked for clarification regarding whether contractor employees are subject to civil penalty under the rule. DOE confirms that contractor employees are not subject to civil penalty; however, under section 851.20(a)(3) contractors are required to assign worker safety and health responsibilities, evaluate personnel performance, and hold personnel accountable for worker safety and health performance.

One commenter (Ex. 5) inquired about a specific situation in which OSHA had inspected facilities and found issues that would take a long time to resolve, so long that the corrective action plan would extend beyond the implementation date of the final rule. In this case, the commenter wondered, would the remaining violations be considered "continuing violations" and be subject to penalty for each day the condition goes uncorrected? The House Committee directed that \$25,000,000 be transferred from the Departmental Administration account to the Science Laboratories Infrastructure to begin addressing the safety deficiencies at the Science laboratories. In addition, the Committee directed the Department to request sufficient funding in the budget requests for fiscal years 2005 and 2006 to correct the remainder of the safety deficiencies. In such cases, DOE will consider the contractors abatement plan as well as the presence of interim control measures when assessing the penalty. One should note that there are no provisions for grandfathering existing noncompliances.

DOE received two comments suggesting specific changes in the wording of the civil penalty enforcement provision in the supplemental proposal. In the first, the commenter (Ex. 5) suggested revising the second parenthetical phrase in section 851.5(a) to read "* * * whose employee or subcontractor violates." DOE disagrees with this editorial suggestion. The rule applies directly to subcontractors. A contractor is not automatically liable for a subcontractor's violations. To provide clear guidance on the subject, DOE will publish and implement an EGS on DOE's multi-employer worksite policy (similar to OSHA's policy) to clarify appropriate enforcement for subcontractor violations.

The second commenter (Ex. 37) recommended that DOE add a provision stating that civil fines will not be imposed unless the contractor knew of the hazard and employees were injured or endangered. DOE disagrees that these criteria should protect a contractor from civil penalty; however, the Department does agree that these criteria should be considered in determining the appropriate level of penalty. DOE also notes when a contractor is not aware of a hazard, the question becomes "Should they have been aware of the hazard?" That is, did the contractor implement effective workplace assessment and inspections procedures as required under final rule section 851.21?

Section 851.5(b) implements the provisions of section 234C.c. of the AEA. Section 234C.c. of the AEA requires DOE to include provisions in its contracts for an appropriate reduction in the fees or amounts paid to

the contractor if the contractor or a contractor employee violates the regulations issued pursuant to section 234C. The Act requires these provisions to be included in each DOE contract with a contractor that has entered into an agreement of indemnification under section 170d of the AEA (the Price-Anderson Amendment Act). The contract provisions must specify the degrees of violations and the amount of the reduction attributable to each degree of violation.

DOE is implementing this statutory mandate to include provisions for the reduction in fees in contracts for violations of this part pursuant to the contract's "Conditional Payment of Fee" clause. Most DOE management and operating contracts currently contain such a clause providing for reductions of earned fee, fixed fee, profit, or share of cost savings that may otherwise be payable under the contract if performance failures relating to environment, safety, and health occur. See 48 CFR 970.5215-3, "Conditional Payment of Fee, Profit, or Incentives" (applicable to DOE management and operating contracts and other contracts designated by the Procurement Executive). DOE amended this clause to set forth the specific criteria and conditions that may precipitate a reduction of earned or fixed fee, profit, or share of cost savings under the contract. The clause establishes reduction ranges that correlate to three specified degrees of performance failures relating to environment, safety, and health. In the final rule, DOE clarifies that the term "environment, health, and safety," as applied in the context of the rule, includes matters relating to "worker safety and health." Under the rule, DOE will apply the same reduction ranges and degrees of performance failure specified in the 'Conditional Payment of Fee, Profit, or Incentives" clause to worker safety and health. In a parallel provision to section 234C.c., section 851.5(b) implements this statutory mandate by making a contractor that fails to comply with the requirements of Subparts B and C of the rule subject to a reduction in fees or other payments under a contract with DOE pursuant to the contract's "Conditional Payment of Fee" clause.

Several of the comments that DOE received on section 851.5(b) related to how and by how much, fees could be reduced under this provision. Three commenters (Exs. 28, 45, 51) believed that reduction in fee is always an option for DOE and should not be a part of the rule, but instead should be included in appropriate contracts. DOE does not agree with these commenters. While

contract penalties are always applicable to provisions of a contract, they may or may not be directly linked to specific safety and health provisions of a contract. DOE believes that the rule strengthens enforcement options by specifying that contract penalties may be applied to violations of the requirements of the rule. Further, including this provision in the regulation is consistent with the underlying purpose of section 234C of the AEA.

Two other commenters (Exs. 29, 47) were concerned whether the reduction in fee could exceed the \$70,000 maximum established for civil penalties. One of these commenters (Ex. 47) thought that, to be consistent with section 234C(b) of the AEA, DOE needed to specify a maximum of \$70,000 contract fee reduction to ensure "legal equity" between the civil penalty and the contract fee reduction mechanism. DOE notes that except where a violation is considered a continuing violation, and each day is considered a separate day for the purposes of computing the penalty, the maximum civil penalty for each violation will not exceed \$70,000. However, for contract penalties DOE will follow the Conditional Payment of Fee Clause. Other commenters suggested additional language and definitions for this section. One commenter (Ex. 47) suggested modifying the rule to state "The Director (e.g., principal enforcement officer) must approve invocation of the Conditional Payment of Fee Clause." This commenter believed that supplemental proposed Appendix A section IX(1)(f) only required "coordination" of all violations with the DOE contract official responsible for administering the Conditional Payment of Fees Clause when considering invoking the provisions for reducing contract fees. DOE does not agree and notes that the Director has been delegated the responsibility for determining the appropriate type of penalty to be applied to a given violation. When contract penalties are used in lieu of civil penalties, the Director coordinates with the responsible contracting official since the selected remedy is within the purview of the contracting officer.

Two other commenters (Exs. 28, 51) presumed that a reduction in fees under this provision could not be brought against a subcontractor due to "privity of contract" (i.e., DOE does not have a relationship with the subcontractor). These commenters found this somewhat confusing because the term "contractor" was defined to include "subcontractor." DOE requires contractors to flow the

requirements of this rule down to their subcontractors. Thus, if DOE elects to reduce the contractor's fee, the contractor could in turn penalize the subcontractor. As noted previously, however, a more likely scenario is that DOE would simply choose the civil penalty option.

As a general matter, DOE intends to use civil penalties as the remedy for most violations where DOE may elect between remedies. DOE expects to invoke the provisions for reducing contract fees only in cases involving especially egregious violations or that indicate a general failure to perform under the contract with respect to worker safety and health. Such violations would call into question a contractor's commitment and ability to achieve the fundamental obligation of providing safe and healthy workplaces for workers because of factors such as willfulness, repeated violations, death, serious injury, patterns of systemic violations, flagrant DOE-identified violations, repeated poor performance in an area of concern, or serious breakdown in management controls. Because such violations indicate a general failure to perform under the contract with respect to worker safety and health, where both remedies are available and DOE elects to use a reduction in fee, DOE would expect to reduce fees substantially under the Conditional Payment of Fee clause.

Section 234C.d. of the AEA imposes three specific limitations on DOE's authority to seek monetary remedies. Specifically, DOE may not (1) both reduce contract fees and assess civil penalties for the same violation of a worker protection requirement; (2) with respect to those nonprofit contractors specifically listed as exempt from civil penalties for nuclear safety violations in subsection d. of section 234A of the AEA, assess an aggregate amount of civil penalties and contractor penalties in a fiscal year in excess of the total amount of fees paid by DOE to that nonprofit entity in that fiscal year; and, (3) assess both civil penalties authorized by section 234A (nuclear safety and radiological protection regulations) and those authorized by section 234C (worker safety and health regulations) for the same violation. These statutory limitations are set forth in sections 851.5(c), (d) and (e) of the rule.

DOE received six comments on section 851.5(c), two comments on section 851.5(d), and no comments specific to section 851.5(e). Several of the comments on section 851.5(c) relate to the imposition of civil or contract penalties. One commenter (Ex. 15) pointed out that DOE is prohibited from

using both civil penalties and contract penalties thus supplemental proposed section 851.9(c) should replace the word "may" with "shall" in the phrase "DOE shall not penalize a contractor * * *" DOE disagrees with this commenter since "may not" means "is not permitted."

Another commenter (Ex. 13) felt that the criteria used to make the determination for imposing the civil penalty rather than reducing contract fees should be embedded in the rule. DOE has not adopted this suggestion. Under the final rule, the decision to use either civil penalties or contract penalties is at the discretion of the Director and is subject to the specific circumstances of each situation. The Director will coordinate with the appropriate contracting official when deciding upon the appropriate penalty method. DOE believes that attempting to predict and develop mandatory criteria encompassing all potential circumstances in this rule would be unnecessarily restrictive and counter to the provision of the statutory requirement for flexibility and discretion in the enforcement of this rule.

Another commenter (Ex. 48) recommended revising this section to state that a contractor cannot be penalized under sections 851.5(a) and (b) for the same violation even if such violation is addressed under another DOE rule, regulation, or order contained in the contractor's contract. The commenter suggested that although supplemental proposed section 851.9(c) attempts to prevent dual (contract and civil) penalties for the same violation. such "double jeopardy" could exist if DOE codifies DOE Order 440.1A. DOE believes this commenter's concern is unfounded. The statute is clear on this issue and the final rule retains the original provision to prevent the use of civil and contract penalties for the same violation.

One commenter (Ex. 54) questioned DOE's decision not to subject contractors to both civil and contract fee reduction penalties for the same violation. The commenter cited the National Academy of Public Administration (NAPA) studies, which show that bonuses were not effectively linked to safety and health performance. DOE notes that, as was described previously, the statute specifically prohibits DOE from imposing both contract and civil penalties for the same safety and health violation.

A second commenter (Ex. 37) suggested expanding supplemental proposed section 851.9(c) in the final rule to avoid imposing a fine when a

contractor earns less than the available fee as a result of a safety and health incident. DOE does not believe an expansion of the limitation is needed. A civil penalty can only be applied if violation of the rule exists. If this violation resulted in an injury, final rule section 851.5(c) would prevent DOE from implementing both civil and contract penalties for the same violation. DOE notes, however, that if an injury resulted from a violation, DOE would consider this fact, as well as the severity of the injury, in determining the amount of penalty.

Referring to the section 851.3 definition of "contractor" as it applies to section 851.5(c), the same commenter (Ex. 37) inquired what DOE expects of "affiliates." To ensure that responsible parties such as an affiliate are held responsible for the safety and health of workers, and to maintain consistency with the duties and responsibilities set forth in 10 CFR part 820, DOE is retaining the reference to affiliated entities in the definition. It is important to note, however, that DOE will consider enforcement actions against any and all contractors associated with a violation. All subcontractors and suppliers of an indemnified contractor are considered indemnified contractors, and as such, are subject to either civil penalties or contract penalties.

The two comments related to section 851.5(d) were both received from the same commenter (Ex. 29). One of the comments requested that the provision state that penalties "shall" (rather than "may") not exceed the contract fee. DOE notes that the language in the final rule "may not exceed" is consistent with the enacting legislation. DOE understands (and intends for) this language to mean that the Department is not permitted to assess an aggregate amount of civil and contract penalties against a non-profit entity under the rule in excess of the total amount of fees paid by DOE to that non-profit entity for the given fiscal year. The second comment (Ex. 29) suggested that, to the extent that DOE may assess both nuclear safety (under 10 CFR 820) and worker safety penalties (under this rule), this final rule should clarify that the penalty limit applies to an aggregate of both types of assessments. DOE notes, that the statute authorizing the assessment of civil penalties for violations of the rule does not require a limit based on total annual penalties assessed for violations of nuclear safety requirements. Therefore, this final rule does not limit total annual penalty amounts due to penalties assessed under 10 CFR 830. DOE will, however, consider this recommendation in developing an enforcement guidance

supplement (EGS) for worker safety and health enforcement.

DOE notes that enforcement actions cannot be brought until the rule becomes effective, which is one year after publication in the Federal Register. Moreover, enforcement actions must be based on violations that take place after the effective date of the rule. Furthermore, compliance with certain requirements (such as submission of a worker safety and health program) is not required immediately upon the effective date of the rule. Of course, nothing in the rule affects the possibility of enforcement of contractual provisions in effect prior to the effective date of the rule.

Section 851.6—Interpretation

Supplemental proposed section 851.6(a) established that the Office of General Counsel would be responsible for formulating and issuing any interpretation concerning a requirement in this part. Several commenters (Exs. 11, 15, 16, 31, 36, 39, 42, 48, 54) were critical of this supplemental proposed provision which gave the DOE Office of General Counsel an exclusive role in issuing interpretations of this part. They expressed concern that DOE's interpretations of OSHA standards would conflict with existing OSHA interpretations. The commenters stated that the codes and standards of Subpart C require interpretation by a competent technical authority and suggested that DOE adopt technical interpretation procedures similar to OSHA's—that is, these commenters felt the Assistant Secretary for Environment, Safety and Health should issue all technical interpretations. Two commenters (Exs. 31, 48) suggested that DOE use the Field Office staff to assist in developing interpretations and a few commenters (Exs. 15, 16, 48) recommended that DOE adopt already existing OSHA interpretations where possible. Yet, another commenter (Ex. 29) questioned whether interpretations could be captured in the contractor worker safety and health program and approved by virtue of the CSO approval of the

Although DOE is of the view that the distinction between legal interpretations and technical interpretations is too vague for those terms to be used in part 851, DOE has responded to the comments by elaborating on the procedures available to members of the public who want to ask for an interpretation or who want to ask for amendments to part 851 to clarify or alter regulatory provisions. DOE has revised proposed section 851.6 and added new sections 851.7 and 851.8.

Section 851.6 of the final rule, sets forth procedures for petitions to initiate generally applicable rulemaking to amend the provisions of part 851. Section 851.7 of the final rule provides for requests for interpretive rulings applying the regulations to a particular set of facts and providing an interpretation that is binding on DOE.

Section 851.8 of the final rule provides for requests for information on the standards in part 851, which may be directed to the Office of Environment, Safety and Health, Office of Health (EH-5). The responses given by EH–5 would be advisory only and would not be binding on DOE. In addition, to assist the DOE community in understanding the technical meaning or application of a specific requirement, EH-5 would continue to operate its safety and health response line to provide information on technical safety and health requirements, requirements published by OSHA, and other adopted standards. In cases where the information is related to OSHA standards, EH-5 would continue to consult the existing body of OSHA interpretations on these regulations. EH-5 would also consult with OSHA representatives if OSHA interpretations did not address a unique DOE question or circumstance.

B. Subpart B—Program Requirements

Subpart B of the final rule establishes general administrative requirements to develop, implement, and maintain a worker protection program. The worker safety and health program would serve as the blueprint through which DOE contractors can communicate a cohesive vision for how various elements making up their overall program interrelate.

As a general suggestion, one commenter (Ex. 6) recommended that supplemental proposed Subpart B be cross-walked against OSHA's 29 CFR 1910 and 29 CFR 1926 to identify potential overlaps and deviations between the OSHA standards and the proposed rule. DOE has considered the commenter's concern but believes such an effort would serve no useful purpose, as the OSHA standards do not establish provisions for a safety and health program.

Section 851.10—General Requirements

Section 850.10 establishes the general requirements for the worker safety and health program. These requirements outline the basic duties of a contractor to maintain a safe and healthful workplace, to comply with the requirements of this rule, and to develop and implement a written program. A few commenters (Exs. 37, 48, 49, 51) expressed concern that the

worker safety and health program would result in increased costs and burden of additional paperwork due to the extensive requirements of the rule. They were particularly concerned that supplemental proposed section 851.100 introduced new requirements above and beyond what is expected under existing DOE directives and felt that these requirements, along with a complicated exemption process, would result in increased costs. DOE acknowledges the concerns of these commenters and notes that the final rule has been revised to closely follow the requirements in DOE Order 440.1A. Hence, DOE believes that implementation of the final rule will result in minimal (if any) additional

DOE also received comments on the subject of limited-duration contractors onsite. One commenter (Ex. 40) sought clarification that the worker safety and health program requirements applied to all contractors, including those brought in for limited-duration and limitedscope work or tasks. DOE notes that final rule section 851.1 clarifies that the worker safety and health requirements of the rule govern the conduct of contractor activities at DOE sites. This includes limited-duration contractors along with all others (with the exception of contractors performing work covered under the exclusions in final rule section 851.2).

Another commenter (Ex. 37) pointed out that limited-duration contractors will have to become familiar with a safety program foreign to them. In response to this concern, DOE believes the program is based on sound worker safety and health principles designed to protect the safety and health of workers on DOE sites. DOE sees no reason to hold one group of DOE contractors to a lesser standard of safety and health protection than others. DOE also believes that the complexity and level of effort needed to develop and implement worker safety and health program under this rule will be greatly dependent on the complexity, duration, and scope of the activities covered. As a result, DOE would expect that a limited duration contractor performing a task of limited scope would require a much simpler program than would a management and operating contractor on a large DOE

A few commenters (Exs. 3, 4, 45) took issue with the requirement in supplemental proposed section 851.100(b)(3)(iii) for contractors to achieve national security missions of the DOE "in an efficient and timely manner" and deemed it inappropriate in a rule governing worker safety and health. Further, one commenter (Ex. 20)

believed that implementation of the rule itself would have an adverse effect on its ability to "achieve national security missions of the Department of Energy in an efficient and timely manner." In response to these concerns, DOE modified the language to eliminate this requirement from the program provisions of Subpart B. Instead, final rule section 851.31(c)(3) provides for a national defense variance where a deviation from the letter of a safety and health standard may be necessary and proper to avoid serious impairment of national defense.

Section 851.10(a)(1) provides that, with respect to a covered workplace for which a contractor is responsible, the contractor must provide a place of employment that is free from recognized hazards that are causing or have the potential to cause death or serious physical harm to workers. A similar provision established in section 5(a)(1) of the OSH Act of 1970 (29 U.S.C. 654) is commonly referred to as the General Duty Clause and states that each employer shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees. Both OSHA and DOE currently apply this provision to workplaces covered under their respective jurisdictions.

A few commenters (Exs. 3, 4, 16) expressed concern that the phrase "responsible for a covered workplace" as applied to contractors in supplemental proposed section 851.4 could lead to confusion regarding applicability of the rule to both contractors and subcontractors. DOE has retained the language in the corresponding section 851.10(a)(1) of the final rule. DOE believes that final rule section 851.1 clearly establishes that the rule applies to contractor activities on DOE sites, and the revised definition of contractor in final rule section 851.3 is clear as to what entities are considered to be contractors.

Several commenters (Exs. 12, 16, 37) expressed concern that the DOE General Duty Clause lacked supporting guidance language, thus potentially resulting in the risk of this obligation being interpreted more severely than OSHA's General Duty Clause. These commenters suggested that guidance and case law developed by OSHA should be relied upon for determining violations and penalties under the DOE rule with defenses commonly available in OSHA enforcement proceedings equally available to DOE contractors. One commenter (Ex. 16) favored deleting the General Duty Clause altogether because,

the commenter asserted, it is unattainable as a stand-alone mandatory requirement. As an alternate suggestion, if the Clause was not deleted, the same commenter concurred with two other commenters and recommended including the "full context of the General Duty Clause as used by OSHA" in the rule. Specifically, the commenter felt the provision should state that the Clause only applies where there is no standard and should list the four elements required by OSHA to prove a violation. DOE believes that the language used in final rule section 851.10(a)(1) for the General Duty Clause is consistent with the language established in the OSH Act and parallels that used in DOE Order 440.1A. As a result, DOE believes that its contractors are intimately familiar with this provision. However, to address these comments and to assist in consistent enforcement of the rule, the DOE Office of Price-Anderson Enforcement intends to prepare enforcement guidance supplements (EGSs) to provide guidance on interpretation of the General Duty Clause, consistent with OSHA guidance on the topic.

DOE received several comments on the terminology used in supplemental proposed section 851.100(a) to refer to hazards. The majority of the commenters on this issue (Exs. 11, 28, 29, 39, 45, 49, 51) favored retention of the term "identified hazards" to describe hazards that were within the rule. But some of these commenters (Exs. 11, 29, 39, 49) suggested inclusion of additional terminology like "potential hazards," "unprotected hazards," and "inherent hazards that are controlled" to ensure a better understanding of the types of hazards covered under the provision. A few commenters (Exs. 28, 45, 51) favored deleting the term "recognized hazards" from the text asserting that workers could only be protected from "identified hazards." One commenter (Ex. 27) recommended that DOE provide a list of specific hazards that a place of employment should be free of to preclude subjective interpretations of the types of recognized workplace hazards that could cause or be likely to cause death or serious bodily harm.

DOE has carefully considered these comments and has simplified section 851.10(a)(1) of the rule to require contractors to provide a workplace free of recognized hazards that are causing, or have the potential to cause, death or serious physical harm. Also, as discussed previously, DOE has removed the provision in supplemental proposed section 851.100(a)(2). Final rule sections 851.21(a) and 851.22(a) further clarify

that, as part of the contractor's worker safety and health program, procedures must be established that contractors will use to identify existing and potential workplace hazards and evaluate, prevent, and abate associated risks.

With respect to hazard protection implications of the General Duty Clause, several commenters (Exs. 20, 31, 36, 39, 42, 49) asserted it was impossible to provide a workplace "free" of hazards without stopping work. Some of these commenters (Exs. 31, 36, 39, 42) suggested rewriting the provision to require the workplace to be "free from uncontrolled or unmitigated hazards." DOE has elected to retain the original language consistent with the provisions of DOE Order 440.1A and OSHA's General Duty Clause and will provide appropriate implementation and enforcement guidance. Two other commenters (Exs. 20, 42) questioned the definition of the term "adequately" in the context of the phrase "adequately protected from identified hazards" in supplemental proposed section 851.100(a)(2) and similar language in section 851.4(b). As previously discussed, DOE believes "adequate protection" is a clear standard that has been used in other context and recognizes the need to protect workers from all identified hazards.

Several commenters (Exs. 5, 16, 29, 48) took issue with the phrase, "likely to cause death or serious bodily harm' in section 851.10(a)(1). One commenter (Ex. 5) felt that the phrase, as used in supplemental proposed sections 851.100(a) and 851.4(a), implied that only violations that could result in death or serious bodily harm would result in fines or penalties. This of course is not the case. Section 851.5 of the final rule clarifies that contractors are subject to civil or contract penalties for any violations of any requirements of this rule. As specified in Appendix B section IX.b.2 and 3, however, DOE will consider the severity of the hazard posed to workers in determining the amount of the penalty imposed. The other commenters (Exs. 16, 29, 48) argued that the phrase was too subjective and had posed enforcement problems for OSHA in the past. These commenters felt that a change in language or a definition of the term "serious bodily harm" was needed to avoid confusion. DOE has modified this language slightly in final rule section 851.10(a) to replace "serious bodily harm" with "serious physical harm." This change in terminology is consistent with the language in DOE Order 440.1A. DOE believes that this provision (and language) has been applied successfully through the Order for the past decade

and that, as a result, contractors are intimately familiar with the language.

Section 851.10(a)(2) requires the contractor to ensure that work is performed in accordance with all applicable requirements of Part 851 and with the worker safety and health program for the workplace. One commenter (Ex. 37) expressed concerns about potential penalties that could result from failure to comply with the worker safety and health program. Specifically, the commenter was concerned that non-compliances with any component of a contractor's worker safety and health program (even those outside the requirements of the rule) could result in civil penalties. This commenter believed that enforcement against provisions of a contractor's program that go above and beyond the requirements of the rule will lead contractors to adhere only to the minimum requirements outlined in the rule and will result in a watered-down worker safety and health program. This commenter argued that only noncompliances with specific worker safety and health requirements in the rule should result in civil penalties. DOE disagrees and believes that the requirement for contractors to develop and implement an approved program makes compliance with the provisions of the program enforceable under the rule. DOE expects that not enforcing these requirements would result in ineffective programs that are not fully implemented. DOE also notes that a contractor's proactive safety and health efforts will be considered in determining the level of penalty associated with a violation and believes that this will continue to compel contractors to develop and implement effective programs.

Section 850.10(b)(1) specifies that the written program must describe how the contractor will comply with the requirements in Subpart C that are applicable to the hazards associated with the contractor's scope of work. Two commenters (Exs. 16, 48) expressed concern that excess paperwork would be generated due to the Subpart C requirements to develop numerous functional area sub-plans in the worker safety and health program. The commenter suggested that these Subpart C requirements duplicated the Subpart B requirement specifying effective implementation of supplemental proposed Subpart C in the written worker safety and health program. DOE agrees with these comments. Section 851.10(b)(1) of the final rule requires contractors to establish a written worker safety and health program that must describe how the contractor will comply with the requirements in Subpart C that are applicable to its scope of work. In addition, final rule section 851.24 requires contractors to take a structured approach to their worker safety and health program and include provisions for the applicable functional areas in the worker safety and health program. DOE believes that this integration of requirements will reduce excess paperwork.

One commenter (Ex. 16) expressed concern that the language, "requirements * * * applicable to the hazards identified for the workplace" in supplemental proposed section 851.4(c) was confusing. The commenter noted that the standards incorporated into Subpart C already included a clear statement of scope and questioned whether the statement in supplemental proposed section 851.4(c) referred to these scope statements or to some other different scope determinations, such as an agreed-upon set of Work Smart Standards. DOE intends for this phrase—revised in section 851.10(b)(1) of the final rule to read, "applicable to the hazards associated with the contractor's scope of work"—to refer to the individual scope of the standard or regulation for those standards specified in the final rule section 851.23. In the case of the functional area requirements specified through final rule section 851.24, this phrase applies to the specific topic covered in the functional area (e.g., pressure safety requirements apply only to worksites with pressure hazards). All other provisions of final rule Subpart C apply to all work sites within the scope of the rule as specified in final rule section 851.1.

Another commenter (Ex. 54) suggested that this section should require that contractors comply with provisions of the rule establishing worker rights to information. In response to this commenter's concern, DOE notes that final rule section 851.10(b) requires contractors to comply with the requirements of Subpart C of the rule. Worker rights provisions are established in Subpart C and thus are included in this broad requirement. To further address this comment, DOE also added final rule section 851.20(a) to clarify management responsibilities and ensure worker rights.

The same commenter (Ex. 54) also suggested that the "General Requirements" section of the rule should include requirements to post appeals, variance requests, orders and all communications between the employer and DOE. DOE notes that requirements (1) a requirement to post compliance orders is established in final rule section 851.4(d); (2) requirements

to post and inform employees of variance requests are addressed in final rule sections 851.31, 851.32, and 851.33; and (3) management requirements regarding health and safety related information and communication with workers are established in 851.20(a). The rule does not establish a requirement to post appeals.

One commenter (Ex. 49) stated that the supplemental proposed requirement to identify and document situations for which an exemption is needed within the worker safety and health program in addition to identifying and documenting the same situations through the exemption process represented an unnecessary duplication of effort which should be eliminated. DOE agrees and has removed this provision from the final rule.

Several commenters (Exs. 16, 39, 42, 45, 51) sought clarification on the tailoring of worker safety and health requirements required by supplemental proposed section 851.100(b)(3). One commenter (Ex. 16) suggested it was impractical for the rule to invoke specific requirements (in Subpart C) and then specify that implementation of the specific requirements was to be tailored. The commenter pointed out that the specific requirements were either met or not met. The commenter also alluded to a potential conflict: other provisions implied that formal exemptions were needed for deviations from specific requirements of Subpart C (tailoring was included in the special circumstances for exemption criteria in supplemental proposed section 851.301). The commenter recommended that much of the required flexibility/tailoring could be built into the safety and health requirements themselves. Two other commenters (Exs. 45, 51) requested clarification on the intent and application of the tailoring with respect to enforcement actions for noncompliances. Another commenter (Ex. 42) requested that DOE provide specific criteria to determine what would constitute effective implementation of tailored worker safety and health requirements in supplemental proposed section 851.100(b)(3). One last commenter (Ex. 39) suggested that the actual level of safety protection (e.g., fire protection) be specified by DOE at the start of a contract, not refined through the exemption process by the contractor well into the contract. In response to these concerns, DOE has modified the language in the final rule to eliminate the requirement for tailoring of worker safety and health programs in Subpart B. In addition, the variance process described in Subpart D of the rule no

longer includes tailoring a requirement as a rationale for a variance.

Section 850.10(b)(2) specifies that the written program must comply with any compliance order issued by the Secretary pursuant to section 851.4. One commenter (Ex. 16) objected to previous wording requiring that contractors comply with compliance orders that are "applicable to the workplace" and questioned why DOE would issue a compliance order under this rule that is not applicable to the workplace. DOE acknowledges the validity of the observation and has removed the phrase "applicable to the workplace" from the corresponding provision in final rule section 851.10(b)(2).

Section 851.11—Development and approval of worker safety and health program

Section 850.11 establishes the procedures for the development and approval of the worker safety and health program. One commenter (Ex. 27) expressed concern that vague language in the supplemental proposal did not lend itself to an enforceable rule. The commenter pointed to the provision of supplemental proposed section 851.101(a)(2)(ii) requiring contractors to "ensure worker safety and health programs are integrated and consistent" as an example to illustrates this point. DOE acknowledges the commenter's concern and has made every attempt to eliminate vague language from the final rule. However, DOE has retained certain commonly understood words and terms in order to allow interpretive latitude to suit differing situations of different DOE

One commenter (Ex. 47) stated that the establishment of standards, such as the OSHA standards, based on welldefined Federal regulations was preferable to the approved safety and health program approach proposed in the rule. The commenter noted that the OSHA approach takes advantage of over 30 years of workplace safety and health and reflects responses to hazards found in general industry. The commenter believed such an approach would also promote consistency across the DOE complex as well as accountability for specific compliance requirements. DOE acknowledges that there are some advantages to having a single set of regulations applicable to all DOE contractors. Nevertheless, there are offsetting disadvantages to having a ''one-size-fits all'' approach. DOE believes that the approach adopted in the final rule that includes both requirements of general applicability, supplemented by additional requirements tailored to the specific

needs and concerns of a specific contractor is the superior approach to providing the optimal level of worker safety and health.

DOE received numerous comments on perceived increased costs and administrative burden that would result from establishing written worker and safety health programs. The majority of the commenters (Exs. 3, 4, 16, 19, 25, 31, 37, 38, 42, 47, 48, 49, 57) expressed concern that the requirements to develop a new discrete written program; integrate and implement that program on the worksite; and maintain, update, and regularly audit the program would result in significantly increased costs and administrative burden. Two commenters (Exs. 31, 48) specifically requested that these impacts be considered prior to codification. Several commenters (Exs. 3, 4, 37, 42, 47, 49) suggested that approval of the program should be sufficient to meet the intent of the rule without further requirements to maintain, update, and audit the program. Two commenters (Exs. 19, 57) favored elimination of these requirements from the rule altogether. Another commenter (Ex. 38) argued that these requirements were redundant, duplicating DOE's existing review and approval of contractors' environment, safety, and health activities like the Work Smart set. DOE agrees and has provided in final rule section 851.13 that in the event a contractor has established a written safety and health program, an Integrated Safety Management System (ISM) description pursuant to the DEAR Clause, or an approved Work Smart Standards (WSS) process before date of issuance of final rule, the contractor may continue to use that program, description, or process as the required worker safety and health program if the appropriate Head of the DOE Field Element approves such use on the basis of written documentation provided by the contractor that identifies the specific portions of the program, description, or process, including any additional requirements or implementation methods to be added to existing program, description, or process, that satisfy the requirements and that provide a workplace as safe and healthful as those required by the final rule requirements.

Several commenters (Exs. 39, 45, 51) stated that processes described in supplemental proposed section 851.101 represented an expansion of the scope of contractor obligations compared to current DOE contractual requirements and orders. A few commenters (Ex. 36, 39, 42) expressed concern that development of the worker safety and health plan and delays in waiting for

approval would result in increased costs. Several other commenters (Exs. 28, 37, 45, 49, 51) concurred and sought clarification from DOE on whether costs incurred by contractors and subcontractors in developing and implementing the DOE-approved worker safety and health program were allowable in accordance with FAR Part 31 and DOE Acquisition Regulation Subpart 931 principles. Costs of compliance with Part 851 are usually going to be allowable costs under the contract under FAR Part 31 and DEAR Part 970.31. Contractor costs in developing and implementing a DOEapproved worker safety and health program are routine costs that are typically allowable. An exception to cost allowability might exist, however, if the action or inaction of contractor managerial personnel is the original cause of the non-compliance, particularly if the non-compliance violates an approved integrated safety management system.

One commenter (Ex. 51) voiced the concern that the worker safety and health rule would require documentation and implementation strategies separate from those for DOE Order 440.1A and the Integrated Safety Management (ISM) Program. In response, DOE notes that the final rule is based on DOE Order 440.1A and replaces Attachment 2, "Contractor Requirements Document of the order. In addition, final rule section 851.11(a)(3) requires that the written program describe how the contractor will integrate all requirements of Part 851 with other related site-specific worker protection activity and with the Integrated Safety Management Systems (ISMS). Section 851.13(b) of the rule clarifies that contractors who have implemented a written worker safety and health program, ISM description, or Work Smart Standards process prior to the effective date of the final rule may continue to implement that program/ system so long as it satisfies the requirements of Part 851. Hence, DOE believes that the integration of these existing programs with the worker safety and health program will eliminate any duplication of effort and limit any additional burden associated with the rule.

Section 850.11(a) requires contractors to prepare and submit a worker safety and health program that provides methods for implementing the requirements of Subpart C to the appropriate Head of DOE Field Element for approval within 380 days publication of the final rule in the **Federal Register**, February 26, 2007. Some commenters (Exs. 5, 13, 19, 38,

57) took issue with the need to prepare, submit, and obtain DOE approval of the written safety and health program. Three of these commenters (Exs. 19, 38, 57) asserted that the requirements for submittal, review, and approval of worker safety and health programs were not necessary to allow DOE to meet its statutory obligation under section 3173 of the National Defense Authorization Act (NDAA). One commenter (Ex. 5) suggested that the imposition of core requirements in supplemental proposed sections 851.10 and 851.100 should preclude the need for DOE to approve worker safety and health plans and supported simply adding the rule to the DOE list of applicable standards provided in management and operating contracts and other DOE contracts. Another commenter (Ex. 13) recommended that these provisions be revised to allow the worker safety and health program to be written as an overview or roadmap document, illustrating the integration of current infrastructure documents (previously created under DOE Orders 440.1A and 420 and DOE Notice 450.7). This commenter suggested that the level of oversight DOE already maintains over programs under existing contract structures justifies the submission of merely the overview document, without any of the supporting safety management program documents. DOE believes that the provisions for submission, review and approval of the written safety and health program plans are necessary to permit the Department to meet its responsibilities under section 3173 of the NDAA and the AEA to ensure a safe and healthful workplace. DOE further notes that the process strikes an appropriate balance between allowing contractors and workers to have input into the requirements, while recognizing that DOE management must be satisfied with their implementation. These programs will also be useful to DOE's enforcement office to evaluate compliance with the rule. Further, the final rule recognizes that programs are already in place and are consistent with the existing mechanism for the submission and approval of worker safety and health plans under Part 851.

DOE received numerous comments on the proposed time schedule for submission of worker safety and health programs by contractors. The general concern expressed by the commenters (Exs. 3, 4, 5, 16, 28, 29, 31, 35, 36, 39, 42, 47, 51, 57) was that the supplemental proposed section 851.101(a) requirement allowed insufficient time for an adequate submission of the written worker safety

and health programs by the July 25, 2005, due date. The commenters also generally recommended modification of the due date depending on the date of issuance of the final rule. Many commenters (Exs. 13, 28, 29, 31, 33, 37, 45, 47, 49, 51, 57) offered various suggestions for the time contractors would need to prepare and submit the written worker safety and health program, ranging anywhere from 90 days to 12 months after publication of the final rule in the **Federal Register**. DOE acknowledges the validity of the commenters' concerns regarding the specific date published in the supplemental proposal and has modified the corresponding final rule section 851.11(a) to require contractors to prepare and submit the worker safety and health program within 380 days after the date of publication of the final rule in the **Federal Register**. In selecting this date, DOE took into account that the NDAA prohibits the rule from becoming effective until twelve (12) months after issuance. DOE expects contractors to begin work on their worker safety and health program immediately upon publication of the final rule and to consult with DOE during the period before the rule becomes effective. Accordingly, DOE believes it is reasonable to require submission of the worker safety and health programs no later than 380 days after publication in the Federal Register. In a related matter, DOE believes it is reasonable to require contractors to be in compliance with their worker safety and health programs no later than 470 days after publication.

DOE also received several questions and comments on contractorsubcontractor obligations and relationships with respect to development of the worker safety and health program. Several commenters (Exs. 13, 20, 28, 29) questioned whether subcontractors, vendors, and delivery contractors needed to submit their own worker safety and health programs or whether they were covered under the programs of their prime or management and operating contractors. One of these commenters (Ex. 20) further questioned whether employees of a subcontractor with a worker safety and health program would be covered under the subcontractor's program or that of the prime management and operating contractor. DOE generally expects that contractors with primary responsibility will develop the health and safety programs and subcontractors will follow the programs pursuant to 851.11(a)(2) and (3). However, in some cases in which a subcontractor has primary responsibility, it may be necessary and

appropriate for them to provide a supplemental program. In situations involving such overlap, contractors need to coordinate so there are clear rules, responsibilities, and procedures that result in an integrated approach to worker safety and health. As discussed previously, vendors and delivery contractors are not contractors for purposes of the rule and in general, their employees are subject to programs developed by the contractor under OSHA's regulatory authority. Nevertheless, when employees of such vendors are on DOE sites, they will benefit from the requirements put in place under Part 851.

With respect to changes in contractors due to contract competition, two commenters (Exs. 25, 27) voiced concern about the effects of a change in laboratory prime contractors and noted there was no provision in the proposed rule dealing with such an event. One of these commenters (Ex. 27) specifically suggested that given DOE's current approach of re-competing contracts, Subpart B of the rule should be modified to address potential changes in management and operating contractors—especially during the period between the effective date of the rule and the one year anniversary. Pursuant to the statutory requirements, the rule contemplates that a new contractor is required to submit and gain approval for its worker safety and health program. As a practical matter, if a prior contractor had a workable program, DOE expects that the new contractor's burden would be minimal because it could submit a similar program.

Section 851.11(a)(1) describes contractor requirements in cases where a contractor is responsible for more than one covered workplace. Under such conditions, the rule requires the contractor to establish and maintain a single worker safety and health program for the covered workplaces for which the contractor is responsible. One commenter (Ex. 5) expressed the opinion that this requirement contradicts the requirement for contractors to integrate health and safety programs with other site DOE contractors. The commenter suggested that one contractor should be responsible for the whole site, with all other users conforming to that contractor's worker safety and health program. DOE disagrees, given the complexity and diversity at some DOE sites, each contractor responsible for work at covered workplaces should coordinate with the other contractors to ensure that there are clear roles, responsibilities and procedures that will

ensure the safety and health of workers at multi-contractor workplaces.

Section 851.11(a)(2) describes contractor requirements if more than one contractor is responsible for a covered workplace. This section clarifies that in such cases, each contractor must establish and maintain a worker safety and health program to cover its activities and must coordinate with the other contractors responsible for work at the workplace to ensure that individual roles, responsibilities, and procedures are established to ensure worker safety and health at multicontractor workplaces.

One commenter (Ex. 15) recommended that the terms "integrated and consistent" in supplemental proposed section 851.101(a)(2)(ii) be replaced with "reflect a common approach and level of protection" to allow greater latitude in situations where multiple contractors are responsible for different activities in a workplace. The commenter was of the opinion that this flexibility was essential to ensure a focus on safety instead of the administrative burden of integration of multiple prime contractors. DOE agrees with this commenter and has revised section 851.11(a)(2)(ii) of the final rule to require that contractors "coordinate with the other contractors responsible for work at the covered workplaces to ensure that there are clear roles, responsibilities, and procedures that will ensure the safety and health of workers at multi-contractor

workplaces.' Several commenters (Exs. 13, 28, 45, 51) sought clarification on this provision, asking which contractor would be responsible for submission of the written worker safety and health program on multi-contractor sites requiring integration and coordination. Three of these commenters (Exs. 28, 45, 51) recommended that each contractor must maintain a worker safety and health program for the workplaces for which each is responsible at a DOE site where multiple contractors are responsible for covered workplaces. DOE agrees with these three commenters that this was the intent of the supplemental proposal. DOE notes that the final rule in section 851.11(a)(2) requires each contractor with responsibility for a covered workplace to establish and maintain a worker safety and health program for the workplaces for which they are responsible. Hence, at multi-contractor sites, each contractor is responsible for submitting its own worker safety and health program for the covered workplaces for which it is responsible.

Some commenters raised concerns about site responsibility issues at multicontractor sites. Two commenters (Exs. 3, 4) asserted that the stipulation that there may be more than one contractor responsible for a covered workplace contradicts other provisions of the rule and will lead to confusion in application. Two other commenters (Exs. 29, 49) questioned whether the management and operating contractor at any given work place would have any oversight, reporting, or other responsibility for work conducted at that site by another organization under direct contract to DOE. Another (Ex. 40) sought clarification of the issue of decentralized vs. centralized responsibility on DOE work sites and DOE assignment of contractor responsibilities for health and safety requirements (e.g., traffic safety) across entire DOE sites. To address these concerns, DOE expects to publish enforcement guidance supplements (EGSs) as discussed in the section-bysection discussion for Subpart E to describe DOE's planned enforcement approach on multi-employer sites. DOE will base these EGSs on similar OSHA multi-employer worksite enforcement policies implemented in private industry.

DOE received numerous comments on the subject of consistency of worker safety and health programs on multiemployer worksites. The main issues of concern included establishing a basis for ensuring consistency and the lack of contractual and legal relationships between contractors. The main recommendations offered to DOE by commenters in resolving these concerns were for DOE to act as the coordinating authority and for DOE to review and make use of the OSHA Multi-Employer Policy in the DOE rule. Each of these issues is discussed in more detail below.

With respect to establishing a basis for ensuring consistency of worker safety and health programs on multi-employer work sites, one commenter (Ex. 45) expressed concern that the language in the proposed rule was subjective, lacked measurement, and was an expectation, not an enforceable requirement. The commenter was of the opinion that consistency should arise from the workforce and be handled in good faith by employers. The commenter further remarked that invoking consistency on multi-employer worksites through enforcement of a standard left the employer at risk for compromising their safety program and made DOE responsible for the success or failure of implementation and performance.

Several other commenters (Exs. 16, 39, 47, 48, 49, 58) raised the issue of the

inherent difficulty in coordinating and integrating worker safety and health plans at multi-employer sites due to lack of contractual relationships between contractors or the legal authority to modify another contractor's program. The same commenters (Exs. 16, 39, 47, 48, 49, 58) recommended that the coordination, accountability, and authority for various worker safety and health plans among multiple contractors on a site should rest with DOE since DOE directly contracts with these entities and maintains contractual authorities. Alternatively these commenters were in favor of deletion of this provision from the rule altogether. One commenter (Ex. 48) specifically requested definition of and guidelines for integration and consistency and suggested that the final rule establish who would determine when integration and consistency requirements were adequately met on multi-employer sites.

Other commenters (Exs. 49, 58) specifically recommended that issues such as those described in the preceding paragraphs would best be addressed through the application of OSHA's Interpretation of Multi-Employer Worksite Citation Policy regarding creating, controlling, exposing, and correcting employers. As discussed elsewhere, DOE intends to prepare an enforcement guidance supplement that will provide guidance on multi-employer worksites that is consistent with current OSHA policy.

One commenter (Ex. 39) felt that the requirement to coordinate programs with other contractors responsible for work on the covered workplace did not address the issue of application of worker safety and health requirements to private entities benefiting from reuse of former Federal facilities on DOE sites. For instance, the DOE site contractor may still provide emergency response and security services to the private entity, but the private entity would not be subject to the rule. The commenter sought clarification of how the emergency response and security personnel would be protected in such instances. In response, DOE notes that emergency response and security personnel would be covered by their respective worker safety and health program regardless of their location on a DOE site. In facilities leased to community reuse organizations and their tenants, safety and health provisions of the lease agreement would apply to the leasee.

Two commenters (Exs. 31, 35) expressed concern about the potential conflict between the proposed rule's requirement to tailor the worker safety and health program and the need to

integrate the contractor's worker safety and health programs at a DOE site. One commenter (Ex. 31) was of the opinion that the requirement for integration between contractors, which would intrinsically seek a majority consensus, was in conflict with the requirement to tailor the worker safety and health program to the work environment. The other commenter (Ex. 35) offered the observation that even though the purpose and basis of the worker safety and health programs of different contractors may be the same, the details of each worker safety and health program must be tailored to the specific work to ensure effective implementation. DOE recognizes that the proposed requirement to "integrate" worker safety and health programs created some confusion during the public comment period. As a result, the term has been removed from final rule section 851.11(a)(2)(ii). This section now clarifies that contractors must coordinate with other contractors onsite to ensure clear delineation of roles, responsibilities, and procedures.

DOE also received numerous comments that argued that the requirement for integration and coordination would result in increased costs and additional administrative burden. The commenters (Exs. 13, 19, 31, 35, 36, 39, 42, 48) expressed concern that integration and coordination between different contractors on a DOE site would be costly and burdensome due to differing missions and management systems and complex inter-relationships. One commenter (Ex. 39) specifically requested that DOE modify standard contract terms to include the requirement to coordinate with other onsite contractors in order to allow contractors to be reimbursed for costs associated with the coordination activity. DOE disagrees that contract modifications are required since contractors on a site currently operate their worker safety and health programs with or without conflict. Conflicts are normally resolved when they occur. DOE expects that the level of adjustments needed to coordinate worker safety and health programs will be minimal and that wide-scale modifications will not be necessary.

DOE received several comments on the issue of ensuring subcontractor compliance as required by supplemental proposed section 851.100(b)(9). These commenters (Exs. 16, 28, 31) raised concerns regarding adequate means of enforcing compliance, potential increased costs, and accountability concerns. One commenter (Ex. 16) voiced the concern that flow-down requirements and monitoring and

penalizing subcontractors for failure to comply were insufficient to ensure compliance. The commenter recommended that the rule section be "rewritten to include quantifiable intent." Two commenters (Exs. 28, 31) asserted that the requirement for contractors to ensure subcontractor compliance would result in the need to re-negotiate legal contracts between prime contractors and subcontractors and lead to increased costs. As discussed above, DOE intends to address these questions in appropriate EGSs on multi-employer worksites consistent with current OSHA policy. However, DOE notes that all contractors, including subcontractors, are responsible for complying with Part 851 to the extent they are responsible for a covered workplace.

In another area related to subcontractor compliance, two commenters (Exs. 37, 47) were concerned that increased contractor oversight and the potential penalties would have a negative impact on subcontractors and could discourage some subcontractors from performing work on DOE sites. DOE is required by statute to implement a worker safety and health program that covers all contractors, including subcontractors.

One commenter (Ex. 29) requested clarification that the need to coordinate and integrate programs applied only to multi-employer sites, not contractor/ subcontractor relationships. This commenter argued that contractors should require subcontractors to conform to their programs. They should not be required to integrate their programs with their subcontractors'. DOE's intent with this provision is not to limit the contractor's contractual authority, but rather to ensure that safety and health program roles, responsibilities, and procedures are clearly understood by all contractors on a covered worksite. In fact, DOE recognizes that requiring subcontractors (through appropriate subcontract mechanisms) to conform to the contractor's safety and health program is an effective way to meet the intent of final rule section 851.11(a)(2)(ii).

Section 851.11(a)(3) describes the required components of the contractor's worker safety and health program. Specifically the section requires that the program describe how the contractor will comply with the requirements of Subpart C of the final rule and how they will integrate these requirements with other related site-specific worker protection activities and with the ISMS.

Several commenters (Exs. 13, 16, 25, 28, 35, 45, 51, 57) sought clarification on the nature and extent of the worker

safety and health program document and requested that DOE develop more detailed guidance on what constituted an acceptable worker safety and health program. Many of the same commenters (Exs. 27, 28, 35, 45) also questioned whether existing worker protection initiatives such as the ISM descriptions, Work Smart Standards, and "B-List" contract requirements could be used to fulfill new program requirements. Some were concerned with a potential duplication of effort and the resulting cost. One of these commenters (Ex. 28) specifically sought clarification on whether the new program was to be developed based on the outline in Subpart C and whether a collection of existing safety procedures, plans, guides, and manuals would be sufficient to meet the requirement. To address these concerns, final rule section 851.11(a)(3) requires the worker safety and health program to describe how the contractor will integrate the requirements of Subpart C of the rule with site-specific worker protection activities and with ISMS. Subpart C provides more detailed direction on the required content of the program. This required content is closely aligned with the program requirements of DOE Order 440.1A. In addition, final rule section 851.13(b) allows contractors who have implemented a written worker safety and health program, an ISM description (pursuant to the DEAR Clause), or a Work Smart Standard process prior to the issuance of the final rule, to continue to implement that program, description, or process so long as it satisfies the requirements of Part 851 and is approved by the appropriate Head of DOE Field Element. Further, the existing series of implementation guides developed to assist DOE contractors in implementing the provisions of DOE Order 440.1A also can assist in implementation of the rule. Shortly after publication of this rule, DOE anticipates publishing updated implementation guides revised to specifically address the provisions of the final rule.

Section 851.11(b) of the final rule delineates the responsibilities of the Head of DOE Field Element with respect to evaluation and approval of worker safety and health programs within 90 days of receipt of a contractor submission. This provision further establishes that the worker safety and health program and any updates will be deemed approved 90 days after submission, if not specifically approved or rejected by DOE within the approval timeframe.

One commenter (Ex. 49) sought clarification from DOE on the value of the formal worker safety and health

program approval process. The commenter suggested that the requirements enforceable via the penalty process should be promulgated in the rule and other contractual requirements enforced via contractual mechanisms. The commenter also noted that each contractor's program would differ, which could lead to enforcement inconsistencies. DOE notes that the enabling legislation makes both civil and contract penalty options available to DOE. Civil penalties can be used only to enforce regulatory requirements. As discussed in connection with implementation, regulatory enforcement necessarily takes into account whether a contractor has undertaken necessary and sufficient actions to implement the requirements established by the rule.

Two commenters (Exs. 5, 51) sought clarification on the reason for DOE approval of contractor worker safety and health programs. One commenter (Ex. 5) asserted that if DOE must approve all worker safety and health programs and supplemental proposed Subpart E provides that only a violation of 10 CFR 851 could result in an enforcement actions, then DOE would be liable if it approved a program that inappropriately excluded an element of the health and safety program. Another commenter (Ex. 51) did not agree that DOE approval of the health and safety plan was required, since DOE did not adopt responsibility or liability for the content of the plan but instead would force contractors to make changes to plans and field actions. The commenter suggested that submission of a comprehensive safety and health program should be sufficient and should include construction health and safety issues. The commenter also noted that DOE approval of lower-tier implementing documents should not be mandated or codified. DOE believes that approving worker safety and health plans is an essential element in carrying out its statutory responsibilities concerning worker safety and health. DOE notes the rule does not require approval of "lower-tier" implementation decisions. As previously discussed, if these contractor decisions do not result in proper implementation of the rule, the contractor will be subject to enforcement actions, including the imposition of civil penalties.

Two commenters (Exs. 13, 42) sought the inclusion of criteria in the rule for DOE review and approval of the written worker safety and health programs. These commenters felt that such criteria were needed to ensure consistent worker safety and health programs across the DOE complex, to ensure a

consistent review and approval processes by DOE field offices, and to minimize the level of effort required to develop and obtain program approval. These commenters sought specific guidance on the DOE Field Office review and approval process; the criteria for determining the appropriate standards needed to achieve the required level of protection; and clarification regarding who had the burden of demonstrating "equivalency." DOE notes that Subpart C of the final rule now provides more specific detail on the required content of the program. This detail is consistent with DOE Order 440.1A and, as a result, is familiar to DOE contractors. In addition, DOE will develop and publish appropriate implementation guidance to supplement these requirements and to assist DOE Head of Field Elements.

One commenter (Ex. 48) sought clarification of the role of local DOE field offices in the approval and maintenance of the worker safety and health program. DOE has clarified this point in final rule section 851.11(b), which states that the appropriate Head of DOE Field Element is responsible for review and approval of the submitted worker safety and health program. For further clarification, DOE has defined the term "Head of DOE Field Element," as used in this rule in final rule section 851.3.

Several commenters (Exs. 13, 28, 29, 39, 45, 51) suggested that the submitted program should be considered approved if DOE does not act within the 90-day time frame allotted for approval, and the program should be implemented as submitted. One commenter (Ex. 13) specifically provided 10 CFR 830 as a model for language in this provision. This commenter noted that, according to 10 CFR 830, if DOE fails to approve or reject the required plan within the prescribed period, the existing plan is by default approved. Another commenter (Ex. 48) proposed an alternate time period for approval and suggested that plans should be considered approved by the Cognizant Secretarial Officer if they are not specifically rejected within 180 days of submission. A few commenters (Exs. 25, 29, 45, 48) raised the doubt that even if a contractor submitted a worker safety and health program on schedule, any inability of DOE to approve the program could translate to a site or laboratory being completely shut down which in turn would place a significant risk upon the contractors. In response to these comments DOE has modified the final rule to clarify in section 851.11(b) that worker safety and health programs will deemed approved 90 days after

submission if not specifically approved or rejected by the appropriate Head of DOE Field Element.

One commenter (Ex. 5) expressed concern that if DOE required approvals and annual updates to the worker safety and health program, then the Voluntary Protection Program (VPP) should be eliminated since there would be no voluntary portion of the safety and health program. DOE disagrees with the commenter. The DOE VPP status requires contractors to go beyond simply complying with the requirements of this rule. VPP promotes effective, comprehensive worksite safety and health and encourages employers to perfect existing programs (continuous improvement). In the VPP, management, labor, and DOE establish cooperative relationships at workplaces that have implemented a comprehensive safety and health management system. Approval into VPP is DOE's official recognition of the outstanding efforts of employers and employees who have achieved exemplary occupational safety and health programs.

Yet another commenter (Ex. 37) questioned how the prime contractor would obtain timely DOE approval of changes to the worker safety and health program when unforeseen emergencies were involved. The commenter referred to the aging infrastructure of some DOE facilities, which may necessitate emergency repairs to utilities and immediate mitigation under direct onsite safety coordination without the luxury of written safety planning. In response to this concern, DOE notes that the intent of its program is to establish implementation procedures for identifying and controlling hazards. The program itself does not list of all hazards with control mechanisms for each hazard. Therefore, the program does not need to be updated each time a new hazard is identified; rather, it must be updated only when a new process is added or a different type of hazard is introduced (or another significant change occurs) that is not effectively addressed through the procedures established in the program.

Section 851.11(b)(1) of the final rule stipulates that beginning one year after the date of publication of the final rule, no work may be performed at a covered workplace unless an approved worker safety and health plan program is in place for the workplace. DOE received numerous comments about work stoppage on sites due to lack of approval of worker safety and health programs. Two commenters (Ex. 5, 29) questioned if the "entire contractor work ceases" if DOE does not approve a contractor's worker safety and health program. One

of these commenters (Ex. 5) sought clarification of what would occur while approvals were pending. The rule makes it clear that a contractor cannot proceed, if it has not obtained approval for its program. This is necessary to ensure workplace safety and health.

Nevertheless, to decrease any unreasonable burden, the rule provides transition for existing programs.

Several commenters (Exs. 33, 39, 38, 47, 57) expressed concern that the proposed requirement for a complete work stoppage on sites due to a lack of an approved worker safety and health program failed to take several important issues into consideration. Two of these commenters (Exs. 38, 57) asserted that a complete work stoppage would be an untoward response to a limited set of pending issues requiring resolution (such as an application for an exemption) prior to program approval. These commenters felt that the supplemental proposal ignored the need to continue certain site activities to ensure that facilities and equipment were maintained in a safe configuration. The same commenters also noted that complete work stoppage would give rise to shutdown, maintenance, and startup costs, with no benefit to DOE or the workers. Two commenters (Exs. 38, 47) recommended substituting a more reasonable and graded approach for the proposed ban on all work activities should the provision be maintained. DOE has carefully considered these comments, but has not revised this provision of the rule. Contractors should already have a worker safety and health program in place under existing contract requirements. DOE believes that 470 days is sufficient for contractors to come into compliance with the rule, including adjusting their existing programs if needed.

A few commenters (Exs. 33, 39, 45, 47) expressed the concern that this provision of the rule fails to acknowledge that many sites have approved ISM, Voluntary Protection Program, and human performance programs already in place that meet or exceed DOE requirements for worker protection. The commenters recommended that a mechanism for approving programs that have undergone ISM verification should be included in the rule. DOE agrees with these commenters and has clarified in final rule section 851.13(b) that contractors who have implemented a written worker safety and health program or ISM description or Work Smart Standard process prior to the effective date of the final rule may continue to implement that program/ system so long as it satisfies the

requirements of Part 851 and is approved by the appropriate Head of DOE Field Element.

One commenter (Ex. 37) suggested that provision should be made in the rule to give contractors more time if their worker safety and health program approvals were delayed due to a DOE backlog in granting exemptions. This commenter felt that supplemental proposed section 851.100(b)(5) required approved exemptions as a component of the worker safety and health program. The commenter questioned how Congress would respond to a facility shutdown even though the facility was in full compliance with all standards existing when the 2002 legislation was passed. DOE does not intend for program approval to be contingent upon approval of variances. To clarify this point, DOE has removed the provision of the supplemental proposal that required that contractors identify conditions that require an exemption in the program. Further, as discussed in detail in the section-by-section discussion of Subpart D, DOE does not anticipate that a large number of variances will be requested under this rule.

Some commenters (Exs. 6, 29, 31) questioned whether EH had the resources to review and concur or comment on contractor programs from across the DOE complex in time to preclude work stoppage. One commenter (Ex. 29) requested that the Cognizant Secretarial Officer (CSO) approval process be detailed in the rule, and questioned whether there would be onsite review and validation by an external DOE team similar to the ISM verification process. This commenter also questioned how the contractor would be notified if the Cognizant Secretarial Officer delegated approval authority to the Site Manager. DOE acknowledges these concerns and has streamlined the approval process in the final rule. Specifically, final rule section 851.11(b) establishes the Head of DOE Field Element as the approval authority for worker safety and health programs. The rule no longer requires review and consultation by the Assistant Secretary for Environment, Safety and Health, nor does it provide for delegation of approval authority; however, contractors must send copies of their approved programs to the Assistant Secretary under final rule section 851.11(b)(2). DOE does not envision the use of external DOE onsite review and validation teams as part of the program approval process. As discussed in the section-by-section discussion for Subpart E, DOE will use onsite inspections as a tool to verify program

implementation and compliance with other provisions of the rule.

Many commenters (Exs. 28, 39, 45, 51) sought clarification on the specific contract provision DOE expects to use to direct a contractor to stop work, pointing out that a contractor may not stop performance on a contract without direction from the DOE contracting officer per DEAR 970.5204–2(g). DOE notes that the stop work authority in the regulation is independent from the contract's provisions. Compliance orders by the Secretary represent an exercise of AEA authority, while stop work authority in subpart C is a regulatory mechanism.

Section 851.11(b)(2) of the final rule describes contractor responsibilities with respect to distribution of the approved worker safety and health program to the DOE Assistant Secretary for Environment, Safety and Health. As discussed above, this provision replaces the proposed rule's provision requiring the Assistant Secretary's consultation during the program approval process.

Section 851.11(b)(3) of the final rule describes contractor responsibilities with respect to distribution of the approved worker safety and health program to affected workers or their designated worker representatives upon written request. DOE's intent with this requirement is to facilitate implementation and enforcement of the rule. In addition, this section ensures that workers and their representatives have access to information related to the protection of their health during the performance of DOE activities. DOE added this provision to the final rule in response to commenters' requests to clarify the management responsibilities and worker rights specified in final rule section 851.20. These commenters' concerns are discussed in greater detail in the section-by-section discussion for final rule section 851.20.

Section 851.11(c)(1) of the final rule describes contractor requirements for submission of periodic updates to the worker safety and health program to the Head of DOE Field Element for review and approval whenever a significant change or addition to the program is made or a change in contractors occurs.

One commenter (Ex. 29) requested clarification of what would constitute "significant changes or additions" to the worker safety and health program. The commenter inquired whether worker safety and health programs had to be submitted if significant changes occurred before the annual review cycle. In response, DOE notes that these terms are subjectively applied in determining if an update to the program is needed. DOE does not envision a "cookbook"

list of changes that would automatically trigger a program update. Rather, DOE intends for contractors to consider work-site or process changes in light of their current programs and determine if their programs effectively address the change. If the answer is no, then the change would be considered "significant" and thus necessitate an update to the program.

DOE received numerous comments on the supplemental proposal requirement for triennial (36-month) internal audits of the worker safety and health program. One commenter (Ex. 30) supported the provision but noted that the results should also be transmitted to employees and their representatives. The majority of the commenters (Exs. 5, 13, 16, 28, 29, 31, 35, 36, 39, 42, 48, 49), however, disagreed strongly with the need for this requirement citing reasons ranging from a lack of a clear specification of the required scope of the audit to concerns regarding administrative burdens and increased costs. DOE has considered and agrees with many of these concerns; accordingly, DOE has deleted the provision requiring 36-month internal audits and audit report submission from the final rule

Section 851.11(c)(2) of the final rule describes contractor requirements for annual submission of updates to the worker safety and health program or, alternatively, a letter stating no changes are necessary in the currently approved program. One commenter (Ex. 49) recommended that the requirement for an annual submission be eliminated from the rule. The commenter argued that once a worker safety and health program is developed, there should be no requirement to submit an annual update. The commenter also felt this requirement was inconsistent with 10 CFR 835, which only requires DOE approval of the Radiation Protection Program if changes decrease the effectiveness of the program. The commenter asserted this requirement appeared to be a purely paperwork requirement, which added no safety and health benefit to the process. DOE does not agree with this comment. The scope of the radiological work environment is very specific and controls are welldefined. On the other hand, the nonradiological work environment is transitory in nature and covers a wide range and large number of hazards. For this reason, DOE contractors must annually assess the nature of the workplace and the effectiveness of their programs. Two other commenters (Exs. 3, 4) asserted that the requirement for annual evaluation and updating of the worker safety and health program was inconsistent with practices in general

industry. DOE disagrees with these commenters and points out that while there is no standard that requires private sector employers to update their safety and health programs annually, it is a common practice among responsible employers and is consistent with the protection DOE wants to afford its contractor employees.

One commenter (Ex. 29) requested clarification on whether the annual submittal was based on the calendar or fiscal year. Unless otherwise specified, annual updates should coincide with the anniversary date of the initial approval. This will alleviate having all updates being submitted at the same time.

Two commenters (Exs. 36, 42) sought clarification of whether the rule required DOE approval of the annual submission and if so, within what time periods. The commenters expressed concern that the requirement for annual approval could result in work stoppages as contractors wait for approvals. One of these commenters (Ex. 36) proposed that the rule should require DOE approval within 30 days after contractor submittal. Under 851.11(b) of the final rule, any updates must be approved 90 days after submission. Until the updates are approved, a contractor should continue to operate under its prior plan.

Several commenters (Exs. 19, 31, 36, 39, 42, 48) expressed concern that additional substantial costs would be associated with meeting the requirement for annual reviews. These commenters recommended that impacts be considered prior to codification. DOE prepared an Economic Analysis for the final rule. The analysis was conducted at 8 DOE sites (representatives of each type facility) and based its cost estimation methodology on a comparison of the requirements of this Part (10 CFR 851) with DOE Order 440.1A. Overall, the bulk of these costs are attributable to requirements for converting medical records to electronic format, the compiling and submitting of written safety and health plans, and the submission of annual updates. Several sites indicated substantial costs for maintenance of complete and accurate hazard and exposure information, for communication of safety information to labor unions, and for implementation of the electrical safety program. It is estimated that the annualized costs for 25 DOE contractor sites to comply with the final rule are, therefore, likely to fall in the range between \$9.7 million (low estimate) to \$24.8 million (high estimate). Other commenters (Exs. 5, 45, 51) proposed use of the Voluntary Protection Program Star site annual report and ISM annual self-evaluations

to meet the requirement for annual evaluations. The commenters also proposed integration of the submissions associated with the worker safety and health program proposed in this rule with the requirements of these other programs in order to reduce costs. DOE notes that a contactor may use these programs if they meet the requirements of this rule, and are approved by the Head of DOE Field Element.

Section 851.11(c)(3) of the final rule describes contractor requirements for incorporating changes, conditions, or standards into the worker safety and health program as directed by DOE. Two commenters (Exs. 15, 27) suggested that to ensure consistency between this provision and existing DEAR clauses and contract terms and conditions, the following language should be added to the final rule: "* * * consistent with DEAR 970.5204-2, Laws, Regulations and DOE Directives (December, 2000) and associated contract clauses. Similarly, other commenters (Exs. 16, 36, 42, 49) questioned the appropriateness of this provision in a regulatory enforcement document. DOE notes that Part 851 establishes regulatory requirements and is independent of any contractual requirements. Accordingly, the obligation of a contractor to implement the regulatory requirements in Part 851 is not dependent on the existence of a contractual obligation. In response to the comments, DOE has modified final rule section 851.11(c)(3) to make it clear that any contractual action directed by the Department must be consistent with these regulatory requirements.

A few commenters (Exs. 16, 42, 48) sought clarification of how the potential changes envisioned in this section of the rule would be directed. One commenter (Ex. 42) recommended that changes to the worker safety and health program plan be agreed to by both the contractor and DOE. Another commenter (Ex. 48) questioned whether only the Cognizant Secretarial Officer would be authorized to direct the incorporation of standards into the contractor's worker safety and health program. A third commenter (Ex. 16) sought clarification of whether DOE direction would emanate from the same organizational level that is specified for approval of exemptions. DOE acknowledges these concerns and clarifies its intent with the provision under final rule section 851.11(c)(3) that the Head of the DOE Field Element will direct the incorporation of changes into contractors' worker safety and health programs consistent with the approval authority established in section 851.11.

Section 851.11(d) of the final rule requires the contractor to notify any

associated labor organizations of the development and implementation of the worker safety and health plan and updates and, upon request, bargain with the labor organizations on implementation of Part 851 in a manner consistent with Federal labor laws. This section is included to ensure that worker safety and health programs are developed and implemented consistent with the requirements imposed by the National Labor Relations Act (NLRA) on employers in this context, and not to create obligations in excess of those that would be found in such circumstances under the NLRA.

DOE included this provision in the final rule in response to concerns raised about the need for involvement of workers or worker representatives in the development and implementation of contractor worker safety and health programs. Specifically, one commenter (Ex. 54) expressed concern that supplemental proposed section 851.101 did not include the means for workers or their representatives to be involved in the development of worker safety and health programs. The means for workers or their representatives to be involved in the development and implementation of the worker safety and health programs are noted in the following sections.

Section 851.12—Implementation

Section 850.12(a) of the final rule requires contractors to implement the requirements of Part 851. Three commenters (Exs. 28, 45, 51) suggested that the worker safety and health program should include an implementation schedule, since all activities required by the program cannot be implemented upon approval—especially with respect to subcontractor implementation of the contractor's approved program. In response to the commenters' concern, DOE notes that final rule section 851.11(a) requires contractors to submit the worker safety and health program for approval within 380 days of the final publication date of the rule; final rule section 851.11(b) ensures DOE approval of the plan within 90 days of receipt of the contractor's submission; and final rule section 851.13(a) allows contractors to achieve compliance with the approved worker safety and health program within 470 days of the publication date of the rule. DOE believes this implementation schedule provides sufficient time for contractors to achieve compliance with the final rule requirements, particularly since the rule closely mirrors DOE Order 440.1A, an order that has been in place for over a decade, and contractors are familiar with its requirements.

One commenter (Ex. 42) suggested that any DOE implementation guidance to be developed for the rule should only be enforceable if a contractor elects to place those requirements in the worker safety and health program plan submitted to DOE. DOE agrees with this suggestion and confirms that worker safety and health guidance materials would only be enforceable against a DOE contractor if included in the contractor's approved program. DOE notes that a guidance document is intended to be informative but not mandatory. However, while a contractor need not follow the approach in a guidance document, the contractor does have an obligation to regulatory requirements in the rule and the worker safety and health programs approved by DOE by taking actions that are necessary and sufficient to achieve full compliance. Failure to take such action could be grounds for an enforcement action.

Section 851.12(b) of the final rule further notes that nothing in Part 851 precludes contractors from taking additional protective action determined necessary to protect the safety and health of workers. This section recognizes that, depending on the circumstances of the work, responsible employers may have to take other actions to protect their workers. DOE does not intend to preclude such actions by the provisions of the rule. DOE recognizes that individuals responsible for implementing worker safety and health must use their professional judgment in protecting the safety and health of workers; nothing in the rule should be viewed as relieving these individuals of their professional responsibility to take whatever actions are warranted to protect the health and safety of the workforce.

Section 851.13—Compliance

Section 850.13(a) of the final rule requires contractors to achieve compliance with all requirements of Subpart C of Part 851 and their approved worker safety and health programs no later than 470 days after the date of publication of the final rule in the **Federal Register**.

Several commenters expressed concern over the supplemental proposal requirement for compliance with the rule by January 26, 2006, suggesting that the date be modified (Exs. 13, 25, 29, 36, 42, 45, 51, 57) and recommending alternate lengths of time for implementation from 180 days after plan approval (Ex. 47) to one year following rule promulgation (Exs. 28, 49). DOE has clarified in final rule section 851.13(a) that contractors must

achieve compliance within 470 days after the date of publication of the rule.

Section 850.13(b) of the final rule allows contractors who have established written worker safety and health programs, ISM descriptions pursuant to the DEAR Clause, or an approved Work Smart Standards process before the date of issuance of the final rule to use them to meet the worker safety and health program requirement of this part if those programs, descriptions, and processes are approved by the Head of the DOE Field Element. This approval by the Head of the DOE Field Element is contingent upon the contractor providing written documentation which identifies the specific portions of these programs, descriptions, and processes that are applicable, and additional requirements or implementation methods to be added in order to satisfy the requirements of this Part to establish a safe and healthful workplace. If an existing program is used to meet the requirement for a worker safety and health program, the contractor has a regulatory obligation to comply with that program.

One commenter (Ex. 27) requested that a grandfather provision be added for existing programs developed under the Work Smart Standards program. DOE notes that a grandfather provision for existing programs is established under final rule section 851.13(b). This provision was added to address comments (Exs. 15, 20, 26, 27, 29, 45, 51) regarding DOE's intent to acknowledge or accept contractor efforts related to existing worker protection initiatives within the DOE community as part of the worker safety and health program required under this rule.

C. Subpart C—Specific Program Requirements

Section 851.20—Management Responsibilities and Workers Rights and Responsibilities

Section 851.20 establishes management responsibilities and workers' rights related to worker safety and health in the workplace. Contractor managers must commit to the safety and health of their workforce. Section 851.20(a) codifies managers' responsibilities, while final rule section 851.20(b) codifies workers' rights. DOE received a substantial number of comments on section 851.20 (previously supplemental proposed section 851.10). Although many of the comments were couched in terms of workers' rights, a large proportion actually related to a combination of workers' rights and management responsibilities toward worker safety and health. Other

comments touched on issues with broader implications that were applicable to this section, as well as to other requirements established elsewhere in this final rule (or other rules). Modifications made to section 851.20 in this final rule complicated categorization of the comments on a provision-by-provision basis. Thus, comments on this section are grouped by general topic or sentiment and are preceded by the following summary of both sections 851.20(a) and 851.20(b) in the final rule.

Section 851.20(a) requires a contractor to ensure its managers at a covered workplace (1) establish written policy, goals, and objectives for the worker safety and health program; (2) use qualified worker safety and health staff (e.g., a certified industrial hygienist) to direct and manage the program; (3) assign worker safety and health program responsibilities, evaluate personnel performance, and hold personnel accountable for worker safety and health performance; (4) provide a mechanism to involve workers and their elected representatives in the development of the worker safety and health program goals, objectives, and performance measurement and in the identification and control of hazards in the workplace; (5) provide workers with access to information relevant to the worker safety and health program; (6) establish procedures for workers to report, without reprisal, job-related fatalities, injuries, illnesses, incidents, and hazards and make recommendations about appropriate ways to control those hazards; (7) provide for prompt response to such reports and recommendations; (8) provide for regular communication with workers about workplace safety and health matters; (9) establish procedures to permit workers to stop work or decline to perform an assigned task because of a reasonable belief that the task poses an imminent risk in circumstances where there is insufficient time to use normal hazard reporting and abatement procedures; and (10) inform workers of their rights and responsibility by appropriate means, including posting the DOE-designated Worker Protection

Workers at DOE sites currently have a number of rights related to ensuring a safe and healthful workplace as specified under DOE Order 440.1A. Section 851.20(b) codifies these rights and makes it clear that workers may exercise them without fear of reprisal. Specifically, the regulations maintain the rights of workers to (1) participate in activities described in section 851.20 on official time; (2) have access to DOE

safety and health publications; the DOEapproved worker safety and health program for the covered workplace; the standards, controls and procedures applicable to the covered workplace; the safety and health poster that informs the worker of relevant rights and responsibilities; recordkeeping logs (to a limited extent); and the appropriate DOE form that contains the employee's name as the injured or ill worker; (3) be notified when monitoring results indicate the worker was overexposed to hazardous materials; (4) observe monitoring or measuring of hazardous agents, and have the results of their own exposure monitoring; (5) have an employee-authorized representative accompany DOE personnel during an inspection of the workplace or consult directly with the DOE personnel if no representative is available; (6) request and receive results of inspections and accident investigations; (7) express concerns related to worker safety and health; (8) decline to perform an assigned task because of a reasonable belief that, under the circumstances, the task poses an imminent risk of death or serious bodily harm coupled with a reasonable belief that there is insufficient time to seek effective redress through the normal hazard reporting and abatement procedures; and (9) stop work on discovering employee exposures to imminently dangerous conditions or other serious hazards, provided that any stop work authority is exercised in a justifiable and responsible manner in accordance with established procedures.

The comments provided to DOE on section 851.20 covered a wide range of issues. Most related directly to the management responsibility and workers' rights provisions of this section. Certain comments, however, related only tangentially to section 851.20 (usually on the basis of workers' rights) and sometimes resulted in modifications to other sections of this rule. For example, several commenters (Exs. 10, 30, 40, 54, 55, 60) requested the incorporation of various worker rights related to the variance process. In general, DOE agrees that workers should be involved in the variance process and has included specific rights related to this process in subpart D to the final rule. A more detailed discussion of these comments and DOE's responses appears in the section-by-section discussion for Subpart D. Similarly, a commenter (Ex. 11) believed that worker rights should include the right to receive and participate in training required by OSHA standards and other requirements. The commenter expressed concern that no provision exists in the rule to train workers in hazard recognition such that they can recognize hazards posing "imminent risk of death or serious bodily harm." The final rule as specified in section 851.23 requires compliance with OSHA standards (including standards that specify training requirements). In addition, the final rule contains more detailed provisions for training, in final rule section 851.25, which requires employers to implement a training program for workers.

The same commenter (Ex. 11) believed that worker rights should also include the right to contact the National Institute for Occupational Safety and Health (NIOSH) to request a health hazard evaluation (HHE) based on concerns about toxic effects of a workplace substance. DOE notes that 42 CFR 85 allows employers or authorized representatives of employees to request HHEs by NIOSH under section 20(a)(6) of the Occupational Safety and Health Act of 1970. Hence, DOE feels it is not necessary to separately address this issue in this rule.

Another commenter (Ex. 29) questioned whether supplemental proposed section 851.10 on worker rights would conflict with 10 CFR 708 (DOE Contractor Employee Protection Program). The commenter also wondered whether 10 CFR 708 would continue to apply to worker rights with respect to nuclear and radiological safety issues once supplemental proposed section 851.10 was in effect for all other safety and health issues. DOE believes that the final rule has no impact on the applicability of 10 CFR 708. Specifically, 10 CFR 708 still applies to complaints of reprisals against DOE contractor employees under certain conditions. In particular, it applies for employee disclosures, participations, or refusals related to safety and health matters, if the underlying procurement contract (described in 10 CFR section 708.4) contains a clause requiring compliance with all applicable safety and health regulations and requirements of DOE (48 CFR 970.5204-2c). Furthermore, 10 CFR 708 provides employees with a mechanism to obtain restitution from the contractor in the event of a finding of a reprisal under the 10 CFR 708 rule, but does not allow for civil or contract penalty against the contractor for violation of the workers' safety and health rights. This final rule provides DOE with the mechanism to assess civil or contract penalties against contractors in such cases.

As was mentioned previously, DOE received numerous comments that relate

to section 851.20 as a whole, or that relate to multiple provisions of this section. In one such comment (Ex. 30), the commenter requested that the term "worker" be defined as an hourly worker who performs line functions in areas to be inspected. Additionally, the commenter believed that the definition of "worker" should not include lawyers, supervisors, and managers for the contractor, since managerial and legal personnel have an interest in minimizing penalties and cannot best represent worker interests during inspections. As discussed previously, worker has been defined to be contractor employees performing work at a covered workplace in furtherance of a DOE mission.

A few commenters (Exs. 40, 47, 55) asserted that the rule should incorporate worker involvement in the development of worker safety and health programs. One of the commenters (Ex. 47) believed that supplemental proposed section 851.10 should be revised to indicate that it is not just a workers' right, but also their responsibility to comply with the provisions in supplemental proposed section 851.10. The commenter recommended that the section be renamed "Worker rights and responsibilities." DOE agrees with this comment and has renamed section 851.20 of the final rule "Management responsibilities and worker rights and responsibilities" to highlight the collaborative nature of the worker safety and health process. As a related modification, DOE has named the subsection on workers rights—section 851.20(b)—"Workers Responsibilities and Rights." Furthermore, final rule section 851.20(a)(4) requires management to provide a mechanism to involve workers and their elected representatives in the development of the worker safety and health program goals, objectives, and performance measures and in the identification and control of hazards in the workplace. DOE also included provision 851.20(a)(8), which requires managers to provide for regular communication with workers about workplace safety and health matters.

Also concerned with worker rights, one commenter (Ex. 11) suggested that workers be given the right to provide comments or testimony on possible toxic effects of substances in the workplace. DOE agrees that workers should be able to provide input on matters that affect them, and this final rule contains provisions to further this objective. Section 851.20(a)(4) requires management to provide a mechanism to involve workers and their elected representatives in the development of

the worker safety and health program goals, objectives, and performance measures, and in the identification and control of hazards in the workplace. Additionally, section 851.20(b)(7) establishes the right for workers to express concerns related to worker safety and health. For issues that involve rulemaking regarding worker exposure to a hazardous substance, the Administrative Procedures Act gives the public (including workers) the right to comment on rulemaking activities; DOE does not believe it necessary to address this issue more specifically in the rule.

DOE received several comments related to retribution and reprisal as a result of workers exercising their rights. Seven commenters (Exs. 11, 21, 30, 40, 44, 60, 62) expressed concern over retribution against workers who report violations, injuries, and unsafe work conditions and felt the regulation should preclude discrimination against any employee for notifying DOE or requesting an investigation. An eighth commenter (Ex. 15) qualified a similar concern by suggesting that security- and confidentiality-related issues be considered in granting worker rights. This commenter suggested that section 851.20(b) include language that allows the worker rights without reprisal, as long as their actions are "consistent with non-disclosure, confidentiality and security requirements." One commenter (Ex. 62) supported anonymous notifications and complaints by workers to DOE enforcement staff without fear of disclosure of identity to nonenforcement personnel. This commenter suggested that standardized forms to be created for this purpose with an explicit option for the complainant to select anonymity. Furthermore under the Privacy Act the commenter proposed that penalties should apply to individuals who breach the employee's right to confidentiality in making a complaint. This commenter argued that such breaches should be considered as civil violations. DOE addresses these concern related to retribution and reprisal in the final rule by including sections 851.20(a)(6), 851.20(b)(7), and 851.20(b)(9). The first of these three requires management to establish procedures for workers to report, without reprisal, job-related fatalities, injuries, illnesses, incidents, and hazards and make recommendations about appropriate ways to control those hazards. Sections 851.20(b)(7) and 851.20(b)(9) give workers the right, again without reprisal, to express concerns related to worker safety and health and to stop work if they discover employee exposures to imminently

dangerous conditions or other serious hazards. DOE notes that each of these provisions are enforceable under the rule and that contractors are subject to both civil and contract penalty for noncompliance with these provision. Further, provision 851.40(c) allows workers or worker representatives to remain anonymous upon filing requests for investigation or inspection. Notwithstanding a worker's right to remain anonymous, DOE notes that penalties could not be assessed under the Privacy Act. Such a complaint would not be a part of a system of records and would not be placed in any sort of file identifiable by name, employee number or other unique identifier. Without those two qualifications, such a complaint would not be covered by the Privacy Act.

Several commenters asked DOE to clarify or expand the rule to improve the flow and exchange of information and documentation. For example, one commenter (Ex. 54) requested that the rule require communication pathways between contractors, workers, DOE, and worker representatives. DOE agrees with this comment and the final rule includes section 851.20(a)(8), which requires contractors to provide for regular communication with workers about worker safety and health matters. DOE will also provide guidelines to assist contractors in developing appropriate communication methods in guidance materials to be published shortly after promulgation of this final rule. DOE believes, however, that stipulating the exact means and methods for achieving this communication in an enforceable regulation would be unnecessarily restrictive, could undermine existing communication mechanisms, and could hinder contractor creativity in future program development efforts.

Several commenters (Exs. 13, 16, 29, 30, 36, 37, 54, 62) expressed concern over worker rights to various forms of information, as well as manager obligations to provide workers with certain information. One commenter (Ex. 62) requested that employers should be required to post a DOE Safety Rule Notification Poster describing Part 851 that would inform workers of rule provisions, the penalties of noncompliance, how to obtain more information and an 800 toll-free number to call. In addition, the commenter supported the idea of informative workshops to explain the rule to workers as part of training programs. DOE addresses this concern in the final rule by including section 851.20(a)(10), which requires contractor managers to inform workers of their rights and

responsibilities by appropriate means, including posting the DOE-designated Worker Protection Poster in the workplace where it will be accessible to all workers. Although the contractor may provide electronic access to the poster, it must still post the poster in areas accessible to workers. DOE further strengthened workers' right to information through final rule section 851.20(b)(6), which allows workers to request and receive results of inspection and accident investigations.

Two commenters (Ex. 29, 60) thought it important that the worker safety and health program be available to workers. In response to these comments, final rule section 851.20(a)(5), DOE requires that management provide workers with access to information relevant to the worker safety and health program. DOE leaves to the contractor the discretion to determine the appropriate format, which must be accessible to all workers. DOE considers electronic means accessible, provided that all employees have access to, and the knowledge to use, computers.

Still considering the flow and exchange of information, two commenters (Exs. 16, 29) requested clarification on what DOE considers to be the "DOE safety and health publications" and the "standards, controls, and procedures" that were specified in supplemental proposed section 851.10(b)(1). In a related question, one of these commenters (Ex. 29) asked whether the documents to which workers must be provided access, as specified in supplemental proposed section 851.10(b)(1), may be provided "on request" or whether they must always be available. The commenter noted that the documents sometimes include costly ANSI standards. DOE intends the documents to be available and provided upon request to employees for review. DOE does not intend for the employer to provide each employee with his/her own copy of the standards. Note that DOE would expect the contractor to have access to (or copies of) all the standards with which the contractor must comply.

In a more general comment about the right of worker representatives to have the same access to information as workers, two commenters (Exs. 11, 54) recommended that the rule clearly state that disclosure affects workers and their unions. Specifically, these commenters believe that worker representatives should have the right to request information, observe monitoring, request relevant exposure and medical records and receive results within 15 days, participate in the worker safety and health process, or create joint

worker safety and health committees. DOE, through final rule section 851.20(a)(4), requires management to provide a mechanism to involve workers and their elected representatives in the development of the worker safety and health program goals, objectives, and performance measures, and in the identification and control of hazards in the workplace. Further, the final rule, as specified in section 851.11(d), requires contractors to give labor organizations representing workers for collective bargaining timely notice of development and implementation of the worker safety and health program and any updates, as well as bargain on implementation issues in a manner consistent with federal labor laws upon timely request.

Several commenters (Exs. 11, 30, 44, 60, 62) requested that workers have the right to participate in enforcement actions. Three of these commenters (Exs. 44, 60, 62) recommended that citations be posted and that employees be given the opportunity to comment on proposed enforcement actions. One of these commenters (Ex. 62) argued that such provisions were comparable to worker rights related to OSHA enforcement actions. Another commenter (Ex. 30) asked that DOE incorporate worker participation as a party in settlement agreements. The fourth commenter (Ex. 11) asserted that workers should have the right to be involved in any meetings or hearings to discuss objections the employer has to allegations of safety and health violations, the assessment of penalties, and/or discussions or changes in abatement plans, procedures, or deadlines. DOE notes that Part 851's enforcement process is based on one that has been successfully used for over ten years with respect to the DOE Nuclear Safety Requirements, a process which does not contemplate such participation. DOE further notes that the OSHA enforcement process does not involve employee participation to the degree requested by the commenters. In addition, section 851.40(c) does provide worker representation, such as the right to request the initiation of an inspection or investigation. DOE concludes that the degree of employee participation in the enforcement process is appropriate and that the specific commenter requests for additional worker involvement in the enforcement process would not be appropriate.

DOE received several comments regarding multiple issues related to exposure monitoring. Three commenters (Exs. 16, 54, 55) worried that the language in supplemental proposed section 851.10(b)(3), which would give

workers the right to observe monitoring or measuring of hazardous agents, could be misinterpreted. Specifically, the commenters believed this section could be interpreted as implying that specific monitoring is required for each individual worker (instead of allowing representative sampling), or as suggesting that contractors do not have to share monitoring results with unmonitored workers performing the same job. These commenters felt that representative sampling results should be provided to all affected workers. However, two other commenters (Exs. 26, 49) disagreed, asserting that the requirement should be limited to providing workers with only their own results, in keeping with the Privacy Act. The commenters believed that workers are unlikely to be qualified to interpret monitoring results for the whole workplace. To ensure timely transfer of information, one commenter (Ex. 16) recommended that DOE specify a time frame within which a contractor should provide employees with exposure results (e.g., results of applicable exposure monitoring must be provided to employees within 90 days following analysis). Further, one commenter (Ex. 49) believed that allowing workers to enter operational areas "to observe monitoring" conflicts with the exposure reduction and minimization aspects of Part 850 and RADCON As Low As Reasonably Achievable Principles. With respect to Privacy Act concerns, DOE notes an individual's test results would be protected. The only way that test results could be disseminated to all workers in an aggregated manner is if they are complied with the following language pursuant to 5 U.S.C. 552(b)(5): Disclosure may be made to a recipient who ''* * * has provided the agency with advance written assurance that the record will be solely used as a statistical research or reporting record, and the record is to be transferred in a form that is not individually identifiable."

DOE received two comments on the use of the term "overexposure" as it relates to employee notification of results exceeding allowable exposure levels. One of these commenters (Ex. 54) suggested that the phrase "was overexposed to hazardous materials" in supplemental proposed section 851.10(b)(2) be replaced with "exposure exceeded limits established by OSHA." DOE disagrees, that a change in wording is necessary since the term overexposed is commonly understood to mean exposures above an established limit (whether set by OSHA, ACGIH, or DOE). The other commenter (Ex. 11) believes that employees should be informed of

all potential hazards before they are exposed, and not only when there is overexposure as specified in supplemental proposed section 851.10(b)(2). DOE notes that the reference to "overexposure" in final rule section 851.20(b)(3) applies specifically to notification of monitoring results. Other sections of the rule—sections 851.20(b) and 851.25—require employee training and access to information on workplace hazards and controls.

The right of workers to participate in monitoring and inspection activities attracted several comments. DOE received several comments (Exs. 13, 16, 29, 36, 42, 49, 57) expressing the general concern that workers would abuse the rights afforded to them in sections 851.20(b)(1), (b)(4), and (b)(5), which give workers the right to participate in activities, observe monitoring results, and accompany DOE personnel during an inspection. The commenters felt that these activities could result in disruption of work. DOE notes the commenters concerns and has modified the language in the final rule.

Worker rights and employer responsibilities during inspections also attracted a number of comments. Many commenters (Exs. 11, 13, 29, 36, 39, 42, 47, 49, 54, 57) expressed concern about a worker's right to accompany DOE personnel during an inspection of the workplace. The commenters believed that the rule should include access requirements to be met in order to accompany DOE personnel on inspection. For example, commenters recommended that a designated employee representative or an appropriate safety person, organization, or entity should accompany DOE on inspections. DOE agrees that the individual accompanying inspectors should not be selected arbitrarily. In the final rule, section 851.20(b)(5) requires that an "employee-authorized representative" be allowed to to accompany DOE on inspections. When no representative is available, the inspector must consult with employees on matters of worker safety and health. Further, section 851.40(c) of the final rule establishes the right of worker representatives to request an inspection or investigation, with supporting documentation, based on criteria outlined in the section.

In a related comment, two of the same commenters (Exs. 13, 29) suggested that allowing workers to go on DOE inspections raises implementation concerns (for example, regarding worker and contractor notification of inspections and inspector qualification standards to ensure consistency of inspections across facilities). DOE notes

that workers are entitled to reasonable assurances that the inspections are carried out in an appropriate manner and notes that in final rule section 851.40(d) includes provisions for notifying contractors of an enforcement inspection. DOE believes, however, that establishing qualification standards for DOE federal staff is beyond the scope of this rule; instead, DOE will follow appropriate personnel qualification standards for federal staff. DOE also believes that establishing detailed provisions on how contractors must implement specific provisions of the rule (such as how to notify workers of an inspection) would be too prescriptive. DOE believes that contractors are the entities best able to determine appropriate implementation procedures for their own sites and workforce. Of course, contractor failure to comply with the worker rights provisions of the final rule could subject the contractor to an enforcement action under the rule.

DOE also received comments related to worker rights after inspections are completed. Two commenters (Exs. 36, 49) expressed concern about a worker's right to request and receive results of inspection and accident investigations. One of these commenters (Ex. 36) described the current policy of some facilities to allow workers to obtain such results on a need-to-know basis only. The other commenter (Ex. 49) believed that workers can only request and receive results that are not exempt from disclosure under the Privacy Act or the Freedom of Information Act. An additional commenter (Ex. 29) questioned whether these "results" include DOE records or just contractor records. DOE notes that a worker can only receive information or results, for his or her own personal record. The worker must designate in writing a representative to receive personal information.

One commenter (Ex. 11) believed that worker rights should include the right to request action from an employer to correct hazards or violations even if the hazards are not violations of specific OSHA standards or other specific requirements. DOE notes that final rule section 851.20(b)(7) gives workers the right to express concerns about worker safety and health issues. DOE intends for this section to include all health and safety concerns, not just hazards addressed by specific OSHA standards.

DOE received two comments related to proposed provisions, retained as sections 851.20(a)(9) and 851.20(b)(9) in this final rule, which respectively cover managers' responsibilities and workers' rights to stop work when a serious

hazard is discovered or believed to be present. One commenter (Ex. 28) objected to the use of the word "discover" in supplemental proposal section 851.10(b)(8), believing that such a term suggests willful deceit or ignorance on the part of managers. The commenter stated that while stop work authority is needed, it should be implemented in a controlled manner in accordance with "established procedures, which include but should not be limited to pre-work briefings of prevailing working conditions." DOE intends for the term "discover" in final rule section 851.20(b)(9) to imply that the hazard was not previously identified through workplace assessment and hazard identification procedures. DOE also expects that any identified hazards would have been mitigated and controlled prior to allowing workers to proceed with activities in a work area. DOE agrees that the rights granted under this provision should be exercised in a controlled manner. Hence, section 851.20(a)(9) of the final rule requires contractors to develop appropriate procedures to implement stop work

In related comments, three commenters (Exs. 11, 28, 48) thought that the language in supplemental proposed section 851.10(b)(8) was too vague, broad, or subjective. DOE notes that this stop work authority provision is similar to the provisions in DOE Order 440.1A. DOE is not aware of any problems with the implementation of this provision under 440.1A and therefore, has retained this provision in the final rule.

Another commenter (Ex. 54) believed that worker representatives should be allowed to participate in a review of stop work conditions. The commenter suggested that such issues are resolved more quickly and effectively when employer and employee representative (as well as external experts such as OSHA and DOE Environment, Safety and Health) are involved. DOE acknowledges these concerns and believes the concerns are addressed by existing provisions of the final rule. Specifically, section 851.20(a) establishes a wide array of management responsibilities for ensuring worker rights under and involvement in the safety and health program. Final rule section 851.20(a)(9) further requires contractors to develop appropriate stop work procedures for workers and section 851.20(a)(7) requires contractors to provide prompt response to worker reports of workplace hazards. DOE believes that these combined provisions provide DOE contractors an adequate framework to develop appropriate stop

work provisions. Within this framework, DOE contractors are free to develop stop work procedures that they feel most effectively protect workers (and empower workers to protect themselves) and allow for prompt corrective action in the event of an imminent danger situation. Since this provision has been required of DOE contractors under DOE Order 440.1A for the past 10 years, DOE would expect contractors to apply existing stop work procedures with slight modifications if deemed necessary based on lessons learned from 10 years of experience implementing this provision.

Section 851.21—Hazard Identification and Assessment

Section 851.21 establishes the contractor's duty to enact procedures for identifying hazards and assessing the related risks in the workplace. This section lists activities contractors must perform as part of their hazard and risk assessment procedures (e.g., conducting workplace monitoring, evaluating operations). Under this section, contractors must also provide a list of closure facility hazards and associated controls to the Head of DOE Field Element, who will accept the controls or direct specific additional actions described in this section.

DOE received a number of comments that expressed concern about the subjectivity of the supplemental proposed section 851.100(b) language concerning identification and evaluation of workplace hazards, and particularly the requirement in section 851.100(b)(1)(iii) to evaluate potential hazards that may arise from unforeseeable conditions. A number of commenters (Exs. 13, 15, 16, 20, 25, 27, 31, 36, 42, 49) recommended that the supplemental proposed requirement to evaluate potential hazards from unforeseeable conditions be eliminated or replaced, based on their opinion that this is an ambiguous, general requirement that unreasonably puts contractors in the position of trying to foresee the unforeseeable. DOE has eliminated the requirement in the final rule. DOE also has modified the final rule to include section 851.21, which provides specific requirements to guide contractors' hazard identification and risk assessment activities.

Section 851.21(a) requires contractors to establish procedures to identify existing and potential workplace hazards and assess the risk of associated workers' injury and illness. These procedures must include methods to: (1) Assess worker exposure to chemical, physical, biological, or safety workplace hazards through monitoring; (2)

document assessment for workplace hazards using recognized exposure assessment and testing methodologies and using accredited and certified laboratories; (3) record observations, testing and monitoring results; (4) analyze designs of new facilities and modifications to existing facilities and equipment for potential workplace hazards; (5) evaluate operations, procedures, and facilities to identify workplace hazards; (6) perform routine job activity-level hazard analysis; (7) review site safety and health experience information; and 8) consider interaction between workplace hazards and other hazards such as radiological hazards.

Most of the comments that DOE received on this section relate to the scope of the required hazard assessment procedures. Two commenters (Exs. 42, 47) suggested that it is not feasible to consider all hazards, as specified in supplemental proposed section 851.100(b)(1)(v), and that only relevant hazards should be considered. DOE believes that to be effective, a worker safety and health program must establish and implement procedures that will identify potential workplace hazards and evaluate the associated risks. In the final rule, section 851.21(a) requires that such procedures be established. Contractors are to identify hazards that are to be identified by assessing worker exposures to chemical, physical, biological and safety hazards identified through appropriate workplace monitoring and job activity level hazard analysis. These methods are designed to identify the hazards to which workers may be exposed. Through this process, DOE expects that contractors will be able to determine which hazards are relevant to specific work situations.

Two other commenters (Exs. 42, 47) expressed concern that supplemental proposed section 851.100(b)(1)(vii) to (ix) went beyond the scope of the ISMS. While the commenters believed that these provisions were beneficial and appropriate for a worker safety and health program, they did not believe that these provisions should be part of the rule. DOE believes that these provisions are necessary requirements for a contractor's worker safety and health program. In the final rule, however, DOE has reorganized these provisions to be more consistent with the requirements of DOE Order 440.1A, which have been in use for the past 10 years. Accordingly, final rule section 851.21(a), requires contractors to develop procedures using specified methodologies (mirroring those established in DOE Order 440.1A) to assess and document the risk of worker

injury and illness associated with existing and potential hazards.

A number of commenters were concerned about the extent to which Part 851 would apply to radiological hazards. Several commenters (Exs. 16, 20, 31, 36, 42, 47, 48, 49) believed that there is no utility in addressing radiological hazards in the worker safety and health program document since they are already considered, and controlled through a contractor's Radiation Protection Program and Radiation Protection Manual in compliance with Price-Anderson Nuclear Safety Regulations such as 10 CFR 835. Two other commenters (Exs. 13, 39) requested that DOE clarify whether Part 851 applies to radiological hazards. If so, one of these commenters (Ex. 13) wondered whether it is DOE's intent to apply this rule to radiological hazards at a lower threshold than regulated by 10 CFR 820, 830, or 835. In section 851.2(b) of the final rule, DOE clarifies that Part 851 does not apply to radiological hazards to the extent they are regulated by 10 CFR Parts 820, 830, and 835. Section 851.21(a)(1) requires contractors to develop procedures that include methods for identifying and assessing hazards related to chemical, physical, biological, and safety work exposures only. Final rule section 851.21(a)(8) makes clear the need to consider other hazards.

DOE received a few comments related to sampling and laboratory analysis. One such commenter (Ex. 16) requested that DOE clarify the language in supplemental proposed section 851.100(b)(1)(vii) by defining what constitutes "appropriate workplace monitoring" (i.e., whether it is in relation to the number of samples, the frequency/timing of samples, qualifications of those conducting the sampling, a comparison of results to limits, etc.). The commenter recommended that "appropriate" either be defined objectively or by reference to OSHA standards used for workplace monitoring. DOE disagrees that more specificity is needed, and believes it is understood that the term "appropriate" in this case means using recognized methods for workplace monitoring such as those published by the American Industrial Hygiene Association or the National Institute for Occupational Safety and Health, etc. DOE notes, however, its intent to develop supplemental guidance material following publication of the final rule to assist contractors in implementation of the rule.

Other commenters (Exs. 5, 16, 27) expressed concern that supplemental proposed section 851.100(b)(1)(viii)

would require the use of accredited or certified laboratories. Specifically, one of these commenters (Ex. 5) asked if the provision for "documenting assessments for chemical, physical, biological and safety workplace hazards using recognized exposure assessment and testing methodologies and use of accredited or certified laboratories" also required contractors to use accredited or certified laboratories for performing other related activities. Another commenter (Ex. 16) believed that certain highly contaminated samples may fall outside the capabilities of commercially available laboratories. Therefore, this commenter felt that this provision should be either deleted or modified to clarify which assessments require accredited or certified laboratories, which accreditation or certification authorities should be used, and what the provisions are for frequency and equivalency. Both this commenter (Ex. 16) and another commenter (Ex. 27) believed that any requirement for use of accredited or certified laboratories should be evaluated with respect to potential costs versus benefits, since use of such laboratories could result in increased costs and time. DOE believes that the converse would likely be true, since not using a certified laboratory would involve such efforts as establishing quality control and quantitative analysis processes etc. Therefore, these efforts would likely be more costly than using an established accredited laboratory. DOE also notes that reliance on accredited and certified laboratories is consistent with requirements established under DOE Order 4040.1A, OSHA standards, and accepted industrial hygiene professional practice.

One commenter (Ex. 16) requested that DOE clarify what kinds of "safety and health information" contractors are required to review, as referred to in supplemental proposed section 851.100(b). To clarify this, DOE provides in final rule section 851.21(a)(7) that contractors hazard identification and assessment procedures must include provisions for the review of site safety and health experience information. DOE anticipates that such information could include, but may not be limited to, injury and illness data, inspection results, accident and near miss investigation results and trending data, etc.

Section 851.21(b) requires contractors to submit to the Head of DOE Field Element a list of closure facility hazards and the established controls within 90 days of identifying such hazards. The Head of Field Element, with concurrence by the CSO, will have 90

days to accept the closure facility hazard controls or direct additional actions to either (1) achieve technical compliance or (2) provide additional controls to protect the workers. DOE intends section 851.21(b) to be implemented in a manner that is consistent with the provision in the NDAA on taking into account the special circumstances associated with facilities that are or will be permanently closed, demolished or subject to title transfer and that minimizes the need for variances.

One commenters (Ex. 28) believed that DOE sites within one year of a formal declaration of site closure should be exempt from compliance with Part 851 and a separate exclusion to this effect should be included under section 851.1. Another commenter (Ex. 39) asked for clarification of the types of "special circumstances" that should be considered for a workplace that is (or is expected to be) permanently closed, demolished, or transferred to another entity. This commenter (Ex. 39) also felt that the supplemental proposed section 851.100(b)(3)(ii), needed to be clarified with respect to the types of circumstances considered relevant to a proposal for modified requirements at sites scheduled for closure, demolition, or transfer. DOE agrees that the original supplemental proposed language related to what is now termed "closure facilities" was unclear, and has revised this section of the final rule. In final rule section 851.21(b), DOE requires submission of a list of closure facility hazards that cannot be fully abated or controlled within 90 days after identification of the hazards in a manner that achieves strict technical compliance with applicable regulatory requirements. The Head of DOE Field Element has 90 days to accept the closure facility hazard controls identified by the contractor as sufficient to ensure a safe and healthful workplace or direct additional action to either achieve technical compliance or provide additional controls to protect the workers.

Final rule section 851.21(c), which was supplemental proposed section 851.100(b)(1), requires contractors to perform the activities identified in section 851.21(a), initially to obtain baseline information, and again as often as necessary. The commenter (Ex. 35) inquired whether the intent was to require a baseline hazard assessment to identify hazards for every workplace. The commenter asked whether it might also be acceptable to describe only the basic hazards of the workplace initially, while also providing a method in the worker safety and health program for

detailed real-time, job-specific hazard and safety analysis to be conducted immediately prior to beginning the work. The commenter went on to state that this latter (real-time assessment) would be performed to ensure that changing worksite conditions have not impacted hazards and associated mitigation strategies since the time when the basic hazards were described in the initial assessment. DOE believes the requirements in final rule section 851.21 are appropriate, and declines to accept this commenter's suggestion. It is DOE's intent that within the framework provided in final rule section 851.21(c), the contractor must identify existing and potential workplace hazards using the prescribed methods in section 851.21(a), for new and existing facilities, operations, and procedures. The contractor must establish and implement hazard identification and risk assessment procedures initially to obtain baseline information and again as often as necessary to ensure compliance with the regulation in Subpart C. Section 851.21(a) also requires routine job activity level hazard analyses to be performed. The final rule intends for the contractor to develop and include the process for performing hazard identification in the worker safety and health program, but the contractor is not required to present the full results of the hazard assessment in the worker safety and health program.

Section 851.22—Hazard Prevention and Abatement

Final rule section 851.22 establishes the requirement for contractors to develop and implement a process for preventing, prioritizing, and abating hazards in the workplace. Under this section contractors must abate hazards using a prescribed hierarchy of controls, starting with elimination (or substitution) and ending with personal protective equipment, which is to be used only as a last resort. Hazards must also be considered when contractors purchase equipment. As a general comment on the section as a whole, three commenters (Exs. 28, 45, 51) believed that the term "adequately protected" is ambiguous in supplemental proposed section 851.100(a)(2) and implies that if an injury occurs by any means, the program would not have provided 'adequate protection.' The commenters believed that the program should provide an acceptable level of worker protection based upon determination of acceptable risks for identified hazards. As discussed previously, DOE believe "adequate protection" is a proper standard. However, in revising this

provision, the reference to "adequate protection" has been eliminated.

Section 851.22(a) requires contractors to establish and implement a hazard prevention and abatement process to ensure that all identified and potential hazards are prevented or abated in a timely manner. For hazards identified either in the facility design or during the development of procedures, contractors are required to incorporate controls in the appropriate facility design or procedure. For existing hazards identified in the workplace, contractors are required to (1) prioritize and implement abatement actions according to the risk to workers; (2) implement interim protective measures pending final abatement; and (3) protect workers from dangerous safety and health conditions. One commenter (Ex. 16) requested that the term "imminently dangerous conditions" in supplemental proposed section 851.100(b)(2)(iii) be defined. DOE has modified the language in final rule section 851.22(a)(2)(iii) to read "dangerous safety and health conditions." These terms are commonly understood and need not be defined in Part 851.

Section 851.22(b), which corresponds to supplemental proposed section 851.100(b)(2)(iv), requires contractors to select hazard controls based on the following hierarchy: (1) Elimination or substitution of the hazards where feasible and appropriate, (2) engineering controls where feasible and appropriate, (3) work practices and administrative controls that limit worker exposures, and (4) personal protective equipment. Two commenters (Exs. 16, 27) believed that the hierarchy of hazard controls should acknowledge appropriate economic and technical feasibility, work activity duration, and available technology constraints that are important and practical considerations in compliance. DOE acknowledges these concerns and section 851.22(b) of the final rule has expanded to clarify that substitution or elimination of hazards and the use of engineering controls should be used where feasible and appropriate, and use of work practices and administrative controls to limit worker exposures.

Section 851.22(c) requires contractors to address hazards when selecting or purchasing equipment, products, and services. Two commenters (Exs. 31, 54) expressed concern about the supplemental proposed section 851.100(b)(2)(v). One commenter (Ex. 31) believed that this provision poses a problem because it is difficult to judge the safety of services based on human performance, and that this provision would require review of safety records

for service providers to evaluate unsafe work practices. The commenter recommended that the reference to services be deleted. The other commenter (Ex. 54) recommended rewording the provision in light of the concept of inherently safer design to require "reduction in hazards to workers by ensuring that equipment purchase, lease or rental, process and equipment design and all acquired services are selected with worker safety and health as a priority." DOE believes that worker safety and health should be a primary consideration in performing work and should be considered in all aspects of the work, including the selection and purchasing of equipment, products, and services. As a result, this provision is retained in the final rule.

Section 851.23—Workplace Safety and Health Standards

Section 851.23(a) requires that contractors comply with the following standards, if applicable to the hazards at their workplace: (1) Title 10 CFR 850, "Chronic Beryllium Disease Prevention Program"; (2) Title 29 CFR Parts 1904.4 through 1904.11, 1904.29 through 1904.33; 1904.44 and 1904.46, "Recording and Reporting Occupational Injuries and Illnesses"; (3) Title 29 CFR Part 1910, "Occupational Safety and Health Standards," excluding 29 CFR 1910.1096, "Ionizing Radiation"; (4) Title 29 CFR Part 1915, "Shipyard Employment''; (5) Title 29 CFR Part 1917, "Marine Terminals"; (6) Title 29 CFR Part 1918, "Safety and Health Regulations for Longshoring"; (7) Title 29 CFR Part 1926, "Safety and Health Regulations for Construction"; (8) Title 29 CFR Part 1928, "Occupational Safety and Health Standards for Agriculture"; (9) ACGIH "Threshold Limit Values (TLV) for Chemical Substances and Physical Agents and Biological Exposure Indices," when the ACGIH TLVs are lower (more protective) than permissible exposure limits in 29 CFR part 1910 (note that when the ACGIH TLVs are used as exposure limits, contractors must nonetheless comply with the other provisions of any applicable expanded health standard found in 29 CFR Part 1910); (10) ANSI Z88.2, "American National Standard Practices for Respiratory Protection"; (11) ANSI Z136.1, "Safe Use of Lasers"; (12) ANSI Z49.1, "Safety in Welding, Cutting and Allied Processes," sections 4.3 and E4.3 (of the 1994 edition or equivalent sections of sequent editions); (13) NFPA 70, "National Electrical Code"; and (14) NFPA 70E, "Electrical Safety in the Workplace." These mandatory standards establish baseline technical safety and health requirements for DOE workplace operations. These standards are already required by DOE Order 440.1A, and are enforced through contract mechanisms. Section 851.23(b) provides that Part 851 may not be construed as relieving a contractor from the obligation to comply with any additional specific safety and health requirement that the contractor determines is necessary for worker protection.

DOE received a substantial number of comments on this section, many of which applied to the section as a whole. One commenter (Ex. 28) noted that supplemental proposed sections 851.201 through 851.210 did not include requirements for chemical or radiological protection, and recommended that DOE specifically define "recognized areas of protection." DOE has clarified in final rule section 851.2(b) that Part 851 does not apply to radiological hazards to the extent regulated by 10 CFR 820, 830, or 835. Further, Subparts B and C establish general and specific worker safety and health program requirements that contractors must implement to protect workers from workplace hazards, which as defined in section 851.3 of the final rule include physical, chemical, biological, or safety hazards with any potential to cause illness, injury, or death to a person.

Numerous commenters (Exs. 6, 15, 16, 20, 28, 29, 33, 37, 45, 47, 48, 51) argued that compliance with the DOE-approved contractor worker safety and health program, Work Smart Standards, or Contractors Requirements Document should constitute compliance with this regulation. Three of these commenters (Exs. 6, 15, 28) alternatively suggested that DOE should include in the final rule DOE directives or standards that have already been identified through various DOE approved processes and incorporated into existing contracts, and then define their relationship or functionality within the rule. Two other commenters (Ex. 12, 42) requested that the rule clarify how DOE orders other than DOE Order 440.1A in prime contracts should be addressed in regard to the worker safety and health requirements. DOE has incorporated relevant DOE directives into the appropriate sections of the final rule. As discussed in the section-by-section discussion for Subpart B of the final rule, DOE has also included provisions in section 851.13(b) to allow contractors to use existing worker safety and health programs established under the Integrated Safety Management System, Work Smart Standards process, or other worker safety and health process provided that such programs meet the

requirements of this rule and are approved by the appropriate Head of the DOE Field element. Furthermore, DOE notes that the standards included in final rule section 851.23(a) have in fact been reviewed and approved by an existing DOE safety and health process. Specifically, these standards were included in DOE Order 440.1A which was the result of extensive coordination among safety and health professionals throughout the entire DOE community and was concurred on by all DOE Secretarial Officers and approved by the Secretary of Energy.

Several commenters (Exs. 30, 60, 62) believed that 10 CFR Part 850, Chronic Beryllium Disease Prevention Program (CBDPP), should be included as an enforceable standard under the rule or, and another commenter (Ex. 49) asked DOE to clarify its intent in that regard. The latter commenter (Ex. 49) argued that 10 CFR part 850 is a performancebased standard and did not provide an adequate technical basis to ensure consistent enforcement, and believes that DOE should provide implementation guidance for 10 CFR part 850 if the Department intends to enforce that rule under 10 CFR part 851. Another commenter (Ex. 30) asked that DOE expand the scope of 10 CFR part 850 to cover the United States Enrichment Corporation (USEC) facilities in Portsmouth, Ohio and Paducah, Kentucky. DOE has considered these comments and agrees that 10 CFR Part 850 should be enforceable under Part 851. Accordingly, final rule section 851.23(a)(1) requires contractor compliance with 10 CFR part 850. In addition, DOE has included a modification to 10 CFR part 850 as a part of this rulemaking effort to clarify that a contractor's CBDPP should supplement and be an integral part of the worker safety and health program required under 10 CFR part 851. This rulemaking effort does not, however, expand the scope of 10 CFR part 850. DOE's intent with this rulemaking effort, as clarified in final rule section 851.2, is to establish worker safety and health program provisions for contractor workplaces under DOE's jurisdiction, not for those under OSHA's jurisdiction as are the USEC facilities mentioned above. DOE also notes in regards to the commenter's (Ex. 49) request for CBDPP guidance material, that DOE has already published such guidance in DOE G 440.7A. DOE further notes that 10 CFR part 850 is already enforceable through contract mechanisms on DOE sites, and has been since its original promulgation in January, 2001.

DOE received a few comments that recommended additional codes or standards that should be incorporated into this rule. A commenter (Ex. 24) suggested that DOE should adopt by reference the International Code Council (ICC) International Codes as the foundation for DOE rules on facility design, construction, renovation, and worker safety, based on the premise that these codes are consistent with DOE Orders 420.1 and 440.1A and have been widely adopted throughout the United States by other federal facilities, state and local facilities, and the private sector. The commenter believed that to do otherwise would foster nonuniformity and would likely result in increased costs and decreased worker safety. DOE acknowledges the commenter's concern but notes that the final rule only includes those consensus standards originally required by DOE Order 440.1A. DOE believes that this change is consistent with intent of Section 3173 of the NDAA and is appropriate in this regulatory context. DOE will continue to encourage contractors to comply with applicable consensus standards where appropriate and will require compliance with selected standards through DOE directives such as DOE Order 420.1 and DOE contracts where needed. DOE also notes that final rule section 851.23(b) requires contractors to comply with any additional safety and health requirement that they determine to be necessary to protect the safety and health of workers.

Another commenter (Ex. 30) recommended that an indoor air quality standard and an ergonomics standard be included in the rule and made enforceable. DOE notes, however, that both indoor air quality and ergonomic hazards fall within the purview of an industrial hygiene program. Accordingly, DOE expects that contractors will address such hazards through the implementation of their industrial hygiene program established in accordance with Appendix A, section 6 of the final rule. DOE expects to develop guidance material to assist contractors in implementing these and other requirements of the final rule.

Another commenter (Ex. 29) indicated that much of the detailed codes listed in the supplemental proposal should be replaced by reference to the major design codes. As noted above, however, DOE has eliminated all but a handful of consensus standards from the final rule consistent with the standards originally mandated under DOE Order 440.1A. Along similar lines, several commenters (Exs. 2, 16, 20, 24, 31, 33, 37) specifically requested that the

International Building Code (IBC) of the ICC International Codes replace NFPA 5000 since several contractors currently adhere to IBC. DOE agrees and has removed NFPA 5000 from the final rule.

DOE received multiple general comments regarding the inclusion of document edition dates in this section. Many commenters (Exs. 1, 3, 4, 12, 14, 15, 16, 20, 22, 28, 31, 36, 37, 39, 42, 48, 49, 50, 51, 54, 55, 61) expressed concern that supplemental proposed section 851.201 included specific edition dates for standards and codes. The commenters note that many existing facilities are unlikely to be in compliance with these recent editions (presumably because they were constructed to meet earlier standards). Several commenters (Exs. 3, 4, 14, 16, 31, 36, 39, 50, 51) believed that including such dates would result in excess exemptions and increased costs. Some of these commenters (Exs. 14, 16, 31, 36, 50, 51) recommended eliminating the specific edition dates of the consensus standards, while others (Exs. 14, 16, 31, 36) offered an alternative recommendation that DOE indicate "latest revision" in lieu of the specific year. Three commenters (Exs. 15, 31, 37) agreed, but suggested that DOE include a mechanism within the rule that updates these dates to ensure consistency with the changing knowledge and needs of the industries they address. Two other commenters (Exs. 28, 49) indicated that the edition dates go beyond the statutory authority given to DOE by Congress. DOE has carefully considered the forgoing comments about the potential effects of incorporating specified editions of consensus standards. Regulatory requirements must be specific and include the editions of incorporated standards. Therefore, DOE cannot accept the suggestion of requiring compliance with the "latest revision" of standards that are incorporated by reference. However, DOE has reviewed the standards listed in section 851.23(a) to determine if they are appropriate. As a result of this review, DOE has eliminated from the final rule many of the consensus standards that were listed in the supplemental proposal. The standards included in this final rule are consistent with those mandated under DOE Order 440.1A. While contractors must meet the standards listed in section 851.23(a), they are free to comply with more recent editions of the standards as long as the provisions of the more recent standards are at least protective as the edition specified in the final rule. In future rulemakings, DOE

will consider the need for updating the referenced standards.

Other comments specifically addressed the problems associated with updating older facilities and systems that were constructed according to previous, rather than current standards. Many of these commenters (Exs. 8, 15, 29, 31, 35, 36, 37, 42, 46, 49) expressed concern that the rule does not include the "grandfathering" of existing facilities (i.e., allowing facilities to meet only the code requirements in effect at the time the facility was built). The commenters believe that it is not feasible to bring older facilities up to all the new codes and that attempting to do so would present insurmountable problems for most facilities. Commenters also believe that failure to allow grandfathering would result in significant costs associated with evaluation, modification, reporting requirements, and the need for exemptions, as well as costs from fines or penalties associated with noncompliance. Some of these commenters requested grandfathering under the Code of Record concept, in which a contractor is not required to implement current editions of codes or standards unless the facility undergoes substantial modifications. The commenters suggested that DOE require modification only in the presence of a significant hazard, in which case the facility would be upgraded to the requirements of the current edition of the code or standard. Another commenter (Ex. 14) also expressed concern that no provision in the proposed rule recognized DOE's use of the risk-based "graded approach" to upgrading aging facilities and correcting deficiencies under current industry codes, regulations, and guidance. This commenter believes that shifting to the proposed compliance-based approach will incur excessive costs at the expense of the DOE program office due to the funds required to bring all facilities into compliance at the same time, to pay civil penalties, or to process exemption requests. The commenter suggested that a possible resolution could be to grandfather known deficiencies with an approved plan for resolution. Another commenter (Ex. 35) recommended that DOE add a provision that allows contractors to use of national consensus standards equivalent to those listed in supplemental proposed section 851.201. It was the commenter's opinion that including the provision would help contractors avoid having to use the exemption relief described in Subpart D. As mentioned previously, DOE has eliminated many of the consensus

standards listed in the supplemental proposed rule. The standards mandated in final rule section 851.23(a) are consistent with those required under the existing DOE Order 440.1A, which has been successfully implemented for more than 10 years. Thus, most facilities will be in compliance with the new standards and grandfathering is not necessary. Therefore, DOE does not anticipate a large number of requests for variances, nor does DOE believe that compliance would result in excessive costs

Several commenters (Exs. 15, 16, 20, 28, 29, 33, 36, 37, 45, 48, 51) noted that conflict exists between many of the consensus standards and codes (e.g., OSHA, NFPA, ASME, and ANSI codes) cited in the supplemental proposal and the codes and standards incorporated into the contracts of many prime contractors and other DOE requirements. Most of these commenters (Exs. 15, 16, 20, 28, 29, 33, 36, 37, 48, 51) suggested that all cited regulations should be reviewed for unintended implications. In the final rule, DOE has aligned the standards in final rule section 851.23(a) with those required under DOE Order 440.1A. Thus, DOE does not anticipate conflict between the standards in the final rule and those in existing contracts and other DOE directives.

Several commenters (Exs. 6, 15, 28, 29, 36, 37, 38, 42, 45, 47, 49, 50, 57) recommended that DOE adopt OSHA standards as the minimum set of requirements, and expressed the opinion that the national consensus standards in the supplemental proposed rule do not provide an appropriate basis for enforcing worker safety and health requirements at DOE facilities. Two of these commenters (Exs. 15, 38) suggested that DOE also adopt other elements of OSHA's regulations, such as interpretations, penalty policies, and appeals mechanism. As previously discussed, DOE has revised the list of standards in response to comments on the supplemental proposal. The standards mandated in final rule section 851.23(a) are consistent with those mandated under the existing DOE Order 440.1A. These standards include OSHA standards as well other consensus standards that have been evaluated by the DOE health and safety community and deemed necessary to address gaps in the OSHA standards and to provide adequate protection to the DOE workforce. DOE also intends to prepare enforcement guidance supplements (EGSs) that will provide enforcement guidance. DOE anticipates that these EGSs will be consistent with and to a great extent based on the equivalent

OSHA guidance. Furthermore, under final rule section 851.6, DOE will continue to issue technical positions that will be based in large measure on the existing body of OSHA interpretations.

Several commenters were concerned by the potential costs of compliance with supplemental proposed section 851.23(a). These commenters (Exs. 14, 16, 20, 27, 29, 31, 34, 36, 37, 38, 42, 48, 49, 57, 58) surmised that implementation of the proposed rule would result in increased costs associated with the increased amount of resources needed to comply with the large number of consensus standards. Further, commenters believed that these costs would divert funds normally spent on safety, which would negatively impact worker safety and health. Two commenters (Exs. 15, 38) also argued that the costs would divert funds from research. One commenter (Ex. 11) felt that DOE should perform an economic impact analysis for the rule. DOE again notes that in the final rule many of the consensus standards listed under the supplemental proposal are eliminated and the remaining standards in final rule section 851.23(a) are those required by the existing DOE Order 440.1A. Most facilities should already be in compliance with these standards and, therefore, DOE does not anticipate increased costs.

DOE received a number of comments on specific standards (or blocks of standards from the same standardsetting organization). Many commenters (Exs. 1, 2, 3, 4, 5, 7, 8, 16, 19, 20, 24, 22, 29, 31, 33, 37, 39, 45, 47, 49, 54, 55, 58, 59, 61) raised concerns about the NFPA codes found in supplemental proposed section 851.201(b), Table 1. The commenters recommended that these codes be eliminated or clarified based on various compliance concerns, including applicability to facilities, increased costs, and excessive variance requests. One commenter (Ex. 61) observed that while the supplemental proposed rule preamble and purpose indicated that the purpose of the rule was worker safety and health, many of the National Fire Protection Association (NFPA) requirements referenced in supplemental proposed rule section 851.201 from DOE Order 420.1A are directed at limiting property damage, not improving worker safety. The commenter inquired if it was the intent of the rule to address property protection in addition to worker safety or whether enforcement of the NFPA standards would be limited to those issues and provisions that specifically affect worker safety. Furthermore, if the latter was the case, the commenter

questioned how DOE would document which provisions specifically applied to worker safety and which applied to property protection. DOE acknowledges these concerns and notes that the intent of the rule is worker safety and health Accordingly, DOE has removed the majority of the specific NFPA standards in the interest of reducing the contractor and site compliance burdens. NFPA 70 and 70E remain in the final rule because they are important for protecting worker safety and health on DOE sites. DOE notes, however, several deleted NFPA standards may be applicable to DOE facilities through DOE fire protection directives, such as DOE Order 420.1A or by contract.

Several of these commenters (Exs. 2, 8, 16, 19, 29, 37, 45, 49) also objected to the American Society of Mechanical Engineers (ASME), ANSI, American Petroleum Institute (API), American Water Works Association (AWWA), and Underwriters Laboratories (UL) codes found in supplemental proposed section 851.201(c), Tables 2 through 5. Commenter concerns related to these codes included increased costs if the codes were retained, compliance issues, legacy construction issues, lack of rationale for omission and inclusion of the codes appearing in the tables (i.e., the included codes were too prescriptive but with numerous gaps in coverage), lack of applicability to DOE sites, potential increase in exemption requests, conflict with cited OSHA regulations in the supplemental proposal, level of specificity not appropriate to a rule of this type, the fact that specified code editions can become quickly outdated, and problems associated with revision of edition dates through rulemaking procedures. Many of these commenters (Exs. 8, 16, 19, 45) suggested that DOE eliminate the specific codes and editions. Finding several of these concerns to be valid, DOE has modified final rule section 851.23(a) by eliminating Tables 2 through 5 and associated codes (i.e., ASME, API, AWWA, UL, and ANSI pressure-related codes).

DOE also received numerous comments related to the standard on TLVs. Many commenters (Exs. 12, 16, 28, 31, 36, 37, 38, 42, 45, 47, 49, 51, 54, 56) expressed concern over supplemental proposed section 851.201(e), which required compliance with the ACGIH standard for TLVs. Several of these commenters (Exs. 16, 28, 31, 36, 37, 42, 45, 51, 56) expressed the opinion that these values are inappropriate and recommended that they be eliminated from the rule or adopted only partially, since they do not take into account economic or technical

feasibility. One commenter (Ex. 38) asserted that this provision goes beyond OSHA requirements and creates an unreasonable obligation for contractors to keep employee exposure levels below both OSHA PELs and the ACGIH exposure limits (depending on which value is lower). Conversely, another commenter (Ex. 54) recommended that, to ensure greater worker protection, DOE continue to require contractors to follow ACGIH TLVs where they are more protective than OSHA PELs. DOE agrees with the latter comment on inclusion of ACGIH TLVs. In final rule section 851.23(a)(9), DOE continues to require the use of ACGIH TLVs exposure limits where they are lower and more protective than OSHA PELs. As mentioned earlier in the discussion of this section, this approach is consistent with DOE Order 440.1A, which has been in place and implemented by DOE contractors on DOE worksites for a decade.

Two commenters were concerned about beryllium exposure levels. One commenter (Ex. 49) recommended that the ACGIH TLV for beryllium be excluded from the rule on the basis that DOE has a separate rule 10 CFR 850 that specifically addresses beryllium exposure limits. In contrast, another commenter (Ex. 62) believed that DOE should adopt the ACGIH TLV for beryllium in the rule; the more protective limit currently under consideration by ACGIH would be applicable under this rule upon ACGIH's approval. In 851.23(a)(1) of the final rule, DOE requires contractors to comply with 10 CFR 850, "Chronic Beryllium Disease Prevention Program" (Part 850 CBDPP). In addition, Part 850 CBDPP has been revised to state that it supplements, and is deemed an integral part of, the worker safety and health program under Part 851. Section 851.23(a)(9) adopts the ACGIH TLVs, however, DOE notes that the rule adopts a specific version of the ACGIH standards. Incorporation of any future changes to those standards into 10 CFR 851 could only be accomplished through appropriate rulemaking procedures.

DOE received a few requests for additional specific standards to be included in the rule. One commenter (Ex. 49) recommended that DOE specifically list parts of the referenced ANSI standards that are considered exposure limits and technical requirements and, thus, applicable under the rule. DOE agrees that specificity is helpful and has included 851.23(a)(10), (11), and (12) in the final rule; these list the three specific ANSI standards adopted under the rule.

Three other commenters (Exs. 11, 54, 55) recommended that DOE include the 10 CFR 1904, "Recording and Reporting Occupational Injuries and Illnesses," standard and require participation in the OSHA illness and injury survey in 29 CFR 1904.41. DOE agrees with this comment and in final rule section 851.23(a)(2), DOE includes and requires compliance with the following provisions of 29 CFR 1904: 1904.4 through 1904.11, 1904.29 through 1904.33, 1904.44, and 1904.46, "Recording and Reporting Occupational Injuries and Illnesses."

One commenter (Ex. 5) suggested that DOE include relevant emergency response standards. This commenter noted that Emergency Response Planning Guidelines (ERPGs) and Temporary Emergency Exposure Limits (TEELs) standards, which apply to emergencies and are not covered by other standards, are not referenced in the rule. DOE notes that the specific issue of including emergency response standards is beyond the scope of this rulemaking.

Several commenters (Exs. 25, 27, 28, 31, 39, 42, 48) expressed concern that supplemental proposed section 851.200(b), which gave DOE the authority to impose additional requirements on a contractor, would leave contractor liability open-ended and would exacerbate costs. These commenters believed that the additional requirements that DOE can impose on a contractor should be limited in response to these comments. DOE has eliminated this authority and modified the language in final rule section 851.23(b) to read, "Nothing in this part must be construed as relieving a contractor from complying with any additional specific safety and health requirements that the contractor determines to be necessary to protect the safety and health of workers.'

Another commenter (Ex. 15) felt that the intention of the introduction to the supplemental proposal, which indicates that this proposal is intended to "codify a minimum set of safety and health requirements with which contractors must comply," is not carried over into the language of Subpart C, and recommended that supplemental proposed section 851.200(a) be modified to include "A contractor responsible for a covered workplace must, at a minimum comply with the worker safety and health requirements * DOE agrees with this concern but feels that it is addressed in 851.23(b) of the final rule, which states that a contractor is not relieved from complying with additional worker safety and health

requirements that they deem necessary to protect their workers.

Section 851.24—Functional Areas

Section 851.24 requires that contractors have a structured approach to their worker safety and health program, which includes provisions for functional areas. Specifically, 851.24(a) requires that contractors, at a minimum, include provisions in the functional areas of construction safety, fire protection, firearm safety, explosives safety, pressure safety, electrical safety, industrial hygiene, occupational medicine, biological safety, and motor vehicle safety. Section 851.24(b) establishes that contractors are subject to all applicable standards and provisions in Appendix A, "Worker Safety and Health Functional Areas." Comments regarding each of the functional areas are addressed in the discussion of Appendix A in this Supplementary Information.

Section 851.25—Training and Information

Section 851.25 describes the contractor requirements for a worker safety and health training and information program. Section 851.25(a) establishes the contractor's obligation to provide training, while section 851.25(b) describes when, and at what frequency, the training must be provided. Specifically, a contractor must provide (1) training and information for new workers, before or at the time of initial assignment to a job involving exposure to a hazard; (2) periodic training as often as necessary to ensure that workers are adequately informed and trained, and (3) additional training when safety and health information or a change in workplace conditions indicates that a new or increased hazard exists. Section 851.25(c) requires contractors to provide training and information to workers with worker safety and health program responsibilities that is necessary for them to effectively carry out those duties.

One commenter (Ex. 30) recommended that proposed section 851.100(b)(7) be eliminated stating that it would result in excess paperwork since contractors already have safety programs and are required to provide a workplace free of hazards. DOE disagrees, believing that training is a basic component of successful worker protection efforts.

Section 851.26—Recordkeeping and Reporting

(a) *Recordkeeping*. Section 851.26 in the final rule addresses contractor

recordkeeping and reporting requirements. This section consolidates provisions that were included in sections 851.4(f) and 851.7 of the supplemental proposed rule. After considering public comment, DOE has revised the recordkeeping and reporting requirements.

Section 851.26(a) requires a contractor to maintain complete and accurate records of all hazard inventory information, hazard assessments, exposure measurements, and exposure controls.

Section 851.26(a)(1) requires contractors to ensure that the workrelated injuries and illnesses of their workers and subcontractor workers are recorded and reported accurately in a manner consistent with DOE Manual 231.1–1A, "Environment, Safety and Health Reporting Manual." This manual was established under DOE Order 231.1A, the primary directive on environment, safety and health reporting, including occupational injuries and illnesses. The manual requires contractors to record, maintain records on, and report occupational fatalities, injuries, and illnesses among their employees (and subcontractors) arising out of work primarily performed at facilities owned or leased by DOE.

Section 851.26(a)(2) requires contractors to comply with the applicable to occupational injury and illness recordkeeping safety and health standards in section 851.23 of this part at their site, unless otherwise directed in DOE Manual 231.1–1A.

Section 851.26(b) establishes contractors' duty to report and investigate accidents, injuries, and illnesses. Under this section contractors are also required to analyze related data for trends and lessons learned, in accordance with DOE Order 225.1A, "Accident Investigations."

Section 851.26(c) requires that contractors not conceal or destroy any information concerning non-compliance or potential non-compliance with the requirement of this part.

DOE received numerous comments on reporting requirements in supplemental proposed section 851.4(f). That supplemental proposed section would have required contractors to report and investigate each occurrence (including "near miss" incidents) that causes a significant likelihood of death or serious bodily harm. The majority of commenters (Exs. 5, 15, 25, 28, 30, 31, 35, 38, 39, 42, 45, 47, 51, 57) requested definitions for the terms used in the context of supplemental proposed section 851.4(f) (e.g., "near miss" and "significant likelihood"). Some commenters (Exs. 16, 36, 42) favored

deletion of the provision, since the terms were too subjective and lacked a clear definition. In response to these concerns, DOE has removed this provision from the final rule. Final rule section 851.26(a)(2) clarifies that contractors must report and record workplace injuries and illnesses in accordance with DOE Manual 231.1–1A.

The commenters (Exs. 5, 15, 25, 28, 30, 31, 35, 38, 39, 42, 45, 47, 51, 57) also sought clarification on reporting thresholds for occurrences in supplemental proposed section 851.4(f). Two commenters (Exs. 13, 39) specifically inquired where and to whom the report should be submitted. One commenter (Ex. 60) asserted that occurrence reporting should be mandatory and failure to report should be subject to enforcement. Concerned that this section contravened Noncompliance Tracking System reporting requirements in PAAA-related programs, other commenters (Exs. 36, 38, 39, 42, 49, 57) pointed out that supplemental proposed section 851.4(f) was not consistent with supplemental proposed Appendix A(IX)(b)(5). Several commenters (Exs. 15, 16, 20, 27, 31, 42, 49) recommended that the reporting process be aligned with existing DOE reporting systems like the Occurrence Reporting and Processing System or DOE Order 231.1A. As is noted earlier in this discussion, DOE agrees with these comments and has replaced supplemental proposed section 851.4(f) with final rule section 851.26, which references DOE Manual 231.1-1A.

E. Subpart D—Variances

The supplemental proposal contained an exemption process based on the exemption process established in 10 CFR part 820 for exemptions from nuclear safety requirements. DOE selected the exemption process outlined in 10 CFR part 820 for use in the supplemental proposal because it is specific to DOE activities. DOE believed that because DOE contractors had already implemented this process, the process would be easily understood and costs would be reduced. Many commenters (Exs. 10, 11, 15, 16, 20, 21, 29, 31, 33, 36, 37, 38, 39, 40, 42, 46, 49, 54, 60), however, disagreed with this selection, most stating that this process would actually be too costly to implement. Other commenters (Exs. 10, 16, 23, 30, 39, 40, 44, 60, 62) argued that the exemption process in the supplemental proposal was not consistent with the requirement for flexibility specified by Congress in section 3173 of the NDAA. Specifically, these commenters felt that the 10 exemption criteria included in the

supplemental proposal exemption process went beyond the flexibility provisions of the NDAA and could allow contractors to inappropriately circumvent many of the requirements of the rule. Several of these commenters (Exs. 16, 58, 62) felt that the flexibility concerns related to closure facilities raised in the NDAA would be more appropriately handled through the worker safety and health program, hazard abatement, and enforcement provisions of the rule.

To address these concerns, several commenters (Exs. 11, 21, 44, 49, 60, 62) suggested that DOE should replace the proposed exemption process with a variance process modeled after OSHA's variance process established in 29 CFR part 1905. These commenters argued that the variance process outlined in 29 CFR part 1905 was developed specifically to address OSHA worker safety and health standards and, thus, was more applicable to the requirements established in the worker safety and health program.

A few commenters (Exs. 28, 45, 51) supported the exemption process in the supplemental proposal but expressed concern that the exemption implementation process would become unwieldy if additional exemption criteria were added. These commenters believed that this could be detrimental to legitimate exemption requests (e.g., facility closure or demolition), and suggested that an initial screening process be established to determine whether an exemption request satisfies criteria for evaluation. One commenter (Ex. 28) suggested that the 10 exemption circumstances be grouped into 4 categories for screening.

DOE has considered each of these comments and concluded that a variance process modeled after the OSHA variance process is more appropriate to address worker safety and health issues. As a result, DOE has adopted a variance process based on the variance process of 29 CFR part 1905. DOE notes that, because section 851.23 requires compliance with OSHA standards, the use of the OSHA variance process as the framework of the DOE variance process will allow DOE to benefit from OSHA's implementation of the process over the past 3 decades. DOE expects that variance requests to OSHA and OSHA responses will be relevant to variance requests that the Department will receive under Part 851.

Many commenters (Exs. 8, 15, 16, 20, 29, 31, 35, 36, 37, 38, 39, 42, 46, 49) argued that the extensive list of standards in supplemental proposed section 851.201 would result in excessive exemption requests and a

corresponding increase in compliance costs, since contractors would often be unable to meet the specific editions of standards incorporated by reference. One commenter (Ex. 5) stated that exemptions take an incredible amount of time to prepare and get through the DOE system for review and approval. As previously discussed, DOE has pared back the standards mandated in the final rule to be consistent with those required by existing DOE Order 440.1A. DOE believes that DOE contractors are intimately familiar and largely in compliance with the requirements of these standards. As a result, DOE does not anticipate a large number of requests for variances. As mentioned in the section-by-section discussion for the fire protection provisions of Appendix A section 2 of the final rule, DOE believes that the "equivalency" process established in many of the NFPA standards required under final rule section 851.23 will further reduce the need for variances under the rule.

DOE also intends to apply OSHA's policies regarding de minimis violations in determining the need for a variance and believes that this policy will further reduce the volume of variance requests. Specifically, OSHA practice holds that variances are not needed for conditions that meet the criteria for de minimis violations. These criteria, as described in the OSHA Field Inspection Reference Manual CPL 2.103, Section 7—Chapter III, Sub-section C(2)(g) include conditions where: (1) Violations of the relevant standard has no direct or immediate relationship to safety or health; (2) An employer complies with the clear intent of the standard but deviates from its particular requirements in a manner that has no direct or immediate relationship to employee safety or health; (3) An employer complies with a proposed standard or amendment or a consensus standard rather than with the standard in effect at the time of the inspection and the employer's action clearly provides equal or greater employee protection or the employer complies with a written interpretation issued by the OSHA Regional or National Office; or (4) An employer's workplace is at the "state of the art" which is technically beyond the requirements of the applicable standard and provides equivalent or more effective employee safety or health protection.

General examples illustrating potential de minimis conditions that may not require issuance of variances based on the OSHA criteria described above may involve deviations of distance specifications, construction material requirements, use of incorrect

color, minor variations from recordkeeping, testing, or inspection regulations. For example, in considering a variance request for 29 CFR 1910.27(b)(1)(ii) which allows 12 inches as the maximum distance between ladder rungs, OSHA determined that a situation involving rungs that were 13 inches apart could be considered de minimis. In another example involving 29 CFR 1910.28(a)(3) which requires guarding on all open sides of scaffolds, OSHA determined that a situation where employees were tied off with safety belts in lieu of guarding, met the intent of the standard and thus, was a de minimis condition and a variance was not needed. In a third example, OSHA determined that a deviation from 29 CFR 1910.217(e)(1)(ii) which, requires that mechanical power presses be inspected and tested at least weekly, was de minimis in a situation where the machinery was seldom used, and was inspected and tested prior to each use.

The following sections provide a detailed discussion of the variance process outlined in the final rule. Because this process differs significantly from the exemption process outlined in the supplemental proposal, the sections below do not correspond directly with the sections of the original proposal.

Section 851.30—Consideration of Variances

Section 851.30 establishes the authorities that will consider requests for variances from specific provisions of the rule. Specifically, section 851.30(a) establishes that the Under Secretary has the authority to grant variances. Under this provision, this authority may not be delegated. A few commenters (Ex. 30, 44, 60, 62) believe that the Secretary of Energy, not the Officer with responsibility for a contractor's activity, should issue the decision for a variance or an exemption. The commenters believe that instead of allowing the NNSA to recommend exemptions and issue final decisions, the Energy Secretary should render decisions on all exemptions, after receiving a recommendation from the EH-1. DOE disagrees, but believes that the appropriate approval level for granting a variance rests with the Under Secretary for Energy and Environment, or the Under Secretary for Science, or the Under Secretary for Nuclear Security/ Administrator for National Nuclear Security Administration, and need not be elevated to the Secretarial level. The Under Secretary, in granting the variance must consider the recommendation of the Assistant Secretary for Environment, Safety and Health.

Another commenter (Ex. 11) stated that non-NNSA and NNSA contractors should not have separate systems for the exemption process, and that one process would be appropriate for the consideration of all variances. DOE agrees that a single Department-wide process is appropriate and has designed the variance process so that the Assistant Secretary for Environment, Safety and Health considers all variances requests and makes a recommendation as to whether they should be granted or denied. The decision to grant a variance is made by the Under Secretary with line management responsibility for the contractor requesting the variance. The Under Secretary must consider the recommendation of Assistant Secretary in deciding whether to grant the variance.

One commenter (Ex. 29) argued that the exemption process would function more efficiently if variance requests for standards addressing less significant hazards could be approved at the regional or site level, so as not to overburden the CSO with multiple variance requests. DOE believes, however, that concerns regarding excessive variance requests are no longer relevant since, for the reasons noted above, DOE does not anticipate a large number of requests for variances.

A final commenter (Ex. 47) on this section believed that the provision that the CSO cannot delegate exemption authority contradicts the requirements of supplemental proposed section 851.203(a)(9). This referenced section addressed a fire protection selfassessment program; however, DOE believes this was an erroneous reference and that the commenter intended to reference supplemental proposed section 851.203(a)(12), which addressed the approval of fire protection equivalencies at the site manager level. Although this specific provision has been removed from the final rule, the equivalency process is separate from the variance process outlined in subpart D of the final rule, so no conflict exists within the rule.

Section 851.30(b) establishes that a variance application must contain the requirements specified in final rule section 851.31.

Section 851.31—Variance Process

Section 851.31 of the final rule describes the variance process requirements. Several commenters (Exs. 15, 16, 29, 31, 37, 42, 46, 49) expressed concern over the proposed requirement to resubmit existing exemptions, especially those exemptions involving fire safety (Exs. 31, 37, 42). Commenters

stated that this requirement would result in a significant increase in exemption requests, and this, in turn, would result in increased cost including the need for additional resources to manage the risk pending reapproval. A few commenters suggested that the rule be reworded to incorporate previous exemptions and equivalencies (Ex. 16, 31, 37, 49). DOE notes the commenters' concerns and has revised the final rule.

Section 851.31(a) requires contractors desiring a variance from a safety and health standard established in final rule 851.23 to submit a written application to the appropriate CSO. Section 851.31(a)(1) and (2) established that the CSO may forward the application to the Assistant Secretary for Environment, Safety and Health. If the CSO does not forward the application to the Assistant Secretary, the CSO must return the application to the contractor with a written statement explaining why the application was not forwarded.

Final rule section 851.31(a)(3) requires upon receipt of the variance application from the CSO, the Assistant Secretary for Environment, Safety and Health to review the application for a variance, and make a written recommendation to either approve the application, or approve the application with conditions, or deny the application. In this process, the Assistant Secretary for Environment, Safety and Health ensures uniformity in grant variances and provides the consistency needed the variance process.

One commenter (Ex. 49) expressed concern that the proposed rule is unclear as to whether the CSO can grant an exemption if the Assistant Secretary for Environment, Safety Health does disagrees or fails to respond during the 30-day review period. This commenter suggested that the rule include language that states that the CSO may grant an exemption if the Assistant Secretary fails to respond, or even if the Assistant Secretary disagrees, during the 30-day review period. DOE has revised the final rule to elevate approval authority to the appropriate Under Secretary, which requires the appropriate Under Secretary to "consider" the Assistant Secretary's "recommendations." DOE has revised the final rule to elevate approval authority to the appropriate Under Secretary, which requires the appropriate Under Secretary to consider the Assistant Secretary's recommendations.

Two commenters (Exs. 30, 60) expressed concern that the supplemental proposal might be interpreted as allowing exemptions to go into effect within 30 days if EH–1

fails to act on an exemption review. The commenters believed that this maybe an unrealistic deadline if there is a backlog of exemption requests, and could result in unwarranted exemption approvals. DOE notes, the variance process in the final rule does not establish a time limit for EH–1's review of contractor variance requests.

Another question raised by a commenter (Ex. 49) was whether exemptions of rule requirements could be incorporated in the contractor worker safety and health plan and be approved through CSO approval of this plan. The approval authority for a variance is higher than that for a written program. Variances may not be approved by incorporating a variance request in the worker safety and health program, which is reviewed and approved by the Head of DOE Field Element.

A few commenters (Exs. 28, 37, 45, 51) concerned about a potentially lengthy variance approval process, requested that a specific time period (e.g., 45 days) be set for DOE to act on an exemption request. Some of these commenters were concerned that the variance approval process could delay approval of a contractor's worker safety and health program, resulting in a temporary facility shutdown. As noted in the discussion of subpart B of the final rule, DOE does not intend for approval of the contractor's safety and health program to be contingent upon or related to approval of outstanding variance request. To clarify this intent, DOE has removed a provision from subpart B of the final rule that required contractors to identify, in their programs, situations for which exemptions were needed. As a result, action on variance requests alone will not delay approval of a contractor's worker safety and health program.

A few commenters (Exs. 28, 45, 51) argued that exemption relief should not be limited to Subpart C but should be available for relief form provisions in all subparts of the rule. DOE disagrees with the commenter, however, because the standards listed in section 851.23 of the final rule are generally more prescriptive in nature than the other programmatic requirements in the rule. For instance, there may be many ways for a contractor to meet the intent of a programmatic requirement (such as management responsibilities). For this reason, final rule section 851.31(a) specifies that the variance process in the final rule applies only to the safety and health standards prescribed in final rule section 851.23.

Another commenter (Ex. 13) suggested that the DOE expand the exemption process to provide for an

exemption of an entire facility from one or more requirements, via a single exemption request. This commenter felt that such a broad exemptions might be appropriate for a facility that is scheduled for closure or transfer of title. DOE disagrees with this commenter. The variance process is intended to provide relief from a specific requirement due to specific circumstances present in a specific work site. The provisions are not intended to provide wholesale exemptions from standards at entire facilities. DOE notes that the standards mandated in final rule section 851.23 are consistent with the standards required by DOE Order 440.1A. The majority of these standards have been applicable to DOE worksites through DOE Order 440.1A and a variety of predecessor orders and contract clauses for decades. In addition, DOE believes that sufficient flexibility for closure facilities is provided through final rule section 851.21(b), which allows contractors to submit to the Head of DOE Field Element a list of closure facility hazards that cannot be fully abated and/or controlled within 90 days of being identified.

Section 851.31(b) establishes procedures for processing defective variance applications. The Assistant Secretary for Environment, Safety and Health can return an application with a written explanation if it does not contain the information required to make a determination.

Section 851.31(c) establishes the required content for a variance application. Like the corresponding sections of the previous supplemental proposed, final rule sections 851.31(b)(1) through (3) specify that a variance application must contain the name and address of the contractor, the address of the DOE site(s) involved, and a specification of the standard from which the contractor seeks a variance.

Several commenters (Exs. 10, 30, 40, 54, 55, 60, 62) expressed concern at the lack of worker notification and involvement in the proposed exemption process and requested that when a contractor applies for an exemption, the exemption request (and any replies to that request) be posted in a designated area in the workplace at the time of the request. These commenters noted that worker input should be required and solicited, and requested that workers and their representatives be fully able to participate in any discussions and appeal any decision. After reviewing these comments, DOE has added several provisions to the final rule to address these concerns. For instance, section 851.31(c)(4) requires that the

applications include any requests for a conference, which as clarified in final rule section 851.34 allow contractors and workers to present facts on how they would be affected by the variance. In addition, sections 851.31(c)(5) and (6)require that the application include a statement that the contractor has informed the affected workers of the application through appropriate methods, as well as a description of how workers were informed of the application and of their right to petition the Assistant Secretary of Environment, Safety and Health for a conference. Section 851.31(c)(5) further clarifies that appropriate methods for notifying workers of the application include giving a copy of the application to the workers' authorized representative, posting a statement at the place(s) where notices to workers are normally posted. giving a summary of the application and specifying where a copy may be

examined, and other appropriate means. One commenter (Ex. 62) believes that the rule should clarify the required content for an exemption, and that the required content should be based on OSHA's required content for variances. This commenter, as well as two others (Exs. 44, 60), also suggested that the proposed rule be revised to incorporate OSHA's approach which, according to the commenters, requires a clear demonstration that worker safety will not be negatively affected by the variance and establishes the procedures needed to provide a fair and transparent exemptions process. These commenters argued that OSHA's approach permits employers to apply for variances, but requires notice to affected employees and the public and gives them the opportunity to participate in a hearing. These commenters believed that a review process that provides the public, affected workers and their representatives, with ample notice and the opportunity to have their views considered would help ensure transparency, accountability, and integrity in the DOE rule. One of these commenters (Ex. 62) further requested a 30-day review period for workers and believed that decisions regarding an exemption should be published in the Federal Register within 10 days of

DOE agrees in part with these requests and, as discussed above, has included provisions for worker notification and involvement in the variance process in final rule sections 851.31(c)(4) through (6). DOE does not agree, however, that parties not impacted by the variance request be notified of the application. The final rule, however, does not preclude workers from sharing concerns

with any party regarding workplace safety and health matters at their own discretion.

Section 851.31(d) describes the types of variances for which a contractor may apply. These are: Temporary variances, permanent variances, and national defense variances. Section 851.31(d)(1) defines the purpose of a temporary variance. A temporary variance allows contractors a short-term exemption from a workplace safety and health standard when they cannot comply with the requirements by the prescribed date because the necessary construction or alteration of the facility cannot be completed in time or because technical personnel, materials, or equipment are temporarily unavailable. To be eligible for a temporary variance, a contractor must implement an effective compliance program as quickly as possible. In the meantime, the contractor must demonstrate to the appropriate Under Secretary and the Assistant Secretary for Environment, Safety and Health, that all available steps are being taken to safeguard workers. DOE does not consider the inability to afford compliance costs to be a valid reason for requesting a temporary variance.

Section 851.31(d)(2) of the final rule establishes the requirements for a permanent variance. A permanent variance grants an exemption from a workplace safety and health standard to contractors who could prove that their methods, conditions, practices, operations, or processes provide workplaces that are as safe and healthful as those that follow the prescribed standard. To decide whether to recommend granting a permanent variance to the appropriate Under Secretary, The Assistant Secretary for Environment, Safety and Health reviews the contractor's application and, if appropriate, visits the workplace to confirm the facts provided in the application. If the request has merit, the Assistant Secretary could recommend granting a permanent variance as described in final rule section 851.32. Final permanent variance orders will detail the contractor's specific responsibilities and requirements and explain exactly how the contractor's method varies from the regulation's

Section 851.31(d)(3) of the final rule establishes the criteria for granting a variance from a workplace safety and health requirement for reasons of national defense. The Department will use national defense variances to grant reasonable exemptions from workplace safety and health standard requirements to avoid serious impairment of national

defense. The contractor must submit a statement showing how the conditions, practices, means, methods, operations, or processes used would give workers a safe and healthful place of employment in a manner that is, to the extent practicable taking into account the national defense mission, consistent with the standard form which the variance is requested. A national defense variance will only be granted for a maximum of six months unless a showing is made that additional time is essential to the national defense mission.

One commenter (Ex. 11) believed that the national defense exemption provisions included in the supplemental proposal would create a potential "loop hole" by allowing practices that would result in worker injuries and illnesses in the name of achieving national defense "in an efficient and timely manner." DOE notes that the NDAA mandates flexibility for national defense activities. DOE believes the language in the final rule provides such flexibility without creating the potential for disregarding the standards set forth in subpart C.

Another commenter (Ex. 62) acknowledged that national security exemptions are warranted, but noted that such exemptions should be rare. This commenter believed that national security concerns could be addressed directly in the rulemaking, as with DOE's exemption from OSHA standards on explosives, through careful writing of the rule. While agreeing that national defense variances should be rare, DOE does not agree that the need for variances can be removed by more specific rule drafting. DOE notes that the provision exempting DOE from OSHA standards regarding explosives was included because existing DOE explosive safety requirements are more directly relevant to DOE operations and thus are more protective of the DOE workforce.

Section 851.32—Action on Variance Requests

Section 851.32 of the final rule establishes procedures for an approval recommendation of a variance application. Specifically, section final rule 851.32(a)(1) establishes if the Assistant Secretary for Environment, Safety and Health recommends approval of a variance application, the Assistant Secretary is required to forward the application and the approval recommendation to the Under Secretary. The recommendation must include a discussion of the basis for the recommendation and any terms and

conditions proposed for inclusion as part of the approval.

Section 851.32(a)(2) requires that if the Under Secretary approves the variance to notify the Assistant Secretary for Environment, Safety and Health who must notify the Office of Price-Anderson Enforcement and the appropriate CSO. The CSO is required to notify the contractor. Final rule section 851.32(a)(3) requires the Assistant Secretary include in the notification a reference to the safety and health standard or portion thereof, that is the subject of the application, a detailed description of the variance, the basis for the approval and any terms and conditions of the approval

Section 851.32(a)(4) and (5) establishes that if the Under Secretary denies a variance, the Under Secretary must notify the Assistant Secretary for Environment, Safety and Health and the CSO who must notify the contractor. The notification must include the grounds for the denial.

Section 851.32(b) establishes the approval criteria for a variance application. The Assistant Secretary for Environment, Safety and Health may recommend to the Under Secretary granting a variance only if the variance: (1) Is not inconsistent with section 3173 of the NDAA; (2) Would not present an undue risk to worker safety and health; (3) Is warranted under the circumstances; (4) Satisfies the requirements of § 851.31 of this part for the type of variances requested.

A few commenters (Exs. 28, 45, 51) believed that the wording in the exemption criteria in supplemental proposed rule section 851.301(a)(1) should be changed from "Be consistent with law" to "Be consistent with applicable law." Another commenter (Ex. 29) requested that the proposed language in the supplemental notice of proposed rulemaking section 851.301(a)(1) be changed to "Be consistent with the intent of the law," noting that if a contractor could achieve full compliance with the law, an exemption would not be needed. This basic criterion is clarified in final rule section 851.32(c)(1), which states that DOE may grant a variance only if the variance "is consistent with section 3173 of the NDAA not prohibited by

Another commenter (Ex. 44) requested that the proposed rule be revised to explicitly state that there may not be a reduction in worker safety through the granting of an exemption, and that the rule should require a preponderance of evidence that worker safety will not be compromised. The commenter also requested that the rule

allow adequate determination to be made regarding the effectiveness of alternative protective measures and that DOE establish expiration dates for approved exemptions, rather than giving the contractors almost complete leeway to establish their own exemptions. DOE agrees with this commenter and in final rule section 851.32(c)(2) requires a determination that the variance would not present an undue risk to worker safety and health prior to the Under Secretary granting the variance.

One commenter (Ex. 39) requested that the rule make clear that hazards that are inherent to the work being performed are excluded from the provision that states that an exemption must be free of recognized hazards. DOE has removed the language stating that the exemption must be free of recognized from the variance criteria established in the final rule. DOE notes, however, that contractors are required by section 851.32(c) to demonstrate that alternate controls will provide a workplace that is as safe and healthful as that required by the standard and also requires a determination that the variance will not present an undue risk to worker safety and health. These sections clarify the Department's intent that variances not diminish protection provided to the DOE workforce.

Section 851.31(c) establishes procedures for the Assistant Secretary for Environment, Safety and Health to recommend denial of an application. If denial is recommended, the Assistant Secretary is required to give prompt notice to the CSO, who must either notify the contractor that the application is denied or, if the CSO disagrees with the recommendation, forward the application, the recommendation, the statement of the grounds for denial, and a written statement explaining the basis for disagreement with the Assistant Secretary's decision to the appropriate Under Secretary who will review the package and make a decision. All denial notices must include, or be accompanied by, a brief statement of the grounds for the denial, as required by section 851.31(c)(4) of the final rule. A denial of an application pursuant to this paragraph shall be without prejudice to submitting of another application.

Section 851.32(d) establishes the grounds for denial of a variance application. A variance application can be denied: (1) When enforcement of the violation would be handled as a de minimis violation; (2) when a variance is not necessary, for example, when an interpretative ruling is granted on a specific standard or portion thereof; (3) when there is a situation that does not

meet the requirement for a variance set forth in the approval criteria.

Section 851.33—Terms and Conditions

Section 851.33 establishes the required terms and conditions of an approved variance. The section establishes that a variance may contain, but is not limited to, provisions that limit its duration, require alternative action, require partial compliance, or establish a schedule for full or partial compliance. No comments were submitted on the corresponding provisions of the supplemental notice of proposed rulemaking during the public comment period.

Section 851.34—Requests for Conferences

Section 851.34 allows for a worker to request a conference. Any affected contractor or worker may file a request for a conference on the application with the Assistant Secretary for Environment, Safety and Health. A request must include a statement showing how the contractor or worker would be affected by the variance applied for, the specification in the application that is denied and a summary of evidence in support of each denial, and any views or arguments on any issue of facts or law presented.

As discussed in section 851.31(b), several commenters (Ex. 10, 30, 54, 55) believed that worker input should be required and solicited, and requested that workers and their representatives be fully able to participate in any discussions and appeal any decision. DOE agrees with this request and incorporated worker notification requirements and worker rights to petition for a conference into the final rule.

Section 851.34(c) of the final rule, allows the Assistant Secretary for Environment, Safety and Health, or its designee, to determine whether to meet with an affected contractor or worker.

F. Subpart E—Enforcement Process

Subpart E of this rule describes how DOE will enforce the rule's worker safety and health program requirements. Specifically, the subpart outlines the rights and responsibilities of DOE and contractors during inspections, investigations, and resulting enforcement actions. The enforcement options available to DOE are designed to provide a flexible framework that encourages settlement of enforcement proceedings while prescribing clear, timely communication between DOE and contractors throughout all phases of enforcement activities.

DOE received support for the elements of the enforcement program from several commenters, who generally view DOE's approach as reasonable and sound. One commenter (Ex. 51) strongly agreed with the enforcement process of the supplemental proposal and expected that the self-auditing process would create positive incentives for contractors to self-identify and correct hazards. Additionally, this commenter found the enforcement process's purpose and procedures to be clearly defined, as were the classifications and categories of violation severity levels.

Other commenters requested clarification of various points of the rule. For instance, one commenter (Ex. 5) asked DOE to clarify whether only deviations from the rule could result in financial penalties. The commenter suggested that "it would be better to use the preliminary hazard analysis (PHA) process such that fines and penalties could be imposed if sites violated technical safety requirements." DOE presumes that this commenter is distinguishing between deviations from the letter of the rule and deviations from their approved written program. In fact, DOE intends for both the approved worker safety and health program and the applicable requirements of Subpart C to be enforceable. DOE recognizes that violations of standard requirements may be the result of worker safety and health program failures. In these instances worker safety and health program failures may be cited.

Another commenter (Ex. 6) suggested that safety and health-related enforcement should be performed by OSHA rather than DOE. In its view, DOE does not have the capabilities (e.g., certified occupational safety and health inspectors) to enforce the rule. DOE agrees that a qualified staff is an important component of an effective enforcement program and notes that DOE, through authority granted under the AEA of 1954, has enforced occupational safety and health requirements through contracts on DOE sites since its inception. Section 3173 of the NDAA mandates DOE to promulgate this rule to provide a regulatory enforcement and civil penalty mechanism. The Office of Price-Anderson Enforcement is staffed with trained, qualified professionals capable of performing enforcement inspections and investigations.

Several of the comments (Exs. 12, 13, 37) sought clarification of certain aspects of the enforcement process. For instance, one commenter (Ex. 13) found some of the terminology (e.g., "deception," "willfulness," "gross negligence") too subjective for use in

determining the severity of violations. The commenter suggested that further guidance is needed to clearly define the DOE's intended enforcement of the rule. Clear definitions were also requested by a commenter (Ex. 37) who suggested that DOE adopt provisions from OSHA's enforcement processes on severity of findings, threshold criteria for appeals, and an independent and equitable appeals process. Another commenter (Ex. 12) felt the rule did not clearly indicate how potential violations would be identified and screened. This commenter suggested that DOE develop compliance directives such as those used by OSHA. DOE agrees that enforcement guidelines with clearly defined terminology will aid the Department in ensuring fair and consistent enforcement. DOE has revised Appendix B of the final rule (previously Appendix A of the supplemental proposed rule) to clarify severity levels, and final rule section 851.44 clearly describes the administrative appeals process. Additionally, DOE intends to publish enforcement guidance supplements (EGS) that, coupled with Appendix B to the final rule, will further guide the enforcement process.

A commenter (Ex. 16) concerned specifically with the Noncompliance Tracking System (NTS) process and NTS reporting thresholds suggested that DOE use an enforcement process similar to that used for the enforcement of Price-Anderson Amendment Act (PAAA). This commenter indicated that DOE could benefit from its experience of implementing the PAAA process over the past 10 years, particularly by integrating costly NTS reporting with Occurrence Reporting and Processing System (ORPS), making use of fully integrated contractor management systems (as in draft DOE Order 226.1), following the Nuclear Regulatory Commission (NRC) precedents by eliminating subjective NTS reporting thresholds, and encouraging contractors to shift from "event driven" to "assessment driven" reporting. While not opposed to further clarification of NTS reporting thresholds, DOE notes that the DOE community has experience in implementing tracking programs. Contractors have long been responsible for recording and analyzing occupational safety and health (OSH) noncompliances and tracking abatement progress as required by DOE Order 440.1A. To help refine the process under the final rule, the Office of Price-Anderson Enforcement plans to develop and publish in appropriate EGSs, thresholds for voluntary contractor

reporting of noncompliances into NTS. The Office of Price-Anderson Enforcement expects to periodically adjust the thresholds as additional experience is gained under the final rule. Also, this office will incorporate lessons learned from the reporting of nuclear violations into NTS.

Several commenters (Exs. 31, 37, 42, 57, 58) expressed concern that the proposed rule would not provide for defenses that are commonly applied to American industry in OSHA enforcement proceedings. These commenters offered specific examples, including defenses related to a standard being "unenforceably vague," lack of employee endangerment, lack of employer knowledge of a hazard, technological or economic feasibility of abatement for noise and toxic substance hazards or regulatorily proposed mitigation plans, unpreventable or unforeseeable employee misconduct, lack of employer control over a hazard, and emergency conditions. DOE recognizes the value of additional guidance on these matters but notes that affirmative defenses from OSHA citations are not built into the regulatory text of the OSHA standards as suggested by some of the commenters. Such defenses are instead discussed in OSHA's enforcement guidance, including the Field Inspection Reference Manual. The defenses commonly addressed in OSHA guidance include unpreventable employee misconduct, impossibility, greater hazard, and multi-employer workplaces. DOE intends to follow a similar approach by incorporating guidelines on these types of affirmative defenses in appropriate EGSs to the extent these defenses are appropriate for DOE. Another commenter (Ex. 11) suggested that the rule should contain details of an inspection targeting process that outlines the procedures DOE will use as the criteria for selecting facilities for inspection. The commenter indicated that OSHA has published criteria of this type, which are used to ensure effective use of limited enforcement resources. DOE does not agree with this comment. There is no statutory requirement that DOE outline its process for identifying and prosecuting violations of the Part 851. Such a process would interfere with the discretion necessary to effectively implement the statutory mandate. However, as previously mentioned, DOE does intend to develop EGSs that will present guidelines for the enforcement process. The Office of Price-Anderson Enforcement expects to adapt many of OSHA's inspection

protocols to the unique DOE enforcement regime.

DOE received several comments that questioned whether DOE can effectively regulate contractors to the extent indicated by this part. For example, a commenter (Ex. 6) questioned whether DOE would enforce this regulation for its Headquarters (HQ), regional, or site offices, and suggested that HQ will need to set up an independent oversight office. These commenters may not be aware that the Office of Price-Anderson Enforcement, which has independent oversight authority, currently enforces nuclear safety requirements, will expand its enforcement function to include enforcement of the worker safety and health provisions of this rule.

Another commenter (Ex. 13) described the enforcement policy as establishing a highly complex nuclear safety process that far exceeds what OSHA expects of the industrial sector. DOE disagrees with this statement. The worker safety and health program implemented in the final rule is based on the program management provisions established in DOE Order 440.1A and its predecessor orders to address occupational safety and health at DOE facilities. The worker safety and health program was based in large measure on the OSHA Voluntary Safety and Health Management Guidelines published in 1989. Accordingly, DOE believes that the provisions of the final rule are generally consistent with what OSHA expects of effective worker safety and health programs in the private sector.

Compliance costs and accounting were a concern for several commenters. Two of these commenters (Exs. 31, 48) felt that DOE enforcement will result in increased cost to contractors "to respond to new and extensive enforcement activities." DOE disagrees. Contractors with effective integrated safety management programs, which incorporate both nuclear safety and worker safety and health programs, have little to worry about. The Office of Price-Anderson Enforcement intends to enforce both nuclear and worker safety and health programs from the same office, using similar operating principles. The Office of Price-Anderson Enforcement will most likely consider enforcement action in significant situations. Another commenter (Ex. 29) suggested that—for the purposes of the Major Fraud Act—the rule should include a provision stating when the contractor must begin segregating the costs of responding to a DOE safety and health investigation, since these costs will not be recoverable if a violation is confirmed. DOE has significant experience with the Major Fraud Act in

connection with the implementation of part 820. Accordingly, the same procedures and requirements that DOE has already successfully applied to enforcement actions under 10 CFR part 820 will apply to enforcement actions under 10 CFR part 851.

DOE received a number of comments in addition to those discussed above that recommended that DOE incorporate various aspects of OSHA's enforcement program. A few commenters (Ex. 29, 37, 47) believed that DOE should use an enforcement process based on OSHA to better serve the needs of worker safety and health. For instance, one commenter (Ex. 37) felt strongly that an "OSHA approach to safety enforcement" is more appropriate and better understood by DOE management and operating contractors and subcontractors than the nuclear safety enforcement approach proposed in the rule. The commenter suggested that DOE consider relying upon OSHA enforcement guidance and case law for determining violations and penalties under the DOE rule, particularly in regard to the General Duty Clause and affirmative action defenses. DOE does not agree with this commenter's assertion that contractors are unfamiliar with the enforcement approach in this rule. This rule will apply to contractors and their subcontractors, just as the nuclear safety rules apply. Therefore, these parties should already be familiar with the enforcement regime and the flow down of requirements. Two other commenters (Exs. 38, 57) believe that, unlike the OSHA enforcement process, the DOE enforcement process in the supplemental notice of proposed rulemaking would not afford contractors the right to a hearing with the ability to present witness testimony before penalties are assessed. DOE disagrees and notes that the final rule gives contractors several opportunities to contest notices of violation and provide evidence (including witness testimony) to support their position. These opportunities include the right, under final rule section 851.44, to an administrative appeal to the Office of Hearings and Appeals in accordance with 10 CFR 1003, Subpart G, which establishes procedural regulations for the DOE Office of Hearings and Appeals with respect to private grievances and redress.) The procedures under 10 CFR 1003.77 also allow petitioners to seek further judicial review of the final order issued by the Office of Hearings and Appeals.

Another commenter (Ex. 42) expressed concern that the supplemental notice of proposed rulemaking does not address whether DOE will use contractor selfassessments as a basis for enforcement actions. This commenter recommended that DOE adopt OSHA's policy regarding the treatment of voluntary employer safety and health self-audits. DOE notes that contractors are responsible for identifying and tracking noncompliances. The Office of Price-Anderson Enforcement does not intend to routinely ask to see contractor selfassessment reports for the purpose of identifying noncompliances; however, the Office may review such documents during the course of a program review or during an investigation prompted by an event such as an accident, recurring or repetitive condition, or programmatic failure.

One commenter (Ex. 48) suggested that "The overall effect of this rule * * as written will be to burden both the Government and its contractors with a potentially massive reporting and analysis effort. Contractors will be compelled to report each variation in standard compliance and the DOE enforcement and investigative arm [will be compelled to read and screen all reports for NOV issue." It appears to DOE that this commenter assumes that a contractor may have a significant number of noncompliances on the effective date of this rule. This should not be the case since contractors should already be in compliance with DOE Order 440.1A, which provides the basis for this final rule. Noncompliances that existed in the past should have been identified, analyzed, and tracked through abatement. Any noncompliances that still exist, should already be in the contractors' tracking systems. The magnitude of emerging noncompliances should not overwhelm reporting systems.

The same commenter (Ex. 48) also views the rule as providing only punitive compliance mechanisms. The commenter argued that relying only on punitive measures will reverse the successful partnering of DOE and its contractors that has achieved significant safety and health performance in recent decades. The commenter suggested that the DOE rule will shift the focus of contractor worker safety and health practice to policing for conditional violations and away from successful proactive programs. DOE disagrees, believing instead that this rule is more likely to enhance the relationship between DOE and its contractors. DOE contractors have already made contractual commitments to perform their work in accordance with DOE's safety and health requirements as established in DOE Order 440.1A. The rule will only clarify and strengthen

both DOE's and the contractor understands of the requirements.

Section 851.40—Investigations and Inspections

Section 851.40 establishes DOE's right to conduct investigations and inspections to confirm contractor compliance with the rule and describes the steps DOE must take when performing an investigation or inspection. The section also gives contractors certain rights and responsibilities during inspections and investigations.

Section 851.40(a) gives the Director the right to take any actions necessary to conduct inspections and investigations of contractor compliance with health and safety program requirements. In order to conduct these inspections, DOE enforcement officers have the right to prompt entry into worksites.

One commenter (Ex. 42) indicated that DOE must establish clear procedures for OE to carry out investigations and enforcement actions. This commenter believed that these procedures should specify what events will trigger an informal conference and subsequent enforcement action and whether Type A and B investigations will be used as the basis for legal action. Again, DOE finds that it is more appropriate to establish inspection protocols EGSs. These EGSs, coupled with Appendix B to the final rule, will guide the enforcement process and address the issues raised by the commenter. The Office of Price-Anderson Enforcement will use all available information in exercising its enforcement authority.

A second commenter (Ex. 5) inquired whether the Office of Price-Anderson Enforcement is considering revising the existing guidance provided in the Operational Procedures (*Identifying, Reporting, and Tracking Nuclear Safety Noncompliances Under PAAA*, June 1998 edition) or if the Office will develop a stand-alone guidance document for the review and reporting determination of potential noncompliances. As stated above, the Office of Price-Anderson Enforcement intends to provide EGSs that will cover NTS reporting thresholds.

A number of commenters (Exs. 11, 16, 28, 29, 35, 36, 37, 43, 45, 47, 51) expressed the opinion that Voluntary Protection Program (VPP) sites should not be subject to programmed inspections or should qualify for a reduction in inspections. DOE agrees that VPP sites are likely to have the best worker safety and health programs and be in substantial compliance with the

provisions of this rule. Nevertheless, DOE believes it is important that VPP sites be subject to all of the provisions of this rule. The Office does not expect these sites to have many NTS-reportable violations, but the Office will respond as necessary to significant violations and develop appropriate programmed

inspection strategies.

Öne commenter (Ex. 31) asked whether inspection and investigation authority will be delegated to the field or site office level. Enforcement authority rests with the Office of Price-Anderson Enforcement and will not be delegated to the field or site office levels. DOE does not, however, intend to interfere with inspection and investigation activities conducted by the field or site offices. A commenter (Ex. 32) suggested that the rule address how the Office of Price-Anderson Enforcement will take the results of inspections that are performed at DOE sites by the Office of Independent Oversight and Performance Assurance's Office of Safeguards and Security Evaluations (OA-10) and EH's Office of Quality Assurance Programs (EH-31), into account when determining the frequency and necessity of its own inspections. The Office of Price-Anderson Enforcement will use all available information, from any source, in developing enforcement protocols and plans, and making enforcement decisions.

Section 851.40(b) requires contractors to cooperate with DOE throughout enforcement activities. DOE received no comments on section 851.40(b) during the public comment period.

The right of a worker or worker representative to request an investigation is included in final rule section 851.40(c). Although the worker may remain anonymous, the investigation request should identify the activity of concern as specifically as possible and include supporting documentation. Several commenters (Exs. 30, 54, 55, 60) suggested that persons requesting investigations or inspections be allowed to remain anonymous. DOE agrees, final rule section 851.40(c) now includes a provision establishing a worker's or worker representative's right to remain anonymous upon filing a request for an inspection or investigation.

Two commenters (Exs. 26, 39) asked DOE to clarify that it is up to the Director to determine whether a complaint will be investigated and suggested changing the subject of this paragraph from "any person" to a "covered worker." The commenters thought such a change would avoid the implication that DOE will investigate all

complaints, even those made by a private citizen who called with an investigation request. DOE agrees that the original language in supplemental proposed section 851.400(c) too board. Accordingly, final rule section 851.40(c) clarifies DOE's intent to allow workers or their representatives the opportunity to request an investigation or inspection of a specific work place safety and health concern. DOE intends to respond to all worker and worker representative requests for investigation or inspection, at least to the extent needed to determine if further action is necessary or warranted. If the initial investigation reveals that further investigation or inspection is unwarranted, the Director may, under final rule section 851.40(i), close the investigation.

It is important to note that the Office of Price-Anderson Enforcement expects that workers or worker representatives will have first presented their concerns through their respective Employee Concerns Programs (ECPs), but without satisfactory resolution. Several related comments (Exs. 31, 36, 42, 48) suggested that this rule recognize the ECP and contractor management as an avenue to resolve concerns involving safety matters. Two of these commenters (Exs. 31, 48) indicated that if the issue cannot be resolved, then the worker should be able to request an investigation but not an inspection; they argued that a request for inspection should be handled only through the established ECP program or contractor management chain of

DOE notes that final rule sections 851.20(a)(6) through (9) establish provisions for contractors to develop and implement procedures allowing workers to express concerns regarding workplace hazards and for contractors to respond to those concerns. While DOE intends for workers to explore these avenues first, DOE does not feel it is appropriate to restrict a worker's right to request an inspection or investigation by requiring them to try these other options first. DOE disagrees with the comment that inspections should be limited to the ECP or contractor chain of command. Onsite inspections often are a necessary part of an investigation and may give the Office of Price-Anderson Enforcement the best opportunity to verify whether a violation or noncompliance exists.

command.

Two commenters (Exs. 54, 55) asked that employees and their representatives be given the right to accompany the inspector under supplemental proposed section 851.400(c). One of these commenters (Ex. 54) stated that this section would not give workers or their representatives the right to be involved

in any part of the inspection, except the right to accompany an inspector under supplemental proposed section 851.10(b)(4). DOE notes that final rule section 851.20(b) establishes the right for a worker representative to accompany the Director during the physical inspection of the workplace. If a representative is not available, the Director must consult, as appropriate, with employees on matters of worker safety and health. During an evaluation of a noncompliance or an inspection, the Office of Price-Anderson Enforcement normally interviews individuals with direct knowledge of the workplace to gather information such as frequency of exposure, duration of exposure, and other details. The Office of Price-Anderson Enforcement expects that, through this process, the appropriate people would be consulted.

One of the commenters (Ex. 54) was also concerned that a worker's ability to request and receive copies of inspections and accident investigations in accordance with ISM and with supplemental proposed section 851.10(b)(4) may be curtailed by portions of this section. DOE disagrees and notes that final rule section 851.20(b), which mirrors the worker rights provisions of DOE Order 440.1A, clearly establishes that workers have the right to obtain results of inspections and accident investigations, as described in final rule section 851.20(b)(6).

When a contractor becomes the subject of an investigation or inspection, final rule section 851.40(d) requires the Director to inform the contractor in writing. The written notification must describe the purpose of the action and be provided at the initiation of the investigation or inspection process.

Three commenters (Exs. 28, 45, 51) requested that DOE revise supplemental proposed section 851.400(d) to require the Director to notify a contractor in writing prior to the initiation of a proceeding under the Major Fraud Act. A fourth commenter (Ex. 36) asked whether this section would change the Office of Price-Anderson Enforcement's practice in defining a "proceeding" under the Major Fraud Act. DOE has significant experience with the Major Fraud Act in connection with the implementation of part 820. Accordingly, the same procedures and requirements that DOE has already successfully applied to enforcement actions under 10 CFR part 820 will apply to enforcement actions under 10 CFR part 851.

A commenter (Ex. 47) suggested that DOE indicate in the rule that all information pertaining to the investigation or inspection that is in the

possession of DOE will be provided to the contractor at the initiation of the investigation or inspection. Although DOE generally provides such information to contractors, the Office of Price-Anderson Enforcement must retain the right not to disclose certain information if it believes the information may interfere with the willingness of individuals to step forward on a confidential basis or if sharing the information will hinder the Office's enforcement activities. Therefore, DOE is not adopting this suggestion.

Section 851.40(e) prohibits DOE from releasing to the public any information obtained during an investigation or inspection, unless the Director authorizes the public disclosure of the investigation. Once the Director authorizes public disclosure for an investigation, the information associated with the investigation is a matter of public record. Prior to and disclosure, DOE must determine that disclosure is not precluded by the Freedom of Information Act (FOIA), 5 U.S.C. 552, and Part 1004 of this title.

DOE received several comments expressing concern about the Director's discretion to authorize or withhold public disclosure of information related to an investigation. Three commenters (Exs. 26, 39, 48) wondered whether the Director's discretion overrides FOIA, Privacy Act, and judicial determinations of what otherwise might remain confidential or be required to be released. These commenters were particularly concerned about protection of classified project or proprietary information. Two of these commenters (Exs. 39, 48) expressed similar concerns about supplemental proposed section 851.400(f), which addressed requests for confidential treatment of information. DOE recognizes these concerns and confirms that the Director's actions with respect to release of documents are always subject to the constraints of law. Final rule section 851.40(e) or 851.40(f) has been revised to clarify that disclosure of information is subject to the Freedom of Information Act.

Section 851.40(f) clarifies that a request for confidential treatment of information under the Freedom of Information Act (FOIA), does not prevent disclosure of the information if the Director determines the release is in the public interest and is permitted or required by law.

During an investigation or inspection, final rule section 851.40(g) allows any contractor to submit to DOE any information that the contractor feels explains the contractor's position or is relevant to the investigation or

inspection. DOE received no comments on section 851.40(g) during the public comment period.

Section 851.40(h) permits the Director to convene, and require a contractor to attend, an enforcement conference to discuss any information related to a situation that might be a violation of a requirement in this part. Conference discussions might include, but are not limited to, the significance or causes of a violation, corrective action taken or not taken by the contractor, and mitigating or aggravating circumstances. DOE will not make a transcript and the conference is not normally open to the public.

Two commenters (Exs. 31, 48) indicated that informal conferences should never be open to the public since it would hinder open dialogue and the cooperative nature of the conference. DOE agrees that enforcement conferences should not normally be open to the public, but believes that this is a matter that is appropriately within the discretion of the Director. This provision is consistent with the Office of Price-Anderson Enforcement nuclear safety enforcement provisions and practices.

The same commenters (Exs. 31, 48) also noted that if the Director can compel contractor attendance at the informal conference, then the "official enforcement process" has begun at that point and the contractor should attend with legal counsel present. DOE has significant experience with the Major Fraud Act in connection with the implementation of part 820. Accordingly, the same procedures and requirements that DOE has already successfully applied to enforcement actions under 10 CFR part 820 will apply to enforcement actions under 10 CFR part 851. With respect to the 'conferences,'' DOE has determined that it is appropriate to retain the term "informal conference" to retain consistency with section 820.22.

Another commenter (Ex. 47) asked that contractors be allowed to request informal conferences. DOE agrees; final rule Appendix B ("General Statement of Enforcement Policy"), paragraph VII (d) clarifies that a contractor may request an enforcement conference.

Section 851.40(i) permits the Director to close the investigation or inspection if facts show that further action is unwarranted. Two commenters (Exs. 31, 48) suggested that when the Director closes an investigation due to lack of factual evidence or if evidence shows no violation, then the matter should be closed without prejudice and may not be reopened by the Director. DOE notes that the Director has the authority to

initiate or close an investigation. If facts presented or discovered during the investigation indicate that further action is unwarranted, then the Director may close the investigation without prejudice. If, after the initial investigation is closed, facts are discovered which indicate that the investigation should be reopened or reconvened, then the Director may reopen the investigation.

Section 851.40(j) allows the Director to issue enforcement letters that state DOE's expectations with respect to any aspect of the requirements of Part 851. The enforcement letter, however, may not create the basis for a legally enforceable requirement pursuant to this part. One commenter (Ex. 29) inquired whether supplemental proposed section 851.400(j) should have used the term "Enforcement Guidance Supplements" rather than "enforcement letters." DOE disagrees because the two terms are separate and distinct. Enforcement letters are issued in cases where DOE decides that an enforcement action is not required, but concludes that it is important to communicate a particular message to the contractor. An enforcement letter is a vehicle to highlight actions taken by the contractor that were appropriate and that formed the basis for not taking more formal enforcement actions. The enforcement letter will also usually identify areas (1) that may have been less satisfactory than desired but not sufficiently serious to warrant enforcement action, and (2) in which contractor attention is required to avoid a more serious condition that would require enforcement action. An enforcement letter may also highlight noteworthy contractor practices. EGSs, on the other hand are issued periodically by the Office of Price-Anderson Enforcement to provide clarifying guidance regarding the processes used in enforcement activities. EGSs provide information or recommendations only and impose no requirements or actions on DOE contractors.

Section 851.40(k) permits the Director to sign, issue, and serve subpoenas. For NNSA sites, this responsibility is assigned to the NNSA Administrator in final rule section 851.45(a). Several commenters (Exs. 28, 45, 51) argued that this provision would present an apparent conflict of interest if the investigator can become party to the judicial process by signing, issuing, and serving subpoenas. DOE disagrees with this concern and notes that the Director and NNSA Administrator have each been given subpoena authority within their statutory purview.

Section 851.41—Settlement

Section 851.41 encourages settlement of DOE enforcement proceedings and establishes a basic framework within which settlements shall proceed. This section presents the rights and duties of the Director and contractors seeking to resolve issues through a consent order.

Section 851.41(a) states that DOE encourages settlement of any enforcement proceeding, if settlement is consistent with Part 851. At any time, the Director and contractor may hold a settlement conference, which will not be recorded in a transcript or open to the public.

Section 851.41(b) allows the Director to use a consent order to resolve issues in an outstanding proceeding. The consent order must set forth the relevant facts, terms, and remedies to which the parties agree and must be signed by both parties. The order need not find or admit that a violation occurred, but shall constitute a final order.

DOE did not receive any comments specific to section 851.41(a) or 851.41(b), but did receive three comments that relate to 851.41 as a whole. One commenter (Ex. 30) was concerned that enforcement actions that require funding to abate hazards pose a "special challenge to a self regulated entity." The commenter believes that such actions should not be settled unless the settlement contains a resource-loaded plan that will ensure implementation. DOE notes that DOE field management are involved in all decision making related to enforcement actions, and settlement negotiations include appropriate cost considerations. The same commenter was joined by another (Exs. 30, 54) in suggesting that DOE should allow workers and unions to elect party status in an enforcement proceeding and to participate in settlement negotiations, as is allowed by OSHA. The second commenter (Ex. 54) also objected to the fact that the supplemental proposed rule would permit all settlement records to be kept secret and would provide no appeal right on the settlement. DOE disagrees with these commenters and does not intend to provide this opportunity. The Director is responsible for carrying out the intent of enabling legislation as delegated by the Secretary. A commenter (Ex. 45) requested that DOE define the term "settlement." After carefully reviewing this comment, DOE believes the settlement process is adequately described in final rule section 851.41 and need not be separately defined. The final rule does define the outcome of a settlement (that is, a consent order), in section 851.3.

Section 851.42—Preliminary Notice of Violation

Section 851.42 permits the Director to issue a preliminary notice of violation (PNOV) to the contractor if the Director believes that a violation of this part has occurred. The section lists the specific information that must be included in the PNOV and in the contractor's reply. The PNOV constitutes a final order with no right of appeal if the contractor fails to reply within 30 days. Once final, the PNOV must be posted.

DOE received two general comments regarding section supplemental proposed section 851.402. In the first, three commenters (Exs. 54, 55, 60) noted that the supplemental proposal contained no requirement to post notifications of violation. Two of these commenters (Exs. 54, 55) were also concerned that the section provided no right of worker or union appeals or for worker or union involvement in any way in the process. DOE agrees that it is appropriate for workers or their representatives to play a role in the process and has revised the rule to facilitate their participation. In the final rule, section 851.20(b)(5) gives worker representatives the right to accompany the Director during inspections or, if a representative is not available, requires inspectors to consult employees on matters of health and safety. Section 851.20(b)(6) gives workers the right to request and receive results of inspections and accident investigations. DOE also has included in section 851.42(e) a requirement that PNOVs be posted once they are final.

A commenter (Ex. 28) argued that a contractor should give greater weight to an OSHA decision involving an interpretation of an OSHA standard than to a DOE interpretation of the same standard. DOE notes that OSHA interpretations of OSHA standards will be considered valid unless directed by DOE General Counsel. However, DOE reserves the right to deviate from an OSHA interpretation when it applies to a unique operation at a DOE site. In such cases, DOE will issue its own interpretation for purposes of implementing the DOE worker safety and health program.

Section 851.42(a) authorizes the Director to issue a PNOV. The PNOV must include specific information under section 851.42(b), including as the facts on which the alleged violation is based, proposed remedies and civil penalties, and a statement obliging the contractor to reply in writing within 30 days. Section 851.42(c) requires that the contractor's reply cover the relevant facts, any extenuating circumstances,

and answers to questions set forth in the PNOV. Under section 851.42(d), if the contractor fails to submit a reply and all supporting documents within the allowed time, the contractor relinquishes the right to appeal the PNOV. Section 851.42(e) requires that the PNOV be prominently posted in the area where the violation occurred until the violation is corrected.

DOE did not receive comments related specifically to sections 851.42(a) through (e) during the public comment period.

Section 851.43—Final Notice of Violation

Section 851.43 requires the Director to review a contractor's timely written reply to a preliminary notice of violation (PNOV). If the Director determines that a violation occurred, this section allows the Director to issue a final notice of violation that includes specific information listed by this section. Unless the contractor petitions the Office of Hearings and Appeals, the final notice constitutes a final order. Section 841.43(a) establishes that the Director will review and make a final determination regarding a contractor's timely reply to a PNOV. If the Director determines that a violation has occurred or is continuing to occur, the Director may issue the contractor a final notice of violation as described by section 841.43(b). Specifically, the final notice must state that the contractor may petition the Office of Hearings and Appeals in accordance with 10 CFR Part 1003, subpart G.

One commenter (Ex. 47) recommended that supplemental proposed sections 851.403 and 851.404 be revised to provide for appeals to Administrative Law Judges (ALJs), following the PAAA process contained in 10 CFR 820, rather than to DOE's Office of Hearings and Appeals. DOE has not accepted this comment, because initial decisions based on an evidentiary record are prepared by the Office of Price-Anderson Enforcement. Therefore, a trial de novo (new trial) is unnecessary and the Office of Hearings and Appeals is the appropriate forum to which appeals may be referred.

Under section 841.43(c), a contractor relinquishes any right to appeal if the contractor fails to make a timely petition for review of a final notice of violation. In the absence of a petition for review the final notice becomes a final order.

Section 851.44—Administrative Appeal

Section 851.44 establishes the right of a contractor to petition the Office of Hearings and Appeals for review. Section 851.44(a) describes this right, which must be exercised within 30 calendar days of receipt of the final notice of violation. Section 851.44(b) clarifies that in order to exhaust final remedies; the contractor must make such a petition in accordance with section 851.44(a).

DOE received several general comments on the review process. Several commenters (Exs. 15, 31, 47) suggested that a third party reviewer (not DOE) should handle contractors' petitions instead of the Office of Hearings and Appeals. These commenters recommended that contractors be given an opportunity to challenge a proposed civil penalty either before an ALJ or in a U.S. District Court, as provided for in 10 CFR 820. The commenters pointed out that ALJs routinely hear OSHA cases and have a greater familiarity with OSHA requirements and case law. One of these commenters (Ex. 15) went on to suggest that DOE establish a small independent review commission as a final step in the administrative review process, as is used effectively by OSHA. A related comment (Ex. 61) inquired whether the final rule would provide a mechanism for contesting or overturning potential findings that a contractor believes to be technically inaccurate. As discussed with regards to final rule section 851.43, the Office of Price-Anderson Enforcement prepares initial decisions based on an evidentiary record. Therefore, a trial de novo (new trial) is unnecessary and the Office of Hearings and Appeals is the appropriate forum to which appeals may be referred.

Section 851.45—Direction to NNSA Contractors

Section 851.45 establishes that for NNSA contractors, it is the NNSA Administrator, rather than the Director, who issues subpoenas and notices. Section 851.45(a) gives the NNSA Administrator authority to sign, issue, and serve subpoenas, orders, disclosures, preliminary notice of violations, and final notices. The Administrator must consider the Director's recommendation.

Appendix A—Worker Safety and Health Functional Areas

This appendix establishes the mandatory requirements for implementing the applicable functional areas required by 10 CFR 851.24 of this part. These provisions from DOE Order 440.1A, "Worker Protection Management for DOE Federal and Contractor Employees," were derived through years of coordination, analysis, and review and comment procedures seeking input from top subject matter

experts throughout the Department as part of the Order development process. As a result, at the time of publication of DOE Order 440.1A, these provisions reflected the state-of-the-art in corporate safety and health program requirements and were established with the concurrence of each DOE Program Secretarial Office. Since the order was published, the Department has gained close to a decade of experience in successfully implementing these functional area provisions on DOE worksites. These sections build on the lessons learned over these years and establish appropriate functional area enhancements as deemed necessary by DOE subject matter experts in conjunction with the respective DOE internal technical advisory committees.

Several commenters (Exs. 16, 27, 28, 42, 45) expressed concern that the provisions of this Appendix would require contractors to expend additional effort and resources to submit safety and health plans above and beyond the safety and health program called for under supplemental proposed Section 851.100 or to perform an extensive review and analysis of existing programs to ensure compliance with the rule. DOE does not believe that this is the case. The fundamental requirements captured in Appendix A of the final rule reflect those of DOE Order 440.1A, which has been applicable at DOE worksites for many years. Consequently, DOE believes that contractors are already complying with these requirements and thus minimal, if any, additional effort will be needed.

One commenter (Ex. 28) sought clarification on whether plans required under the functional area sections of the rule must be submitted for DOE approval. Section 851.11 of the final rule requires contractors to submit to a written worker safety and health program that provides the methods for implementing the requirements of Subpart C (which includes the functional areas) to the appropriate Head of DOE Field Element for approval. Accordingly, a description of how the contractor will meet the requirements of Appendix A of the final rule must be included in the worker safety and health program that is submitted for DOE approval.

These sections also establish provisions for a new functional area within the comprehensive worker protection program to address biological safety. DOE believes this new functional area is warranted to address concerns that arose from the anthrax terrorist attacks of October 2001. Provisions for each of the functional areas are

discussed in further detail in the sections that follow.

1. Construction Safety

Appendix A, section 1 (formerly supplemental notice of proposed rulemaking section 851.202) establishes requirements and responsibilities that apply to the construction managers and construction contractors for planning and implementing appropriate worker safety and health measures during construction activities. For the construction section of this rule, it was necessary to provide separate definitions in final rule section 851.3 that are applicable to construction in order to circumscribe those activities to which the construction safety provisions apply and to assign responsibilities for these activities. The definition of "construction" was taken directly from OSHA's standards, which in turn has taken its definition from the Davis-Bacon Act regulating wage rates for federally funded construction projects.

The definition for "construction contractor" as provided in order to discern where in the contract hierarchy the responsibility for implementing the provisions of a construction contract lies. Depending on the contracting situation, the construction contractor may be the management and operating contractor if the work is performed directly by his forces or it may be a subcontractor to the management and operating contractor or a subcontractor to a separate construction management contractor.

Similarly, the definition of "construction manager" was provided in order to discern where in the project hierarchy the responsibility for primary oversight of the construction contractor lies. For the purpose of this rule, the construction manager could be DOE if the construction work is performed directly by the management and operating contractor or it may be the management and operating contractor if the construction work is performed by a subcontractor to the management and operating contractor. It could also be a separate firm hired by DOE or the management and operating contractor to perform construction management services.

The definitions for "construction project" and "construction worksite" were provided in order to circumscribe the activities and geographic location, respectively, to which the construction safety provisions of this rule apply.

Some commenters (Exs. 16, 27, 28, 36, 42, 45) expressed concern that the provisions of this section would require contractors to expend additional effort

and resources to submit safety and health plans above and beyond the safety and health program called for under supplemental proposed section 851.100 or to perform an extensive review and analysis of existing programs to ensure compliance with the rule. As stated previously, DOE does not believe that this is the case, because the requirements in Appendix A, section 1, of the final rule reflect those of DOE Order 440.1A.

One commenter (Ex. 54) requested that references to OSHA's Process Safety Management standards (29 CFR 1910.119 and 1926.64) be added to the construction safety requirements of the rule. DOE notes, however, that final rule section 851.23 requires contractors to comply with all standards at 29 CFR 1910 and 1926, so a separate reference is not needed in Appendix A, section 1, of the final rule.

Three commenters (Exs. 16, 28, 45) were of the opinion that the language in this section of the supplemental proposal was subjective and more suitable as contract language than as enforceable language in a rule. DOE considers the "subjectivity" of this language—now captured in Appendix A, section 1, of the final rule—to be useful in allowing for a graded approach in the implementation of the construction safety requirements. A graded approach can also be applied to the development and approval of health and safety plans by the construction manager, which was an area of concern for other commenters (Exs. 36, 42).

Other commenters (Exs. 20, 29, 37, 45, 51, 54) requested clarification on the responsibilities of various contractors at a DOE construction site. Accordingly, DOE has introduced the terms "construction contractor" and "construction manager" and specified distinct responsibilities and requirements for each type of contractor, in addition to providing definitions for these two terms in section 851.3—Definitions.

The provisions of section 1(a)(1) of Appendix A focus on the requirement for construction contractors to prepare activity hazard analyses for project activities prior to commencement of work on the affected activities. One commenter (Ex. 40) pointed to the need for construction managers to provide a list of known worksite risks (e.g., site characterization data) to the construction contractor so that they can be appropriately addressed in the construction contractor's activity hazard analysis. Section 1(a)(ii) was added to the final rule to address this concern.

Another commenter (Ex. 29) requested clarification on whether

activities that use standard personal protective equipment require a hazard analysis. DOE's intent, as stated in Appendix A section 1(a), is to require activity level hazard analysis for each definable construction activity. The need for personal protective equipment does not dictate the need to perform a hazard analysis. Rather, the hazard analysis, through the identification of workplace hazards, dictates the need for workplace controls and protective equipment.

One commenter (Ex. 48) argued that it is more appropriate to perform an ongoing hazard analysis rather than performing the hazard analysis before initiating the construction project. DOE agrees in part. As noted in Appendix A section 1(a), the hazard analysis required under section 1(a)(1) is required for "each separately definable construction activity (e.g., excavations, foundations, structural steel, roofing).' DOE's intent with this provision is that the construction manager prepares a hazard analysis prior to the start of each discrete construction activity within the project. DOE acknowledges that these activities will likely occur at different stages of the overall project and that some contractors may find it easier to prepare the related analyses as the project progresses rather than all at one time. DOE believes that this decision is best left to the discretion of the construction manager provided that the hazard analyses meet the requirements of section 1(a)(1).

Several commenters (Exs. 26, 36, 39, 42, 45, 48, 51) noted that the wording of supplemental proposed section 851.202(a)(1)(iii) implied the need for a professional engineer for a wide variety of services beyond those prescribed by OSHA's construction standards, 29 CFR 1926. DOE agrees that the language of the supplemental proposal could be misinterpreted and, as a result, this provision was edited in Appendix A section 1(a)(iii), of the final rule to reflect the requirement for professional engineering services consistent with OSHA's standards.

A number of commenters (Exs. 15, 19, 42, 45, 48, 49, 51) took issue with the wording of supplemental proposed section 851.202(a)(1)(iv) and the need to provide qualifications for competent persons. This provision was changed in Appendix A section 1(a)(iv) of the final rule to require the identification of the competent person for each work activity, consistent with OSHA requirements.

Appendix A section 1(a)(2) requires the construction contractor to ensure that workers are aware of foreseeable hazards and the protective measures

described within the activity analysis. The provision of supplemental proposed section 851.202(a)(3) that would have made a worker's use of appropriate protective measures a condition of employment was cited by four commenters (Exs. 16, 31, 36, 48) as reducing flexibility in labor/ management relations. DOE agrees with these concerns. Accordingly, this provision was revised in Appendix A section 1(a)(3), of the final rule to state that the construction contractor must require that workers acknowledge being informed of the hazards and protective measures associated with assigned work activities and to require that workers failing to use the required controls be subject to the contractor's disciplinary process. One commenter (Ex. 16) argued that the rule should include an enforcement provision that does not hold contractors responsible for willful non-compliance on the part of employees. DOE agrees with this commenter and has added a provision in final rule section 851.20(b) to prohibit workers from taking actions inconsistent with the rule. As mentioned in the section-by-section discussion for section 851.5 of the final rule, DOE will develop enforcement guidance for the rule that will include provisions similar to OSHA's unpreventable employee misconduct defense—outlined in OSHA's Field Inspection Reference Manual, Chapter III, paragraph C.8.c(1).

Appendix A section 1(b) requires the construction contractor to have a designated representative on the construction worksite during periods of active construction and that this representative is knowledgeable of project hazards and have the authority to take actions. The section further clarifies that the representative must conduct frequent and regular inspections of the worksite to identify and correct hazards.

Several commenters (Exs. 16, 31, 36, 42, 47, 48, 49) objected to the requirement for a construction contractor's designated representative to be on the construction worksite at all times. These commenters also questioned the need for daily worksite inspections by the contractor's designated representative and requested clarifications on the terms "on site at all times" and "active construction" (Exs. 20, 29, 39, 47, and 48). The need for a contractor's representative to be onsite during active construction derives from the Federal Acquisition Regulation (FAR) Parts 36.506 and 52.236-6, Superintendence by the Contractor, which state that "At all times during performance of this contract and until

the work is completed and accepted, the Contractor shall directly superintend the work or assign and have on the worksite a competent superintendent who is satisfactory to the Contracting Officer and has authority to act for the Contractor." The term "active construction" in section 1(b) of Appendix A is effectively defined by the addition of the parenthetical statement clarifying that "active construction" excludes periods of inactivity such as weekends or weather delays. With regard to the frequency of safety and health inspections, the text in section 1(b) has been changed to replace the term "daily" with "frequent and regular" in an effort to be consistent with OSHA's construction safety standard addressing this issue, 29 CFR 1926.20(b)(2).

One commenter (Ex. 49) requested that the term "onsite" in supplemental proposed section 851.202(a)(4) be replaced with "available" to accommodate for the designated representative's lunch breaks. DOE believes that, in the absence of activity on the construction worksite during a lunch break, there is no need for the presence of a designated representative. However, if construction continues during the designated representative's lunch break, the contractor must ensure that another representative is designated and present onsite.

One commenter (Ex. 16) objected to a requirement in supplemental proposed section 851.202(a)(4) for specific training for designated representatives. DOE agrees with this commenter's concern and has removed the provision from the final rule.

Other commenters (Exs. 20 and 47) requested a definition for the term "designated representative." DOE notes that, although the rule does not provide such a definition, section 1(b) provides that the designated representative must be a person who is knowledgeable of the project's hazards and has full authority to act on behalf of the construction contractor.

Appendix A section 1(c) is derived from provisions originally included in supplemental proposed section 851.202(a)(4). These provisions require that workers be instructed to report identified hazards to the contractor's designated representative and that contractors take certain steps up to and including stopping work if they cannot immediately correct the hazards.

Several commenters took issue with a variety of terms used in the original provision of the supplemental proposal. Specifically, one commenter (Ex. 27) objected to the use of the word "unforeseen" in describing hazards that workers must report. Accordingly, the word has been deleted from the rule and the text clarified to refer to hazards that have not been previously identified or evaluated. Another commenter (Ex. 48) questioned the appropriateness of the term "immediate corrective action" on the grounds that it implies permanent correction. DOE disagrees that the term is inappropriate. Appendix A section 1(c) specifically discusses the conditions for which interim control measures are appropriate (i.e., when immediate corrective action is not possible or the hazard falls outside the project scope).

On the subject of workers reporting hazards not previously identified or evaluated, one commenter (Ex. 31) responded that, because current practices involve workers reporting safety concerns to their immediate supervisors, the requirement be reworded to include reporting of hazards to either the immediate supervisor "or" the designated representative. DOE disagrees. Designated representatives, as discussed above, are persons with the authority to act on behalf of the construction contractor and, therefore, are the appropriate persons to inform of the hazards. This does not, however, preclude the contractor from establishing internal procedures to require workers to report hazards to their immediate supervisor and the designated representative.

Appendix A section 1(d) requires construction contractors to prepare a written construction project safety and health plan to implement the requirements of section 1 of the Appendix. The section stipulates that the contractor must obtain the construction manager's approval of the plan before commencing any work

covered by the plan.

There were several comments (Exs. 15, 40, 47, 48, 55) regarding the supplemental proposal's requirement in section 851.202(b) of having the monetary threshold of the Davis-Bacon Act trigger the need for a written construction safety plan. The Davis-Bacon act was used in previous DOE policy, as a means for deciding which activities were constructions. However, DOE has decided, after considering the comments that using a law governing wage rates as the determining factor for a safety regulation is inappropriate and often confusing. Hence, reference to the Davis-Bacon Act has been deleted from the final rule.

There were also numerous comments (Exs. 15, 16, 25, 28, 29, 36, 37, 42, 45, 49, 51) concerning the requirement for DOE to review and approve

construction contractors' safety and health plans. These comments focused on the fact that DOE generally does not have the personnel resources to fulfill this requirement. DOE agrees with these comments and has changed the approving authority in section 1(a)(1) to the construction manager.

2. Fire Protection

Appendix A section 2 (formerly supplemental notice of proposed rulemaking section 851.203), establishes the basic requirements for a comprehensive fire protection program.

Numerous commenters (Exs. 2, 3, 4, 5, 8, 13, 15, 29, 31, 36, 39, 42, 47, 48, 49, 61) objected to the approach taken in the supplemental proposed rule with regard to fire protection. Section 851.203 of the supplemental proposal included specific requirements for fire protection and fire department operations. DOE agrees that a more pragmatic and less prescriptive approach to the delineation of requirements for fire protection and emergency services is appropriate. Consequently, the final rule has been revised to include the text from the fire protection portion of DOE Order 440.1A, which has been in effect since 1998.

One commenter (Ex. 5) suggested that the rule prohibit the purchase or use of self-illuminating exit signs or other signs at nuclear facilities since these signs are a source of tritium and are difficult to disassociate from a nuclear event at a nuclear facility. DOE notes that the purchase or use of selfilluminating exit signs or other signs at nuclear facilities is not within the scope of the final rule. Self-illuminating exit signs or other signs are commercially available and issued under the Nuclear Regulatory Commission's general license.

Section 2(a) of Appendix A to the final rule establishes the specific requirements for the implementation of a comprehensive fire protection program to ensure workers a safe and healthful workplace. These requirements, along with the applicable NFPA standards, and DOE fire safety directives, technical standards and guidance, have historically been considered necessary for a comprehensive fire safety program. The section further clarifies that the program must include appropriate facility and site-wide fire protection, fire alarm notification and egress features, and that contractors must assure access to a fully staffed, trained, and equipped emergency response organization that is capable of responding in a timely and effective manner to site emergencies.

Two commenters (Exs. 31, 39) objected to the requirement that all contractors must implement a fire protection and response program (emphasis added). According to the commenters, other options are available, including reliance on another government agency or a public fire department. The requirement for a current Baseline Needs Assessment and the need for written pre-fire strategies, plans, and standard operating procedures, as would be provided by section 851.203(a)(7) and (a)(8) in the supplemental notice of proposed rulemaking was of concern to other commenters (Ex. 36, 39, 48). These commenters were of the view that these requirement should not apply to contractors that do not operate fire departments. DOE agrees with the commenters, and has revised the text to emphasize that contractors must have access (emphasis added) to a fully staffed, trained, and equipped emergency response organization that is capable of responding in a timely and effective manner to a spectrum of site emergencies. However, DOE expects that the decision regarding the type of emergency services capability that is credited is based, in part, on the results of a Baseline Needs Assessment.

A few commenters (Exs. 31, 42, 49, 61) requested that DOE define "qualified fire protection engineer." DOE has removed this term from the final rule.

Appendix A section 2(b), requires inclusion of appropriate fire protection criteria and procedures, analyses, hardware and systems, apparatus and equipment, and personnel in the fire protection program to ensure that the objective in Appendix A section 2(a) is met. This includes meeting the applicable building code and National Fire Protection Association (NFPA) Codes and Standards or exceeding them, when necessary, to meet safety objectives, unless explicit written relief has been granted by DOE.

Numerous commenters (Exs. 2, 4, 5, 8, 16, 19, 22, 24, 31, 37, 42, 45, 49, 53, 54, 58, 61) objected to the number of NFPA codes and standards proposed by DOE in the supplemental notice of proposed rulemaking, as many appeared to have little, or no relevance to activities at DOE sites. Similarly, another commenter (Ex. 39) asserted that some of the requirements in those codes and standards applied to the protection of structures and were not directly related to the safety and health of workers. DOE has decided that an exhaustive list of applicable NFPA standards is unnecessary and has not included a list in the final rule. With regard to the issue of facility-specific requirements within NFPA codes and standards, DOE agrees that any requirement that is not directly related to the safety and health of workers is not applicable in the context of this rule. However, these requirements may apply to DOE facilities through DOE directives, such as with DOE O 420.1, which are made applicable by contract.

A number of commenters (Exs. 2, 4, 22, 49, 54, 55, 61) objected to the inclusion of specific editions of the applicable NFPA standards, arguing that as this would result in the enforcement of obsolescent criteria. As discussed previously, DOE has decided against incorporating into the rule most of the standards included in the supplemental proposed rule.

Two commenters (Exs. 7, 29) expressed concern that adoption of NFPA Standard 1710, and the enforcement of requirements from other NFPA standards that govern fire department operations would impose significant burdens (in terms of time, staffing, paperwork, etc.) on site emergency services organizations for which there are insufficient budgets. Other commenters (Exs. 5, 37, 39, 42, 48) stated their belief that the non-fire department oriented requirements would also significantly increase costs. DOE agrees and has deleted the NFPA standards governing fire department operations from the final rule.

One commenter (Ex.1) suggested that NFPA Standard 1600, "Disaster and Emergency Management and Business Continuity Programs" be included in the rule. DOE disagrees with this recommendation because this standard is included in other DOE directives, such as DOE O 420.1, which apply, through contracts, to DOE facilities.

Several commenters (8, 15, 29, 31, 35, 36, 37, 42, 46, 49) objected to the list of NFPA and other industry standards because there was no consideration for the fact that many DOE facilities were constructed years ago under the "code(s) of record." DOE agrees with the commenter and has revised the list of standards to more closely mirror the list of standards required under DOE O 440.1A. It is DOE's intent that contractors use DOE fire safety directives which establish the concept of compliance with a "code of record."

Another commenter (Ex. 49) questioned on how NFPA standards would apply in leased locations where the contractor has no enforcement authority and does not control the fire department manpower, training and equipment. DOE has deleted the NFPA standards from the final rule.

One commenter (Ex. 13) suggested that DOE consider adding the Underwriters Laboratories (UL) listings and Factory Mutual data sheets to Appendix A section 2. This commenter did not, however, provide a rationale for this suggestion. Without a rationale DOE could make determine the need for the inclusion of such standards in the final rule, therefore, DOE has not included them in the final rule.

Another commenter (Ex. 54) requested that references to OSHA's Process Safety Management standards (29 CFR 1910.119 and 1926.64) be added to the fire safety requirements of the rule. DOE notes that final rule section 851.23 requires contractors to comply with all standards at 29 CFR 1910 and 1926. Hence, a separate reference is not needed in Appendix A section 2 of the final rule. Several commenters (Exs. 2, 4, 16, 48, 49, 59, 61) objected to the lack of explicit reference to the "equivalency" concept that has historically been used within the DOE fire safety community to rationalize alternative approaches to fire safety. DOE agrees in part and concludes that, beyond the definition of a formal exemption process to this rule, no explicit reference to "equivalencies" is necessary, as this concept is an integral part of all NFPA codes and standards and DOE fire safety directives. The recommendation made by two commenters (Exs. 36, 42) that the Authority Having Jurisdiction (AHJ) be responsible for approving fire safety code and standard equivalencies (as required by DOE Order 420.1A) instead of the DOE site manager (as would be required by the proposed rule) is acceptable to DOE.

3. Explosives Safety

Appendix A section 3 (formerly supplemental notice of proposed rulemaking section 851.204), of the final rule establishes safety provisions for DOE contractors performing work involving explosive materials. Appendix A section 3(a) establishes the primary requirement for DOE contractors to develop, implement, and maintain a comprehensive explosives safety program. These provisions this program must assure that workers, visitors, and members of the public are not exposed to significant explosives threats (blast overpressure, fragment, debris, structural collapse, heat and fire).

DOE explosives handling and processing operations are an integral part of DOE weapons and weapons-related development, manufacturing, and dismantlement activities as well as DOE security operations. Safety in all

operations associated with explosive materials is an ongoing, primary concern and must be given high priority in all program direction and management activities.

DOE received a number of comments on the explosives safety provisions included in section 851.204 of the supplemental proposed rule. A majority of these commenters (Exs. 8, 15, 20, 37, 59) stated that the rule should require contractors to comply with DOE Manual 440.1-1, DOE Explosives Safety Manual. These commenters argued that the provisions in this section of the supplemental proposal were vague and were not as comprehensive and clear as the provisions of the DOE Explosives Safety Manual. The commenters noted specific concerns regarding reference to an undefined certification program to train persons assigned to explosives operations (Exs. 37, 59); the omission of a grandfather clause to address older facilities that cannot meet newer requirements (Ex. 59); the omission of criteria related to firebreaks and fire exits (Exs. 37, 59); and the omission of critical components of the lightning protection program (Exs. 37, 59). These commenters noted that the DOE Explosives Safety Manual was specifically developed to address explosives safety in DOE operations and felt that reliance on the Manual rather than the incomplete explosives safety requirements in the supplemental proposal would provide for more effective protection of the DOE work force.

DOE agrees with these commenters and has accordingly replaced the technical provisions that were included in the supplemental proposal with the basic requirement in Appendix A section 3(b) that contractors comply with DOE Manual 440.1-1A, Explosives Safety Manual (DOE M 440.1–1A), Contractor Requirements Document (Attachment 2), January 9, 2006. As noted by the commenters, this Manual establishes safety controls and standards that are not addressed in other existing DOE or non-DOE regulations. The Manual closes the considerable safety gap created by DOE's unique activities, governs the DOE explosives safety process, and ensures that explosives safety is commensurate with actual risk.

One commenter (Ex. 39) questioned why the explosives safety provisions in the supplemental proposal specifically excepted the use of explosive material for routine construction, demolition, and tunnel blasting. Although, this specific exception has been removed from the text of the final rule, the exception, with additional clarification and rationale, is a part of the DOE

Explosive Safety Manual. Specifically, the Manual states that if blasting operations are routine in the context of construction or tunneling blasting, then the more appropriate OSHA 1910 and 1926 standards may be used. However, magazines must be sited according to the Department of Defense (DoD) Criteria in DoD 6055.9, DOD Ammunition and Explosives Safety Standards. Transportation of explosives across DOE sites must be in conformity with the Manual. DOE does not believe, however, that explosive demolition of facilities should be considered a routine use of explosives due to its unique risks. As a result, DOE intends that such operations would be governed by requirements in the DOE Technical Standard on Explosive Demolition of Structures.

Several commenters (Exs. 9, 16, 22, 59) questioned the incorporation of NFPA 495, Explosives Materials and NFPA 498, Standards for Safe Havens and Interchange Lots for Vehicles Transporting Explosives, in Subpart C of the supplemental proposal. These commenters noted that the standards are not applicable to the military style of explosives materials used in DOE and felt that their inclusion in the rule would only confuse covered contractors with conflicting and less rigorous safety policies. DOE agrees with these commenters and has removed the standards from the final rule.

Appendix A section 3(c) of the final rule clarifies that contractors must determine the applicability of the explosives safety requirements to research and development laboratory type operations consistent with the DOE level of protection criteria established in the DOE Explosives Safety Manual. This provision was added to the final rule to address one commenter's (Ex. 36) concern that the explosives safety provisions of the supplemental proposal did not accommodate laboratory activities where the forms and quantities of explosive materials did not represent a significant personnel or facility hazard.

4. Pressure Safety

Appendix A section 4 (formerly supplemental notice of proposed rulemaking section 851.205), of the final rule establishes pressure safety requirements for DOE contractors performing activities at covered workplaces. DOE received numerous comments regarding the corresponding section of the supplemental proposed rule expressing concern or requesting clarification of proposed pressure safety provisions.

DOE critically evaluated each of these comments and considered related input from the Department's Pressure Safety Committee in crafting the pressure safety section of the final rule. DOE notes that the DOE Pressure Safety Committee includes both federal and contractor experts from within the DOE complex. Based on this evaluation and an evaluation of comments on the overall supplemental proposed rule in general, DOE revised the pressure safety section of the final rule to closely follow the requirements of the Pressure System Safety section in DOE Order 440.1A. DOE Order 440.1A has governed pressure system safety within DOE for the last eight years and has been well scrutinized through an expert technical review processes.

The sections that follow provide a detailed discussion of the provisions of the pressure safety section of the final rule as well as a summary of, and DOE responses to, the specific comments received related to these provisions. One commenter (Ex. 20) expressed concern that intensive configuration management would be required to administer the requirements of the rule and research would be necessary to establish a clearly documented baseline for compliance. In response to this concern, DOE notes since the pressure safety requirements in the final rule incorporate the existing requirements in DOE Order 440.1A, DOE believes that contractors, who are already in compliance with DOE Order 440.1A, will require minimal, if any effort to implement the rule requirements.

Åppendix A section 4(a) describes what constitute pressure systems and requires contractors to establish safety policies and procedures to ensure they are designed, fabricated, tested, inspected, maintained, repaired, and operated by trained and qualified personnel in accordance with applicable and sound engineering principles.

Two commenters (Ex. 42, 49) requested a definition of pressure systems. DOE notes that the DOE Pressure Safety Committee has, in the draft Implementation Guide to DOE Order 440.1A, defined pressure systems in the following terms: "Pressure systems are comprised of all pressure vessels, and pressure sources including cryogenics, pneumatic, hydraulic, and vacuum. Vacuum systems should be considered pressure systems due to their potential for catastrophic failure due to backfill pressurization. Associated hardware (e.g. gauges, and regulators), fittings, piping, pumps, and pressure relief devices are also integral parts of the pressure system". DOE has included this definition in final rule

section 851.3 and in Appendix A section 4(a). In addition, DOE emphasizes that cryogenic and vacuum systems are included as pressure systems.

Two commenters (Ex. 29, 48) suggested that pressure retaining vessel safety requirements were best imposed through contract provisions or through specifications for new components, and that operational safety requirements were already contained in the applicable national consensus standards (OSHA regulations) incorporated in the proposed rule. The commenters specifically suggested modifying the language in proposed section 851.205(a) to require contractor safety policies and procedures to ensure that design, fabrication, testing, inspection, maintenance and operation of pressure systems is performed by "qualified personnel in accordance with applicable safety or national consensus standards."

In response, DOE notes that the corresponding Appendix A section (4)(a) follows the requirements of the Pressure System Safety section in DOE Order 440.1A, according to which contractors must establish safety policies and procedures to ensure that pressure systems are designed, fabricated, tested, inspected, maintained, repaired, and operated by trained and qualified personnel in accordance with applicable and sound engineering principles. Further DOE stresses that training of personnel using, maintaining, repairing, or constructing pressure systems is paramount. The inspection and maintenance of the systems is also essential as they decay over time and a reasoned engineering approach must be used to maintain

Appendix A section 4(b) further describes the applicable national consensus standards including professional and state and local codes, that contractors must conform to with respect to pressure system safety in DOE covered workplaces.

DOE received numerous comments (Exs. 2, 8, 16, 19, 29, 37, 45, 49) expressing concern over the inclusion of ASME codes in proposed section 851.201(c) and suggested they be eliminated or modified. In response to these concerns, DOE has revised the corresponding final rule section Appendix A section 4(b) to eliminate the proposed tables and any cited standards that lacked relevance to the pressure safety requirements of the rule.

One commenter (Ex. 16) expressed concern over the separation of requirements for compliance with ASME codes and ensuring pressure safety and suggested it gave "the

appearance of being inappropriate or unsafe for components within the scope of the ASME code." The commenter recommended presenting both requirements in a manner that clarified their relationship and scope. In response DOE notes that the corresponding final rule section has been revised to present the relevant codes within the pressure safety requirements in Appendix A section 4(b). Additionally, DOE reiterates that this new section follows the requirements of the pressure system safety section in DOE Order 440.1A. According to Appendix A section 4(b)(1) through (3) of the final rule, contractors must ensure that all pressure vessels, boilers, air receivers, and supporting piping systems conform to the applicable ASME Boilers and Pressure Vessel Safety Codes, the ANSI/ ASME B.31 Piping Code or the strictest applicable state and local codes. These provisions are consistent with the long held policy of only citing the ASME code on pressure vessels or the ANSI piping code, which are mainly manufacturing and fabrication codes.

The research and development aspects of DOE often require that some pressure vessels are built to contain very high pressure that is above the level of applicability of the ASME Pressure Safety Code. Other times, new materials or shapes are required that are beyond the applicability of the ASME Code. In these cases, addressed under Appendix A section 4(c), rational engineering provisions are set to govern the vessels construction and use and assure equivalent safety.

Appendix A section 4(c) provides guidelines for equivalent measures that contractors may implement in the event that national consensus standards are not applicable to ensure pressure system safety and meet the requirements of the final rule.

A few commenters (Ex. 29, 42, 49) sought clarification of what constituted an "independent peer review" to determine if national consensus codes and standards were applicable or not. In response to this concern, DOE has revised the language of the corresponding final rule section to eliminate use of the phrase "independent peer review." One commenter (Ex. 49) further questioned what approved measures were to be implemented in the event consensus standards were not applicable. In response, DOE has provided greater clarification in final rule Appendix A section 4(c) of the measures that are to be used. The final rule Appendix A section 4(c) provides that when national consensus codes are not applicable

(because of pressure range, vessel geometry, use of special materials, etc.), contractors must implement measures to provide equivalent protection and ensure a level of safety greater than or equal to the level of protection afforded by the ASME code. DOE notes that documented organizational peer review is acceptable for the design drawings, sketches, and calculations that must be reviewed and approved by a professional engineer.

5. Firearms Safety

Appendix A section 5 of the final rule (formerly supplemental notice of proposed rulemaking section 851.208), establishes firearms safety policies and procedures for security operations, and training to ensure proper accident prevention controls are in place. Two commenters (Exs. 27, 45) asserted that the requirements in Appendix A section 5 of the final rule appear to be a summarization of existing DOE Orders and will likely require extensive review and analysis for contractors to come into compliance with the rule requirements. Since the industrial hygiene requirements in the final rule incorporate the existing requirements in DOE Order 440.1A, DOE believes that for contractors that are already in compliance with DOE Order 440.1A, it should require minimal, if any, effort to implement the rule requirements.

Ŝome commenters (Êxs. 5, 36, 25, 42) requested clarification on whether the requirements of the rule apply to sites without armed security forces and to the occasional use of firearms for research purposes or for activities like the capture and study of wildlife. The provisions of Appendix A section 5(a) apply only to contractors engaged in DOE activities involving the use of firearms. The scope and nature of work activities involving specific types of hazards in this case, the use of firearms determines whether the requirements of a particular safety program apply to the workplace. Generally, the rule requirements do not apply to sites that do not have armed security forces. Other use of firearms at DOE facilities, such as the use of firearms for research (e.g., material testing) or for activities like the capture and study of wildlife, also could create conditions that warrant the application of Appendix A section 5(a) firearms safety provisions.

Two commenters (Exs. 42, 49) were of the opinion that rule did not correctly identify the types of contractors that must comply with the firearms safety requirements. The commenters suggested that use of the term "a contractor *engaged in DOE activities involving the use of firearms*" would be more appropriate than the phrase "a contractor responsible for a workplace" which had been used in the supplemental notice of proposed rulemaking. DOE agrees with the commenters and the language in Appendix A section 5(a) had been revised accordingly.

Written procedures must address firearms safety, engineering and administrative controls, as well as personal protective equipment requirements according to Appendix A

section 5(a)(1).

Appendix A sections 5(a)(2)(i) through (viii) establish requirements for contractors to develop specific procedures for various activities that involve the use of firearms including the storage, handling, cleaning, inventory, and maintenance of firearms, ammunition, pyrotechnics etc. Procedures must also be developed for the use of firing ranges by personnel other than DOE or DOE contractor protective forces personnel. As a minimum, procedures must be established for: (1) Storage, handling, cleaning, inventory, and maintenance of firearms and associated ammunition; (2) activities such as loading, unloading, and exchanging firearms. These procedures must address use of bullet containment devices and those techniques to be used when no bullet containment device is available; (3) use and storage of pyrotechnics, explosives, and/or explosive projectiles; (4) handling misfires, duds, and unauthorized discharges; (5) live fire training, qualification, and evaluation activities; (6) training and exercises using engagement simulation systems; (7) medical response at firearms training facilities; and (8) use of firing ranges by personnel other than DOE or DOE contractor protective forces personnel.

In order to comply with the provisions of Appendix A section 5(b), contractors must ensure that personnel responsible for the direction and operation of the firearms safety program are professionally qualified and have sufficient time and authority to implement the procedures under this section.

Appendix A section 5(c) requires that contractors must ensure that firearms instructors and armorers have been certified by the Safeguards and Security National Training Center to conduct the level of activity provided. Additionally, personnel must not be allowed to conduct activities for which they have not been certified.

Appendix A section 5(d), mandates that contractors conduct formal appraisals assessing implementation of procedures, personnel responsibilities, and duty assignments to ensure overall policy objectives and performance criteria are being met by qualified personnel.

According to the provisions of Appendix A section 5(e), contractors must implement procedures related to firearms training, live fire range safety, qualification, and evaluation activities, including procedures requiring that: (1) Personnel must successfully complete initial firearms safety training before being issued any firearms; (2) authorized armed personnel must demonstrate through documented limited scope performance tests both technical and practical knowledge of firearms handling and safety on a semiannual basis; (3) all firearms training lesson plans must incorporate safety for all aspects of firearms training task performance standards; (4) firearms safety briefings must immediately precede training, qualifications, and evaluation activities involving live fire and/or engagement simulation systems; (5) a safety analysis approved by the Head of DOE Field Element must be developed for the facilities and operation of each live fire range prior to implementation of any new training, qualification, or evaluation activity, and the results of these analyses must be incorporated into procedures, lesson plans, exercise plans, and limited scope performance tests; (6) firing range safety procedures must be conspicuously posted at all range facilities; and (7) live fire ranges, approved by the Head of DOE Field Element, must be properly sited to protect personnel on the range, as well as personnel and property not associated with the range.

Contractors must ensure that the transportation, handling, placarding, and storage of munitions conform to the applicable DOE requirements to satisfy the requirements of Appendix A section 5(f).

6. Industrial Hygiene

Appendix A section 6 of the final rule (formerly supplemental notice of proposed rulemaking section 851.209), provides the industrial hygiene program requirements. Industrial hygiene is an important component of a comprehensive worker protection program. The contents of this functional area were developed by the DOE **Industrial Hygiene Coordinating** Committee (IHCC) to identify those minimum requirements necessary to implement an effective industrial hygiene program. The minimum set of requirements that resulted from this process reflects the recommendations of industrial hygiene experts from across the DOE complex.

Two commenters (Exs. 27, 45) asserted that the requirements in supplemental proposed section 851.209 appeared to be a summarization of existing DOE Orders and would likely require extensive review and analysis for contractors to come into compliance with the rule requirements. Since the industrial hygiene requirements in the final rule incorporate the existing requirements in DOE Order 440.1A, DOE believes that for contractors that are already in compliance with DOE Order 440.1A, minimal, if any, effort will be required to implement the rule requirements.

One commenter (Ex. 37) recommended that Appendix A section 6 reference DOE's Industrial Hygiene (IH) manual and the OSHA standards in lieu of the American Conference of Governmental Industrial Hygienists' (ACGIH's) threshold limit values (TLV) manual. DOE notes that final rule section 851.23 requires contractors to comply with the standards listed in that section, which include OSHA standards as well as the ACGIH TLVs. Further, the purpose of the DOE IH manual is to serve as a guidance tool rather than as regulatory text. Therefore, DOE believes that it is neither necessary nor appropriate to reference the DOE IH manual in Appendix A section 6, in place of the standards already required by section 851.23.

The absence of any requirement for worker participation within the provisions of rule was an issue for two commenters (Exs. 54 and 55). Sections 851.20(a) and (b) of the final rule requires worker participation in work-related safety and health activities and evaluations. This section also requires worker access to various types of safety and health information, in addition to providing for other workers' rights. Therefore, there is no need for worker participation requirements to be specified separately in Appendix A section 6.

Appendix A section 6 in the final rule contains provisions for contractor implementation of a comprehensive and effective industrial hygiene program to reduce the risk of work-related disease or illness. One commenter (Ex. 16) considered the use of the term "workplace" in the supplemental proposed 851.209(a) confusing, especially for sites where DOE utilizes multiple contractors. DOE agrees with the commenter and, accordingly, this term had been deleted from the text of Appendix A section 6.

Appendix A section 6(a) requires initial or baseline surveys and periodic resurveys and/or exposure monitoring as appropriate of all work areas or

operations to identify and evaluate potential worker health risks. Several commenters (Exs. 12, 15, 16, 35, 42, and 48) contended that conducting initial and baseline surveys of all work areas or operations can be burdensome and costly, especially for areas undergoing or intended to undergo decontamination and decommission. DOE disagrees with this contention. The requirements of Appendix A section 6(a) allow contractors the flexibility to determine the appropriate level of assessment based on the complexity of the operation and the presence and level of workplace hazards. The effort for assessments should be graded according to the level of risk each hazard poses. Regarding the question of "grandfathering" existing assessments, if a baseline assessment has already been accomplished, as would be the case for contractors already in compliance with the provisions of DOE O 440.1, and the workplace hazards and activities have not changed, then a new baseline assessment of risks is not required. However, DOE agrees with the commenters that areas or operations undergoing decontamination and decommission could change on a daily basis. As a result, more frequent assessments are needed to ensure that all hazards are identified and controlled.

Appendix A section 6(b), requires coordination with planning and design personnel to anticipate and control facility and operations related health hazards as one of the elements of the industrial hygiene program that contractors must implement.

Coordination with cognizant occupational medical, environmental, health physics, and work planning professionals is another element of the industrial hygiene program that is required by Appendix A section 6(c).

According to Appendix A section 6(d), the contractor's industrial hygiene program must include policies and procedures to control risks from identified and potential occupational carcinogens. Two commenters (Exs. 16, 48) asserted that the rule fails to specify or define the identified or potential carcinogens. DOE notes that section 851.23 of the final rule mandates compliance with several safety and health standards, including OSHA standards and the ACGIH TLVs, that address occupational carcinogens. These standards identify occupational carcinogens and provide additional information in the areas of exposure levels, hazard control, and worker protection for different carcinogens. Consequently, Appendix A section 6(d) does not provide a separate

identification or definition for carcinogens.

Appendix A section 6(e) of the final rule requires that the contractors' industrial hygiene program be managed and implemented by professionally and technically qualified industrial hygienists.

7. Biological Safety

Appendix A section 7 of the final rule (formerly supplemental notice of proposed rulemaking section 851.207), provides the biological safety program requirements. In February 2001, the DOE Office of Inspector General (DOE-IG) issued a report entitled "Inspection of Department of Energy Activities Involving Biological Select Agents' (DOE/IG-0492). In this report the DOE-IG made 7 recommendations regarding the handling and use of biological agents within the Department. In response to this report the department developed, through its directives system, DOE Notice 450.7 "The Safe Handling, Transfer, and Receipt of Biological Etiologic Agents at Department of Energy Facilities". Proposed 10 CFR 851.207 reflected the requirements contained in DOE Notice 450.7.

In November 2001, the Deputy
Secretary of Energy indicated in a memo
that the Department must be a
responsible steward of biological
etiologic agents and directed
Departmental elements to have DOE
Notice 450.7, The Safe Handling,
Transfer, and Receipt of Biological
Etiologic Agents at the Department of
Energy Facilities, incorporated into
applicable contracts. DOE Notice 450.7
lays out the Department's expectations
for BioSafety at the DOE facilities.

The Department of Health and Human Services (DHHS) and the Department of Agriculture issued new regulations covering the possession, use, and transfer of select agents and toxins as interim final rules (42 CFR Part 73, 7 CFR Part 331, and 9 CFR Part 121) in December 2003. The rules were issued in response to the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 and provide updated requirements to those found in DOE Notice 450.7. The updated requirements are included in this rule to cover DOE contractors.

Appendix A section 7(a) (proposed as 851.207(a)) requires the establishment of an institutional biological safety committee (IBC) to review work with biological agents to ensure their compliance with appropriate federal and state guidelines for this type of activity.

Several commenters (Exs. 27, 28, 36, 42, 48) expressed concern that the requirements in supplemental proposed section 851.207 would expose contractors to dual regulation because they would be subject to Part 851, based on DOE directive and to DHHS and Agriculture rules. These concerns are unfounded. When 10 CFR 851 is made effective, including the Biological Safety requirements of Appendix A section 7, DOE N 450.7 will expire and will not be renewed. As stated above, today's final rule incorporates the updated requirements in the DHHS and Department of Agriculture rules.

One commenter (Ex. 28) sought clarification on whether supplemental proposed section 851.207 would be part of the worker health and safety plan that must be submitted for DOE approval. Section 851.11 of the final rule requires contractors to submit to a written worker safety and health program that provides the methods for implementing the requirements of Subpart C (which includes the functional areas, such as biological safety) to the appropriate Head of DOE Field Element for approval. A description of how the contractor will meet the requirements of Appendix A section 7 of the final rule must be included in the worker safety and health program that is submitted for DOE approval.

One commenter (Ex. 15) requested a definition for the term "biological etiological agents" which was included in supplemental proposed section 851.207 and is used throughout Appendix A section 7 of the final rule. DOE interprets the term "biological etiological agent" to mean any agent capable of causing disease in humans, plants or animals. Other commenters (Exs. 6, 15) noted that the term "biological etiological agents" includes many agents that are of little importance to workplace safety or do not pose a security risk and therefore, recommended that this term be replaced by either "Select Agents" as defined by 42 CFR 73, or "Risk Group 3 and 4 agents." DOE believes that the requirements in Appendix A section 7(a)(1) are meant to apply to not only select agents but to any agent that may cause disease. In order to comply with this intent of the rule, the site institutional biological safety committee (IBC) should review all work with biological agents and determine if appropriate controls are being put into place, although a graded approach should be used for the reviews to reflect the severity of the hazard.

Appendix A section 7(a)(1) requires the establishment of an IBC to review work with biological agents to ensure compliance with appropriate federal and state guidelines for this type of activity. Several commenters (Ex. 25, 37, 45, and 51) expressed concern that this provision could be interpreted to apply to contractors that do not possess or use biological etiological agents in the workplace. DOE intends that contractors must implement the provisions of Appendix A section 7(a)(1) wherever they are applicable. A contractor that does not perform work involving exposure to biological agents is not required to implement any provisions of Appendix A section 7. Another commenter (Ex. 15) argued that the requirements in Appendix A section 7(a)(1) would result in additional costs and increased workload for the IBC. DOE considers it good practice to review any work undertaken with biological agents. Although the IBC is required to review all work with biological agents to determine if appropriate controls are in place, DOE believes that the extent and rigor of the review will depend upon the risk and hazard associated with the agent being used. Application of this graded approach should limit any increases in the workload and associated costs. Another commenter (Ex. 29) recommended that the word "appropriate" in supplemental proposed section 851.207(a)(1) be changed to "applicable." DOE agrees, and has revised the text in Appendix A, section 7(a)(1)(i) of the final rule accordingly. Appendix A section 7(a)(1)(ii) of the final rule instructs contractors to confirm the presence of site security, safeguards, and emergency management plans and procedures, when performing work with biological etiologic agents. Two commenters (Ex. 15 and 42) found a lack of clarity in the provisions of supplemental proposed section 851.207(a)(2) and the requirement for IBC review of security plans and procedures; in their view, security matters are typically not considered to be an area of IBC expertise. DOE disagrees, believing the provisions in Appendix A section 7(a)(1)(ii) of the final rule appropriately reflect the importance of maintaining security measures with respect to bioagents. The DHHS and Department of Agricultures rules (42 CFR 73.11 and 73.12), establish requirements for Security and Emergency Response plans to be developed and implemented for select agents. DOE believes there must be a determination of how much review and oversight is needed for all types of biological etiological agents and that the IBC can provide the sites security organization with the expertise to

address these issues. The IBC should note in its review of proposals if security has been properly addressed. However, the policy for security at a DOE facility should be addressed by the security department.

Appendix A section 7(a)(2) requires maintenance of an inventory and status of biological etiologic agents. This information must be submitted to the DOE field and area office as part of an annual report describing the status and inventory of biological etiologic agents and the program. One commenter (Ex. 42) requested definition of the terms "status" and "readily retrievable inventory" and sought clarification on what DOE expectations were for the contents of the annual status report. DOE agrees that the term "readily retrievable" was unclear and has removed the term from the text of Appendix A section 7(a)(2) in the final rule. DOE interprets "status" as including information that will determine whether the biological etiologic agents are on site, dead or live, frozen or in active storage as well as information on the person(s) responsible. This information is necessary to keep DOE informed on the biological etiologic agent activities being undertaken on the Departments sites.

Appendix A section 7(a)(3) requires the submission of each Laboratory Registration/Select Agent Program registration application package to the head of the appropriate DOE field element. One commenter (Ex. 15) was concerned that this provision may affect every revision to the registration, including those involving staff transfers of materials. DOE's intent is for the provision to apply to the initial registration submittal because this will allow DOE to become aware of all bioagent activity. However, staff transfers of materials need not be reported to DOE as long as the Department of Health and Human Services and the Department of Agriculture rules and requirements are met. Other commenters (Exs. 15, 42) asked for the withdrawal of supplemental proposed section 851.207(c). DOE disagrees with this request. As reported by DOE-IG (DOE/ IG-0492), DOE may not have knowledge of the presence of biological agents on a site. Appendix A section 7(a)(4) was included to ensure that DOE is aware of all biological agent activity occurring at DOE sites, as well as any information submitted to the Center for Disease Control and Prevention (CDC) regarding how and where biological agents will be used.

Appendix A section 7(a)(4) of the final rule contains provisions for

submission to the appropriate Head of DOE Field Element a copy of each CDC Form EA–101, Transfer of Select Agents, upon initial submission of the Form EA–101 to a vendor or other supplier requesting or ordering a biological select agent for transfer, receipt, and handling in the registered facility. The completed copy of the Form EA–101, documenting final disposition and/or destruction of the select agent must also be submitted to the appropriate Head of DOE Field Element within 10 days of completion of the Form EA–101.

Appendix A section 7(a)(5) of the final rule requires the IBC to confirm that the site safeguards and security plans and emergency management programs address biological etiologic agents, especially biological select agents. One commenter asserted that the implementation of requirements in supplemental proposed section 851.207(e) would result in high costs to the contractors. As stated above, DHHS and the Department of Agriculture have established requirements for Security and Emergency Response plans through 42 CFR Part 73.11 and 73.12. These rules are enforced by DHHS and the Department of Agriculture, not DOE. Therefore, Appendix A section 7(a)(5) is included to require the contractor to confirm that all site safeguards and security plans and emergency management programs that address biological etiologic agents are in place.

According to the requirements in Appendix A section 7(a)(6), the IBC must establish an immunization policy for personnel working with biological etiologic agents based on the evaluation of risk and benefit of immunization. The CDC has established guidelines for immunizations and these guidelines should be consulted in the establishment of an immunization policy.

8. Occupational Medicine

Appendix A section 8 of the final rule (formerly supplemental notice of proposed rulemaking section 851.210), establishes the requirements for occupational medicine services. Appendix A section 8(a) requires contractors to provide comprehensive occupational medicine services to workers employed at a covered work place. One commenter (Ex. 33) expressed concern that supplemental proposed section 210 included many additional requirements for the preparation and implementation of occupational medical programs beyond those in the initial proposed rule. The commenter also believed that supplemental proposed section 851.210 expanded requirements for site

occupational medical directors (SOMD) in other areas of occupational medicine regardless of the nature or size of DOE activities. DOE has considered the comment but believes that the additions are necessary. The practice of occupational medicine is constantly evolving and medical advances which must be incorporated into site occupational medicine services to ensure the health of workers in maintained and/or improved, and that DOE maintains its medical programs consistent with occupational medicine practice standards and guidelines.

Another commenter (Ex. 48) asserted that the occupational medical services specified in supplemental proposed section 851.210 would result in substantial cost for non-management and operating contractors. DOE does not agree with the commenter's assertion a requirement that all levels of contractors provide comprehensive occupational medicine services will create a negative health and safety situation for DOE, including opening DOE up to increased medical liability. In DOE's experience, small contractors and subcontractors are capable of providing more that a minimal OSHA-level required protection and health care. Therefore, the final rule retains the occupational medicine service provisions.

Two commenters (Exs. 16, 28) believed that program-type documents to supplement the worker safety and health program were not necessary. The commenters recommended that this requirement be deleted, or integrated with the overall worker safety and health program. DOE does not agree with the commenter and believes that the documents should be a part of the overall worker safety and health program.

Another commenter (Ex. 48) questioned if a contractor operating a limited occupational medicine program, such as a first aid station appropriate for construction, is required to adopt all of the elements in supplemental proposed section 851.210, assuming that the contractor desires to continue providing these services after the effective date of the rule. DOE contends that operating a first aid station is but one element of a comprehensive occupational medicine program (OMP). DOE intends for this rule to apply to all covered contractors,

including construction contractors.
One commenter (Ex. 16) felt that the use of the term "workplace" in supplemental proposed section 851.210(a) could easily result in unintended confusion and extensive debate for sites where DOE utilizes multiple contractors. DOE agrees with the commenter and has modified the

provision in Appendix A section 8(a) of the final rule.

One commenter (Ex. 42) believed that supplemental proposed rule section 851.210(a) was unclear in what was considered to be a "comprehensive" occupational medical program or services, and requested that DOE provide elements of the OMP in the rule. DOE does not agree with the commenter and notes that the rules' implementation guide is the appropriate place to provide elements of the occupational medicine program.

Three commenters (Exs. 28, 45, 51) recommended removing: "At sites with operations performed by more than one contractor, several contractors may agree to use services provided under a single contractor's OMP," from supplemental proposed section 851.210(a) because they felt that this language was specific to multi-employer DOE sites and need not be included in the rule. DOE agrees, and has deleted this sentence from the final rule. However, contractors at multi-employer sites may choose to follow this approach to comply with the medical services requirement.

Åppendix A section 8(a)(1) of the final rule establishes that the occupational medicine services must provide services for workers who work on a DOE site for more than 30 days in a 12-month period and for workers who are enrolled for any length of time in a medical or exposure monitoring program required by this rule and/or any other applicable Federal, State or local regulation, or other obligation as specified in Appendix A section 8(a)(2) of the final rule.

Appendix A section 8(b) of the final rule establishes that occupational medicine services must be under the direction of a graduate of a school of medicine or osteopathy who is licensed for the practice of medicine in the state in which the site is located.

Appendix A section 8(c) of the final rule requires that occupational medicine physicians, occupational health nurses, physician's assistants, nurse practitioners, psychologists, employee assistance counselors, and other occupational health personnel providing occupational medicine services must be licensed, registered, or certified as required by Federal or State law where employed.

Appendix A section 8(d) of the final rule states that contractors must provide the occupational medicine providers with access to hazard information by promoting its communication, coordination, and sharing among operating and environment, safety, and health protection organizations. One

commenter (Ex. 54) recommended adding workers and their representatives to supplemental proposed section 851.210(d) which requires contractors to promote communication and coordination between all environmental, safety, and health groups. DOE agrees that worker participation is a critical component of a successful safety and health program. This section imposes requirements only on contractors to provide necessary information to occupational medicine providers

Appendix A section 8(d)(1) of the final rule requires contractors to provide occupational medicine providers with access to information about site and employee hazards and exposures and any changes in them. Specifically, Appendix A section 8(d)(1)(i) of the final rule requires current information about actual or potential work-related site hazards (chemical, radiological, physical, biological, or ergonomic); section 8(d)(1)(ii) requires employee jobtask and hazard analysis information, including essential job functions; section 8(d)(1)(iii) requires actual or potential work-site exposures of each employee; and section 8(d)(1)(iv) specifies information on personnel actions resulting in a change of job functions, hazards or exposures to be provided to the occupational medicine providers.

One commenter (Ex. 48) expressed concern about supplemental proposed section 851.210(d)(3) because it would require the SOMD to be engaged in determining the need for surveillance in each individual's case. The commenter stated that in some cases, such as union construction work, the collective bargaining agreement may not permit medical screening of workers for fitness. DOE understands the commenter's concern and has omitted the language, "prior to medical placement or surveillance evaluations" from final rule Appendix A section 8(d)(1)(iii).

One commenter (Ex. 48) expressed concern that supplemental proposed section 851.210(d)(i) included ergonomic assessments. The commenter asked what would such a requirement involve (i.e., what guidelines and applicable standards would be used; what constitutes an adequate ergonomic evaluation; what are the required credentials for an evaluator; and what constitutes a violation). DOE notes that a detailed explanation of ergonomics and the information requested by the comment is not appropriate for a rule, but will be discussed in the implementation guide to the rule.

One commenter (Ex. 49) recommended that DOE change

supplemental proposed section 851.210(d)(1) to read: "Current available information about actual or potential work-related site hazards (chemical, physical, biological, or ergonomic);" supplemental proposed section 851.210(d)(2) to read: "Employee jobtask and hazard analysis information, including essential job functions, as requested by the SOMD;" and supplemental proposed section 851.210(d)(3) to read: "Actual or potential work-site exposures of each employee prior to medical placement or surveillance evaluations, as requested by the SOMD." DOE elected not to add the suggested qualifiers. Limiting the requirement only to "available" information or only that information "requested by the site occupational medicine provider" would significantly constrain the collection and dissemination of critical data.

Several commenters (Exs. 16, 36, 42, 49) believed that supplemental proposed section 851.210(d)(4) which would require the SOMD to be notified of employee job transfers should only be required if the transferred employee would be exposed to new or different hazards. DOE believes that the occupational medicine provider should know where to locate the employee for health related follow-ups, and how to contact an employee in the case of an

emergency.

Appendix A section 8(d)(2) of the final rule requires contractors to notify the occupational medicine providers when an employee has been absent because of an injury or illness for more than 5 consecutive workdays (or an equivalent time period for those individuals on an alternative work schedule). One commenter (Ex. 48) stated that the proposed rule section 851.210(d)(5) would place a significant burden on the SOMD in cases of off-thejob illness, and did not specify if the injury or illness must be work-related or not.

Appendix A section 8(d)(3) requires contractors must provide the occupational medicine provider information on, and the opportunity to participate in, worker safety and health team meetings and committees. One commenter (Ex. 25) expressed concern that the proposed rule section 851.210(d)(6) required SOMDs to be offered the opportunity to participate in worker safety and health team meetings and committees, yet worker safety and health teams or committees were not mentioned anywhere else in the supplemental proposed rule.

Appendix A section 8(d)(4) requires that contractors provide occupational medicine providers with access to the

workplace for evaluation of job conditions and issues relating to workers' health.

Appendix A section 8(e) stipulates that a designated occupational medicine provider must: (1) Plan and implement the occupation medicine services; and (2) Participate in worker protection teams to build and maintain necessary partnerships among workers, their representatives, managers, and safety and health protection specialists in establishing and maintaining a safe and healthful workplace.

One commenter (Ex. 16) recommended that DOE delete the proposed rule section 851.210(e)(2) that required a formal written plan detailing methods and procedures implementing the OMP on the basis that such a requirement would place an unnecessary burden on the SOMD since many contractor OMPs currently require a series of medical program procedures, rather than a higher level program document. The commenter further stated that Subpart B already required an overall written worker safety and health program that must provide for effective implementation of the worker safety and health requirements of Subpart C. DOE notes the commenters concerns and has revised the rule

accordingly.

Appendix A section 8(f) requires that a record, containing any medical, health history, exposure history, and demographic data collected for the occupational medicine purposes, must be developed and maintained for each employee for whom medical services are provided. Furthermore, the rule stipulates that all occupational medical records must be maintained in accordance with Executive Order 13335, Incentives for the Use of Health Information Technology. Several commenters (Exs. 5, 15, 25, 29, 39, 42, 48) expressed concern over the proposed rule provision 851.210(f) that required all records containing any medical, clinical, health history, exposure history, and demographic data collected under OMP be kept in electronic format, beginning January 2007. Most of these commenters cited significant costs as the basis for their concern. Another commenter (Ex. 49) believed that the proposed rule provision required all medical records collected under OMP be kept in electronic format, beginning January 2007, should be clarified to apply only for medical records generated on or after January 1, 2007. DOE has modified the final rule to be consistent with Executive Order 13335 which requires that medical records be available electronically by 2015.

Appendix A section 8(f)(1) requires that employee medical, psychological, and employee assistance program (EAP) records must be kept confidential, protected from unauthorized access, and stored under conditions that ensure their long-term preservation. Furthermore, the rule specifies that psychological records must be maintained separately from medical records and in the custody the designated psychologist. This provision is consistent with 10 CFR 712.38(b)(2) which applies to the DOE Human Reliability Program. Appendix A section 8(f)(2) establishes that access to these records must be provided in accordance with DOE regulations implementing the Privacy Act and the Energy Employees Occupational Illness Compensation Program Act.

One commenter (Ex. 62) requested that the proposed rule provision 851.210(f)(1) prohibits the SOMD and their staff from providing employers or their lawyers with personal medical information without the employee's consent. DOE notes that all medical information is subject to the Privacy Act of 1974 and the Health Insurance Portability and Accountability Act and is not released without signed consent of the affected worker or other legal

authorization.

Appendix A section 8(g) specifies that the occupational medicine services provider must determine the content of the worker health evaluations. These evaluations must be conducted under the direction of a licensed physician, in accordance with current sound and acceptable medical practices, and in accordance with all pertinent statutory and regulatory requirements, such as the Americans with Disabilities Act. One commenter (Ex. 48) suggested that DOE eliminate supplemental proposed rule section 851.210(f)(2) because the rule extended the occupational medical program into the domain of disability evaluations under the Americans with Disabilities Act (ADA). DOE disagrees and has retained the provision in the final rule since occupational medicine service providers are required to conduct post offer/pre-placement physical and mental examinations in accordance with the ADA.

Several commenters (Exs. 16, 25, 47, 49) took exception to the requirement in proposed rule section 851.210(f)(3) for the SOMD to maintain an up-to-date list of all medical evaluations and tests that are offered and to submit this list annually through the Cognizant Field Element to the Office of Environment, Safety and Health. These commenters suggested eliminating this requirement. One commenter (Ex. 16) suggested the

process would be more efficient if the list of medical evaluations was included in the information in the overall Worker Safety and Health Program. DOE agrees with the commenters and has eliminated the requirement from the final rule.

Appendix A section 8(g)(1) requires that workers must be informed of the purpose and nature of the medical evaluations and tests offered by the occupational medicine provider. Specifically, Appendix A section 8(g)(1)(i) requires that the purpose, nature and results of evaluations and tests must be clearly communicated verbally and in writing to each worker that is being provided with testing and that the communication must be documented in the worker's medical record as specified in Appendix A section 8(g)(1)(ii).

Two commenters (Exs. 15, 47) proposed elimination of the provision in proposed rule section 851.210(f)(5) that required medical test and result related communication be documented in the medical chart with signatures of both the occupational health examiner and worker. These commenters pointed out that supplemental proposed rule section 851.210(f)(4) required communication of the purpose and nature of the tests and suggested this, along with inclusion of language such as "and individual results discussed with the employee," could be sufficient to meet the requirement of proposed rule section 851.210(f)(5). One of the commenters (Ex. 15) asserted that the requirement was "far in excess of the community standard for the practice of medicine for routine medical tests."

Conversely, in order to further strengthen the requirement in proposed rule section 851.210(f)(5) and prevent post-examination changes to employee medical records without the employee's consent, one commenter (Ex. 62) favored adding the language, "modifications to an employee's medical chart cannot be made without the concurrence and signature of the employee." DOE believes that the site occupational medicine records are created and maintained, updated, and reviewed in accordance with accepted medical practice. DOE regulations and medical professionals have explicit guidelines on how to modify records so that changes are tracked. Additionally, DOE notes that employees may officially request a copy of their record. After reviewing the record, if the employee wishes to provide a dated, signed, written statement about an element within the record, they may do so. The attachment from the employee will remain with the record in accordance

with DOE records management regulations.

Appendix A section 8(g)(2) requires certain health evaluations to be conducted when deemed necessary by the occupational medicine provider for the purpose of providing initial and continuing assessment of an employee's fitness for duty. One commenter (Ex. 62) believed that the rule should explicitly bar the SOMD from "prescribing tests, including behavioral science exams, for purposes of carrying out retaliation against employees who were engaged in protected activities, such as reporting waste, fraud, abuse or unlawful or unsafe activities, unless the un-coerced consent of the employee was secured in writing." DOE believes that occupational medicine providers are very sensitive to informed consent which causes them to explain and ask workers to sign consent for evaluations and examinations. DOE further notes that workers have the right and option to decline any portion of an examination, or all medical evaluations or examinations. However, refusing mandatory examinations may result in difficulties placing the worker appropriately in a job.

Appendix A section 8(g)(2)(i) requires that at the time of employment entrance or transfer to a job with new functions and hazards, a medical placement evaluation of the individual's general health and physical and psychological capacity to perform work be conducted to establish a baseline record of physical condition and assure fitness for duty. One commenter (Ex. 54) sought clarification of the criteria for "emotional capacity" as referred to in supplemental proposed rule section 851.210(f). The commenter expressed concern that this requirement would be interpreted to mean that the determination of emotional capacity was left entirely to the SOMD with no apparent limitations or requirements. In response to this concern, DOE has replaced the term "emotional capacity" with "psychological capacity" in the final rule. DOE further notes that the final rule makes allowance for the involvement of licensed, registered or certified psychologists in the occupational medicine service process. Thus DOE believes that such professionals have the requisite training and knowledge to apply clinically established criteria in the determination of an individual's psychological capacity.

One commenter (Ex. 47) suggested the term "medical placement examination" in supplemental proposed rule section 851.210(f)(6)(i) be replaced with the term "medical placement evaluation."

DOE has modified the language in final rule Appendix A section 8(g)(2)(i) to include the term "evaluation" in place of "examination."

Two commenters (Exs. 39, 49) sought clarification of the term "job transfer." One commenter (Ex. 49) suggested defining the term as "involving new or different hazards," while the other commenter (Ex. 39) inquired whether both new and existing employee movement between jobs was covered under the provision. DOE notes that final rule Appendix A section 8(g)(2)(i) clarifies "job transfers" as transfers to jobs with new functions and hazards. Additionally, DOE notes that job transfers for the purposes of reporting to the site occupational medicine department, remains the same regardless of whether the employee is new or existing and means any change in job tasks, titles, exposures, and/or job description.

Appendix A section 8(g)(2)(ii) specifies that periodic, hazard-based medical monitoring or qualification-based fitness for duty evaluations as required by regulations and standards, or as recommended by the occupational medicine services provider, will be provided at the required frequency. DOE did not receive comments on this proposed provision during the public comment period.

Appendix A section 8(g)(2)(iii) specifies use of diagnostic examinations to evaluate employee's injuries and illnesses in order to determine workrelatedness, the applicability of medical restrictions, and referral for definitive care, as appropriate. One commenter (Ex. 47) favored either eliminating the phrase "degree of disability" or substituting the phrase with "apply medical restrictions as appropriate.' DOE has eliminated the phrase "degree of disability" in the corresponding final rule Appendix A section 8(g)(iii). Additionally DOE notes that the medical restriction provision has been greatly modified in the final rule section Appendix A section 8(h).

Another commenter (Ex. 25) expressed concern that supplemental proposed rule section 851.210(f)(6)(iii), would pose a challenge for the SOMD to win the trust of workers in the determination of the work-relatedness of disease and degree of disability, given that the occupational medicine physician worked for the contractor (or multiple contractors). Additionally the commenter expressed the opinion that determination of work-relatedness would increase the potential for worker compensation claims and associated liability, which "contractors would rather avoid regardless of the merits of

the claim." DOE believes that a basic tenet of occupational medicine is to assist workers and management in the determination of the work-relatedness of illness and injury. Hence trained and certified occupational health providers are expected to retain professional impartiality and decide claims on the basis of their merits. Furthermore to minimize the potential for any subjectivity in medical determinations, DOE has eliminated use of the phrase "degree of disability" in the final rule Appendix A section 8(g)(iii).

Appendix A section 8(g)(2)(iv) specifies that after a work-related injury or illness or an absence due to any injury or illness lasting 5 or more consecutive workdays (or an equivalent time period for those individuals on an alternative work schedule), a return to work evaluation will determine the individual's physical and psychological capacity to perform work and return to duty. One commenter (Ex. 54) suggested that supplemental proposed rule section 851.210(f)(6)(iv) clarify that contract language took precedence over SOMD determinations. The commenter proposed including a requirement for a third party medical review (at the expense of the contractor) in the event of a disagreement between the SOMD and a worker's own physician. DOE believes that the occupational medicine provider's recommendation does not supplant contractual requirements regarding return to work (RTW). The occupational service provider is responsible for advising management on the medically appropriate reinstatement of a worker following an injury or illness based on input from the worker's personal physician and other sources.

One commenter (Ex. 15) expressed concern that the requirement for return to work evaluations infringed individual privacy rights with respect to vacation absence and would result in additional costs to the contractor. The commenter proposed that for non-work related illness (such as surgery), it was more appropriate and cost effective to have the worker's personal surgeon make the determination regarding fitness for return to duty. Another commenter (Ex. 48) favored elimination of return to work evaluations after absences due to illnesses or injury for 5 or more days. DOE notes that the occupational medical providers use the written recommendations regarding restrictions that are provided by private physicians. However, occupational medicine providers must conduct return-to-work fitness-for-duty evaluations and make determinations about whether the employee can safely return to their assigned job tasks in the interest of

protecting the worker, co-workers, and the company.

Many commenters (Exs. 16, 25, 36, 42) sought additional clarification on whether return to work health evaluations were merely for absences due to injuries or illnesses, or some other unique situation (e.g., return from active military duty) that were deemed appropriate by the SOMD, and not for return to work from vacations or other non-medically related absences. DOE believes that the corresponding final rule Appendix A section 8(g)(2)(iv) adequately clarifies that return to work evaluations are necessary only when an employee has been absent for illness or

injury for 5 or more days.

Appendix A section 8(g)(2)(v) provides that at the time of separation from employment, individuals shall be offered a general health evaluation to establish a record of physical condition. DOE received many comments with respect to the need for termination exams. One commenter (Ex. 49) suggested that termination exams under supplemental proposed rule section 851.210(f)(6)(v) only be required for "employees enrolled in HAZWOPER or laser surveillance programs at the time of separation." DOE disagrees and believes it is imperative that termination exams and evaluations be conducted on all workers in order to minimize the liability impact of work-related injury and illness claims. Another commenter (Ex. 25) sought clarification of why a termination exam was required. DOE notes that termination examinations are not fitness-for-duty; rather they are examinations to document the health status and known exposures of the employees when they leave employment at DOE.

Several commenters (Ex. 16, 36, 42) noted that contractors did not have the ability to require a terminating individual to participate in the evaluations required by supplemental proposed rule section 851.210(f)(6)(v), which specifies that a health evaluation is required for individuals at the time of separation from employment. These commenters suggested that the rule be modified to require contractors to only offer a medical evaluation at termination. DOE agrees with the commenters suggestion and has modified the language in final rule Appendix A section 8(g)(2)(v) to only require contractors to offer individuals, at the time of separation from employment, a general health evaluation to establish a record of physical condition.

Appendix A section 8(h) requires the occupational medicine provider to monitor ill and injured workers to

facilitate their rehabilitation and safe return to work and to minimize lost time and its associated costs. Two commenters (Exs. 30, 62) expressed concern that the requirement in supplemental proposed rule section 851.210(g)(2), for the occupational medicine program to "monitor ill and injured workers to facilitate their rehabilitation and safe return to work and to minimize lost time and its associated costs," encourages the SOMD to return workers to the job before they are well. The commenters asserted that this placed the SOMD in the posture of serving two masters: the patient's health and well being, and the economic interests of the contractor. As previously discussed in this section, occupational medicine providers are bound by medical and legal obligations to put the patient's interest first and make recommendations to the contractor about fitness-for-duty and/or return-towork status without breaching confidence of a non-occupational diagnosis or condition without the patient's permission. For example, the occupational medicine provider can state that the worker has a condition for which restrictions are recommended, and state specifically what those restrictions are. Restrictions are based on the best interest of the physical and mental health and well-being of the patient/worker and on the safety and well-being of co-workers. When a contractor has no work for which that individual is qualified at that time, then the patient/worker must abide by the contractor's employment policies and benefits that are available.

Appendix A section 8(h)(1) the occupational medicine provider to place an individual under medical restrictions when health evaluations indicate the worker should not perform certain job tasks. Furthermore, the occupational medicine provider must notify the worker and contractor management when employee work restrictions are

imposed or removed.

Two commenters (Exs. 30, 54) noted that supplemental proposed rule section 851.210(g) requires the SOMD to place an individual under medical restrictions when health evaluations indicate that the worker should not perform certain job tasks. However, the commenters pointed out that the proposed rule has no requirement for medical removal protection (i.e., no loss of pay if transferred to a job which pays less or inability to work due to a work related problem as is the case with OSHA's Lead standard). The commenters suggested that such a provision for medical removal protection should be included in the rule, whether required

by an OSHA regulation or not. DOE believes that medical removal protection is an inappropriate remedy in this instance. The primary purpose of medical removal protection is to reduce or eliminate the potential for exposure to toxic materials in workers who display evidence of overexposure to that material. Workers under medical restriction may be protected by the Americans with Disability Act, Workers' Compensation Programs, or other means.

Appendix A section 8(i) stipulates that occupational medicine provider's physicians and medical staff must, on a timely basis, communicate results of health evaluations to management and to safety and health protection specialists in order to facilitate the mitigation of worksite hazards. Three commenters (Exs. 47, 54, 55) sought clarification of the requirement in proposed rule section 851.210(g)(3) for the "communication of results of health trend evaluations to management and site worker health protection professionals." One of the commenters (Ex. 47) suggested that only "identified" health trends should be included under this provision, while other commenters (Exs. 54, 55) suggested the inclusion of worker health and safety committees and worker representatives as recipients for the health evaluation trend data. DOE has eliminated the term "trend" and only requires "communication of results of health evaluations to management and health protection specialists" in the corresponding final rule Appendix A section 8(i). DOE further notes that worker safety and health committees and worker representatives can obtain trend data on illness and injury and trend data on safety from the Office of Environment, Safety and Health's offices of Epidemiology and Health Surveillance, Performance and Assessment, respectively.

Appendix A section 8(j) specifies that the occupational medicine provider must include measures to identify and manage the principal preventable causes of premature morbidity and mortality affecting worker health and productivity. In particular, Appendix A section 8(j)(1) requires the occupational medicine provider to include programs to prevent and manage these causes of morbidity when evaluations demonstrate their cost effectiveness. Additionally, Appendix A section 8(j)(2) requires contractors to make available to the occupational medicine provider appropriate access to information from health, disability, and other insurance plans (de-identified as necessary) in order to facilitate this process.

Appendix A section 8(k) establishes that the occupational medicine services provider must review and approve the medical and behavioral aspects of employee counseling and health promotional programs. One commenter (Ex. 48) favored eliminating the requirement in proposed rule section 851.210(h) and replacing it with the language, "Occupational medical services and medical surveillance must be provided to employees as required by applicable OSHA regulations." DOE believes that limiting the services to only what is required by OSHA regulations places undue constraints on the occupation medicine program. The services listed constitute many of the elements of a comprehensive occupation medicine program.

Appendix A section $8(\breve{k})(1)$ specifies that contractor-sponsored or contractorsupported EAPs must be reviewed and approved by the occupational medicine services provider. One commenter (Ex. 5) suggested that DOE should offer alternatives for the SOMD review, such as review by the medical director of the EAP programs, because many companies use corporate sponsored programs that are not reviewed by the SOMD. DOE believes that the occupational medicine provider must review and approve all services offered to employees because the occupational medicine provider has overall responsibility for ensuring that employees are offered appropriate and comprehensive services.

Appendix A section 8(k)(2) specifies that contractor-sponsored or contractor-supported alcohol and other substance abuse rehabilitation programs must be reviewed and approved by the occupational medicine services provider.

Appendix A section 8(k)(3) specifies that contractor-sponsored or contractor-supported wellness programs must be reviewed and approved by the occupational medicine services provider. DOE did not receive comments on this proposed provision during the public comment period.

Additionally, Appendix A section 8(k)(4) of the final rule specifies that the occupational medicine services provider must review the medical aspects of immunization programs, blood-borne pathogens programs, and bio-hazardous waste programs to evaluate their conformance to applicable guidelines. One commenter (Ex. 16) recommended that proposed rule section 851.210(h)(4) be modified to include the language, "The SOMD must review the medical aspects of * * * programs to evaluate their conformance to applicable guidelines, as determined appropriate

by the SOMD." DOE believes that such guidelines put forth by OSHA and CDC qualify as common industry knowledge and that qualified (licensed/registered/certified) occupational medicine providers as required in Appendix A section(c) are aware of such guidelines.

Appendix A section 8(k)(5) requires that the occupational medicine services provider must develop and periodically review medical emergency response procedures included in site emergency and disaster preparedness plans. This provision further stipulates that medical emergency responses must be integrated with nearby community emergency and disaster plans.

Two commenters (Exs. 5, 16) expressed concerns with respect to emergency and disaster preparedness plans and how they integrate within the occupational medicine requirements under proposed rule section 851.210(i)(1). One commenter (Ex. 16) suggested the language be modified to require "the SOMD to review and approve the medical portion of the site emergency and disaster preparedness plans and procedures." Another commenter (Ex. 5) suggested that contrary to the requirements of proposed rule sections 851.210(i)(1) and (2), in small communities, the SOMD may review the site emergency and disaster preparedness plans, but the development, and integration of such plans with community plans is done by the management and operating emergency management or occupational health staff, not by the local physician.

With reference to supplemental proposed sections 851.210(i)(1) and (2), one commenter (Ex. 5) raised the issue that previous DOE guidance on community plan integration specifically referenced mass casualties. However as written, the proposed rule did not include any requirement for mass casualty planning. DOE notes that the DOE order on emergency preparedness addresses mass casualties. Additionally occupational medicine programs are required to be integrated into the Emergency Plans at sites.

9. Motor Vehicle Safety

Appendix A section 9 of the final rule (formerly supplemental notice of proposed rulemaking section 851.206), provides the motor vehicle safety program requirements. This section adopts the motor vehicle safety provisions in DOE Order 440.1A. These provisions allow continued contractor flexibility in determining the most efficient methods for achieving compliance and targeting local accident and injury trends based on local driving and operating conditions. The motor

vehicle safety requirements of this section apply to operation of industrial equipment powered by an electric motor or an internal combustion engine, including, fork trucks, tractors, and platform lift trucks and similar equipment. Appendix A section 9(a) of the final rule requires contractors to implement a motor vehicle safety program to protect the safety and health of all drivers and passengers in Government-owned or -leased motor vehicles and powered industrial equipment (i.e., fork trucks, tractors, platform lift trucks, and other similar specialized equipment powered by an electric motor or an internal combustion engine).

Two commenters (Exs. 27, 45) asserted that the proposed requirements which are in Appendix A section 9 of the final rule, appear to be a summarization of existing DOE Orders and would likely require extensive review and analysis for contractors to come into compliance with the rule requirements. Since motor vehicle requirements in the final rule are the same as the requirements in DOE Order 440.1A, DOE believes that contractors are already in compliance with DOE Order 440.1A should require minimal, if any effort to implement the rule requirements.

Another commenter (Ex. 48) argued that the requirements in Appendix A section 9 should be deleted because motor vehicle safety is adequately covered by OSHA regulation and state laws, including the requirements for training and qualification of powered industrial trucks. DOE disagrees with the commenter and has retained the provisions for motor vehicle safety.

Another commenter (Ex. 40) contended that the requirement that each contractor implement a motor vehicle safety program would be problematic in cases where many contractors share the same space and traffic patterns. DOE notes, each contractor should coordinate with the other contractors to ensure that there are clear roles, responsibilities and procedures that will ensure the safety and health of workers at multicontractor workplaces.

Appendix A section 9(b) mandates that the contractor must tailor the motor vehicle safety program to the individual DOE site or facility, based on an analysis of the needs of that particular site or facility. Appendix A sections 9(c)(1) through (8), specify the different elements that must be addressed by the contractor's motor vehicle safety program. Specifically, these elements include: (1) Vehicle licensing; (2) use of seat belts and other safety devices; (3)

training for vehicle operators; (4) vehicle maintenance and inspection; (5) traffic control and signage; (6) speed limits and other traffic rules; (7) public awareness programs to promote safe driving; (8) and enforcement provisions.

Two commenters (Ex. 39, 40) criticized the corresponding provisions of the supplemental proposed rule, specifically sections 851.206(c)(1) through (3) on the ground that they duplicate the training, testing and licensing requirements of local and state government agencies that regulate motor vehicles. DOE disagrees with the commenters and has retained the requirements in the final rule.

Ševeral commenters (Exs. 16, 29, 36, 48) objected to the use of the word "incentive" in supplemental proposed rule section 851.206(c)(7), which stated that awareness campaigns and incentive programs to encourage safe driving must be part of the motor vehicle safety program. Their rationale was that the word incentive implies monetary reward, and it would be inappropriate to include this type of requirement in a regulation that subjects contractors to civil penalty for violations. DOE disagrees and notes that contractors have been subject to the enforcement (through contract mechanisms) of this exact requirement through the provisions of DOE Order 440.1A for close to ten years. DOE is unaware of any difficulties associated with either compliance with or enforcement of this provision. DOE's intent with the use of the term "incentives programs" as clarified in Appendix A section 9(c)(7) of the final rule is to refer to any program developed by the contractor to encourage safe driving among its workforce. This provision provides contractors the latitude to determine the types of incentives programs they feel are appropriate and effective. The provision does not limit the contractor to or restrict them from the use of monetary incentives.

Another set of commenters (Exs. 20, 36, 39) expressed several concerns about the supplemental proposal, included in section 851.206(c)(8) to require enforcement provisions to the motor vehicle safety program. The applicability of the enforcement provisions to DOE sites with multiple on-site entities was of concern to one commenter (Ex. 39). A second commenter (Ex. 20) questioned how the enforcement provisions would be implemented (i.e., whether the DOE police, a Federal magistrate, or the contractor's staff would be authorized to enforce the program provisions). A third commenter (Ex. 36) contended that the enforcement provisions in the proposed

section would infringe on the employeeemployer relationship and go beyond commercial and regulatory practice. Again, DOE notes that the motor vehicle provisions of this final rule are taken directly from DOE Order 440.1A and have been applicable to contractor operations for almost ten years. DOE expects that contractors will use their existing motor vehicle safety enforcement provisions developed in response to DOE Order 440.1A to comply with the enforcement provisions required under Appendix A section 9(c)(8) of the final rule.

10. Electrical Safety

Three commenters (Ex. 17, 18, 53) recommended that DOE add a new rule section related to electrical safety and worker protection from electrical hazards. One of these commenters (Ex. 53) recommended that the proposed Electrical Safety section include NFPA 70E (Standard for Electrical Safety in the Workplace). Another (Ex. 29) questioned if DOE plans to publish an electrical safety implementation guide. The commenter believed that this would be helpful for understanding what DOE considers an "acceptable approach" for "development of an integrated set of hazard controls." In response to these comments, DOE added Appendix A section 10 to the final rule, which requires contractors to implement a comprehensive electrical safety program that is appropriate for the activities at their site. This program must meet the applicable electrical safety codes and standards referenced in section 851.23 of the rule. As requested, the section 851.23 includes NFPA 70 and 70E among the mandatory electrical safety codes and standards. DOE notes its intent to publish appropriate guidance documents to assist contractors in their compliance efforts.

11. Nanotechnology Safety—Reserved

The Department has chosen to reserve this section since policy and procedures for nanotechnology safety are currently being developed. Once these policies and procedures have been approved, the rule will be amended to include them through a rulemaking consistent with the Administrative Procedure Act.

12. Workplace Violence Prevention— Reserved

The Department has chosen to reserve this section since the policy and procedures for workplace violence prevention are currently being developed. Once these policies and procedures have been approved, the rule will be amended to include them through a rulemaking consistent with the Administrative Procedures Act.

Appendix B—General Statement of Enforcement Policy

As a guidance document for enforcing this rule, the Department has issued a general statement of enforcement policy as Appendix B. The policy sets forth the general framework which DOE will follow to ensure compliance with the regulations and to issue enforcement actions and exercise civil penalty authority. The policy is not binding and does not create any legally enforceable requirements pursuant to this part. It only provides guidance as to how DOE generally expects to seek compliance with the proposed regulations and to deal with any violations of the proposed regulations. One commenter (Ex. 47) pointed out that the supplemental proposal made references to reasonable quality assurance measures and also suggested that contractor activities before the effective date of the rule should not be enforceable. DOE notes that the statute does not allow a contactor to be penalized under both sections (234A and 234C) of the law for the same violation. Also, the statute does not provide for grandfathering activities of the contractor before the effective date of the rule. Therefore, contractors must be in compliance on the effective date of the rule.

Several commenters (Exs. 13, 29, 43, 58) suggested that terms and definitions be expanded or clarified in this section of the final rule. DOE feels that most of these terms are commonly understood and need not be defined in the rule. The rule incorporates commonly used and understood terms from both the nuclear safety enforcement program and worker safety and health programs in both DOE and the private sector. DOE clarifies in final rule section 851.3(b) that terms undefined in this part that are defined in the Atomic Energy Act of 1954 must have the same meaning as under that Act. DOE agrees that all of the different terms used to refer to violations and noncompliances in the supplemental proposal should be deleted.

Three commenters (Exs. 28, 45, 51) supported the position that Appendix B should be deleted from the rule and issued as separate guidance. DOE disagrees. The rule establishes the worker safety and health requirements for contractors. If contractors fully comply with requirements of this rule, then there will be no enforcement actions taken against contractors. If, however, a contractor does not comply, it is necessary to delineate enforcement policies, as is done in Appendix B, so that contractors can understand the

enforcement process. Appendix B establishes that necessary framework for the worker safety and health enforcement program.

The policy is intended to achieve the dual purposes of promoting proactive behavior on the part of DOE contractors to improve worker safety and health performance and deterring contractors from violating the proposed regulations. The policy will encourage DOE contractors to self-identify, report and correct worker safety and health noncompliances and will provide adjustment factors to escalate or mitigate civil penalties on the basis of the nature of the violation and the behavior of the contractor. Several commenters (Exs. 5, 11, 16, 28, 29, 31, 35, 36, 37, 43, 45, 47, 49, 51) took issue with the treatment of DOE Voluntary Protection Program (DOE VPP) sites in that special provisions were not made for their exemplary worker safety and health programs, such as exemption from programmed inspections and special mitigating factors during enforcement. DOE disagrees and believes that the performance of DOE VPP sites under this rule will validate the strength of their programs and that they will stand out as examples of excellent worker safety and health programs within DOE. DOE VPP sites will be subject to all of the provisions of this rule. In fact, DOE VPP sites should have the best worker safety and health programs and be in compliance with the worker safety and health requirements of this rule. DOE would not expect that these sites would need to report many Noncompliance Tracking System (NTS)-reportable violations. The Office of Price-Anderson Enforcement, however, will respond as necessary to significant violations if and when they do occur and develop appropriate programmed inspection strategies.

One commenter (Ex. 39) took exception with the statement that contractors will almost always discover noncompliances before DOE. The commenter noted that DOE representatives are often co-located onsite with contractors and could identify violations before the contractor. DOE disagrees and maintains that contractors are in the best position to identify noncompliances. Since contractors are required to identify and evaluate hazards in the workplace, and have managers, supervisors and employees operating in the workplace on a routine basis, they should be the first to identify noncompliances. Contractors should not rely on DOE to identify noncompliances. If DOE finds noncompliances rather than the contractor, then this may indicate a

weakness in the contractor's worker safety and health program. One commenter (Ex. 29) was concerned since DOE facility representatives are integrated into site operations and participate in collaborative assessments. This commenter argued that, as a result, DOE may learn of violations at the same time or before the contractor. The commenter felt that DOE discovery in such cases should not be held against the contractor when determining mitigation. As noted in the final rule, Appendix B section IX(b)(9)(a)(1) refers to violations identified by a DOE independent assessment or other formal program efforts.

Another commenter (Ex. 21) questioned use of the term awareness in Appendix B section IX(2)(f), and argued that awareness would be difficult to prove on a large worksite, with multiple contractors and informal resolution of noncompliances on the spot, without documentation. Generally, contractors should be aware of the hazards in their covered workplace. Only in rare cases, would DOE accept that the contractor was unaware of hazards. DOE will consider the contactor's self-assessment program and the extent of management involvement in making such determinations.

Several commenters (Exs. 15, 29, 31) took exception to applying enforcement provisions of the rule to subcontractors and suppliers, citing privity of contract, additional management burden, financial implications, and other disincentives for working with DOE. Contract privity is not an issue because DOE, through the Atomic Energy Act, has statutory authority to regulate health and safety matters of workers on the DOE sites covered under this rule. In fact, since DOE indemnifies subcontractors and suppliers against a nuclear incident under the statute, it does not receive further privity in any event. DOE will exercise this authority through this final rule and need not have a direct contractual relationship with subcontractors. This will not alleviate contractors of their responsibility to flow contractual requirements down to their subcontractors. The statute mandates indemnification and the statutory requirements apply without respect to any particular contract. Contractors remain contractually responsible for the activities of their subcontractors. DOE also plans to issue an enforcement guidance supplement (EGS) similar to the Occupational Safety and Health Administration (OSHA)'s multiemployer worksite policy, which explains how enforcement will be viewed with respect to multiple

contractors at a particular covered workplace.

Appendix B incorporates the basic outlines of DOE's well-established nuclear safety enforcement program in 10 CFR Part 820. One commenter (Ex. 37) is concerned that DOE will not consider effective OSHA enforcement policies and procedures, such as their letters of interpretation, rulings of law, approach to multi-employer sites and the General Duty Clause. The Office of Price-Anderson Enforcement has maintained copies of all enforcement letters, enforcement actions, program review reports and other data related to nuclear safety enforcement on its web site, which is available to participants in the Price-Anderson Amendments Act (PAAA) program. Over the past 10 years the program has been administered as required by the Price-Anderson Amendments Act. Legal precedents contained therein will be relevant. In a similar manner, on the effective date of this rule, DOE will begin to post all relevant enforcement letters, enforcement actions, program review reports, and other data related to worker safety and health. Interpretations to the OSHA standards issued by OSHA will be considered valid unless directed otherwise by DOE General Counsel. In addition to relying on DOE's proven nuclear safety enforcement principles and operating procedures, the Office of Price-Anderson Enforcement will incorporate relevant OSHA enforcement procedures into an Office of Price-Anderson Enforcement Worker Safety and Health Enforcement Manual.

Another commenter (Ex. 59) proposed that a DOE-approved worker safety and health program constitute an accepted interpretation of the rule. DOE holds that it does not represent an interpretation of the rule. As established in the final rule, a binding interpretive ruling can only be issued through the formal process outlined in section 851.7. In addition, an approved program demonstrates an acceptable approach toward implementing the requirements of the rule.

The policy provides guidance on how enforcement conferences will be conducted, how enforcement actions will be conducted and when enforcement letters will be issued. One commenter (Ex. 31) suggested that specific criteria be established for issuing or not issuing enforcement letters and that enforcement letters should not be issued when a contractor has taken appropriate abatement action. DOE believes that such detailed criteria would unduly restrict the flexibility needed in the enforcement program. With respect to the Director's exercising

discretion when a contractor self-reports a violation, another commenter (Ex. 47) recommended changing "may" to "shall." DOE disagrees in that by definition, discretion cannot be exercised without restraint by DOE if DOE is constrained to act in only one way.

The enforcement policy uses several enforcement terms and includes mitigation factors similar to those in 10 CFR part 820. The severity levels and adjustment factors in the policy incorporate concepts OSHA uses in its enforcement program including whether a violation is serious, other-thanserious, willful, repeat, or *de minimis*.

Specifically, the policy as clarified in Appendix B section VI of the final rule provides guidance on the treatment of violations based on severity levels. Section VI(b)(1) establishes that a severity level I violation is a serious violation, which would involve the potential that death or serious physical harm could result from a condition in a workplace, or from one or more practices, means, methods, operations, or processes used in connection with a workplace. A severity level I violation is subject to a base civil penalty of up to 100% of the maximum base civil penalty or \$70,000.

Section VI(b)(2) establishes that a severity level II violation is an other-than-serious violation, which would involve a potential that the most serious injury or illness that might result from a hazardous condition cannot reasonably be predicted to cause death or serious physical harm to exposed employees, but does have a direct relationship to their safety and health. A severity level II violation is subject to a base civil penalty up to 50% of the maximum base civil penalty or \$35,000.

Under section VI(b)(3) a *de minimis* violation is defined as a violation that has no direct or immediate relationship to safety or health and thus, will not be the subject of formal enforcement action through the issuance of a Notice of Violation.

Several commenters took issue with DOE's description of violation severity in the corresponding sections of the supplemental proposed rule. For instance, four commenters (Exs. 15, 29, 38, 57) favored using OSHA's definition for severity level I since probability in this rule was not precisely defined. DOE disagrees. The probability language in the definition of severity level II (i.e., "a hazardous condition that cannot reasonably be predicted to cause death or serious physical harm") clearly encompasses hazards that present only a remote possibility of death or serious physical harm, thus, such hazards

would be considered severity level II. As a result, the supplemental proposal language is retained in the final rule.

One commenter (Ex. 15) insisted that DOE apply the maximum civil penalty only to cases of willfulness, death, serious injury, patterns of systemic violations, flagrant violations or repeated poor performance and apply the OSHA penalty structure to violations classified as serious, otherthan-serious, and de minimis. DOE disagrees, the penalty structure was established by Public Law. The Director may use discretion to reach final penalty amounts. Appendix B section IX(b)(3) addresses the adjustment factors that the Director will consider when arriving at a penalty amount.

Two commenters (Exs. 45, 51) also suggested adding definitions to supplemental proposed section 851.3 for "severity levels I and II." DOE disagrees, however, since the terms are adequately defined in this appendix. Two other commenters (Exs. 38, 57) requested that DOE more clearly delineate between severity level II and de minimis violations in the rule arguing that under the severity classifications in the supplemental proposed rule, a single improperly placed ladder could be consider a severity level II hazard subject to a \$35,000 penalty. DOE disagrees that a change is needed. The commenters are correct that an improperly positioned ladder could be considered a severity level II hazard if the condition had a direct relationship to employee safety and health but could not reasonably be predicted to cause death or serious physical harm. If, on the other hand, the specific condition had no direct or immediate relationship to safety or health, the hazard would be considered de minimis. DOE also points out here that, under certain circumstances, an improperly positioned or secured ladder could easily present a significant fall hazard which could be considered a severity level I hazard. Since the probability that an injury or illness will occur has a bearing on the proposed penalty, the definitions of severity level I, II, or *de minimis* violations take likelihood or probability into account. In determining the severity level of a violation, the Office of Price-Anderson Enforcement will consider the circumstances affecting each condition—employee exposure, frequency of exposure, proximity to the hazard, level of worker experience, etc.

With respect to fire protection, one commenter (Ex. 61) stated that due to legacy issues there will be numerous *de minimis* violations of National Fire Protection Association (NFPA)

standards. The commenters questioned whether DOE intends for contractors to document and correct these de minimis violations and also stated that most of the code deviations would address property protection rather than worker protection. In response, DOE notes that the list of NFPA standards in the final rule corresponds to those already listed in DOE Order 440.1A and are significantly reduced from that included in the supplemental proposal. Since these NFPA standards have been in place for many years under the DOE Order, DOE does not expect that there will be numerous violations. In addition, DOE believes that deviations from the NFPA standards that would qualify as de minimis violations would likely be addressed through the equivalency process built into the NFPA standards.

In addition to the clear definitions for severity levels I and II and de minimis violations described in Appendix B section VI of the final rule, the supplemental proposed rule Appendix A sections VI(d) through (g) described certain other factors that would be taken into account in determining the severity of a violation. Several commenters took issue with the consideration of these other factors arguing that the factors had no relationship to the actual severity of the hazard. For instance, two commenters (Exs. 29, 36) suggested that severity levels be defined based on the extent of potential harm that could result from the violation (as discussed in supplemental proposed Appendix A sections VI(b) and (c)), not on the culpability of the contractor (as discussed in supplemental proposed Appendix A sections VI(d) and (e)). DOE agrees and has made appropriate changes in the final rule. Culpability will be considered in the assessment of adjustment factors when determining an appropriate level of penalty. Accordingly, this paragraph is now included as an adjustment factor under Appendix B section IX(b)(3)(e) of the final rule.

Two other commenters (Exs. 29, 36) pointed out that, as defined in the supplemental proposal, a severity level II violation could be increased to severity level I if a contractor failed to report a violation. These commenters argued that this potential increase in severity level would make NTS reporting mandatory. DOE agrees. Accordingly, this provision of the supplemental proposal has been moved to Appendix B section IX(b)(3)(g) in the final rule and is no longer included as a factor in determining severity. As in the nuclear safety enforcement program, self-reporting is included as an

adjustment factor in determining appropriate penalty amounts.

Two commenter (Exs. 36, 47) took issues with Appendix A section VI(g) which provided special considerations for facility-related legacy hazards in determining severity levels. One commenter (Ex. 47) stated that this section of the supplemental proposed rule did not address personnel-related legacy issues such as asbestosis cases, hearing loss due to chronic noise exposures, etc. The other commenter (Ex. 36) wondered whether facilityrelated and legacy hazards would be considered in determining the severity of the hazard or would be considered as a mitigating factor when determining penalty amounts. DOE has considered both of these comments as well as other comments received related to legacy hazards and believes that flexibility for legacy hazards is best addressed through worker safety and health program requirements rather than through adjustments to the severity level of a violation. Accordingly, DOE has removed this paragraph from Appendix B section VI of the final rule. Under the final rule, facility-closure issues must be addressed under the contractor's safety and health program (final rule section 851.21(b)). DOE's intent is that this provision address facility-closure issues impacting worker safety and health.

Appendix B section IX of the final rule clarifies that DOE may invoke the provisions for reducing contract fees in cases: (1) Involving especially egregious violations; (2) that indicate a general failure to perform under the contract with respect to worker safety and health; or (3) where the DOE line management believes a violation requires swift enforcement and corrective action. Where DOE uses environmental closure-type contracts, some of short duration and/or where fee payments are scheduled only after significant accomplishment of work, DOE would initially pursue the use of the fee reduction provision. Such violations would call into question a contractor's commitment and ability to achieve the fundamental obligation of providing safe and healthy workplaces for workers because of factors such as willfulness, repeated violations, death, serious injury, patterns of violations, flagrant DOE-identified violations, repeated poor performance in areas of concern, or serious breakdown in management controls. Because such violations indicate a general failure to perform under the contract with respect to worker safety and health where both remedies are available and DOE elects to use a reduction in fee, DOE would expect to reduce fees substantially

under the Conditional Payment of Fee clause.

Regarding the factor of ability of DOE contractors to pay civil penalties, the policy provides in Appendix B section IX(b)(2) that it is not DOE's intention that the economic impact of a civil penalty would put a DOE contractor out of business. Several commenters (Exs. 29, 42, 47) contend that since DOE controls funding, some accommodation would be appropriate in circumstances where the violation existed because funding was not provided. They go on to state that contactors should not be liable if they have notified the contracting officer or COR that funds are needed to correct legacy hazards and infrastructure issues (Exs. 42, 47). The Director will consider all relevant factors in determining an appropriate enforcement method. However, the rule makes no provision for violations that have existed and have not been abated for lack of funding. It is the responsibility of contractors to be in compliance on the effective date of this

The policy also provides that when a contractor asserts that it cannot pay the proposed penalty, DOE would evaluate the relationship of affiliated entities to the contractor such as parent corporations. One commenter (Ex. 39) stated that such an approach is "in direct contravention of state laws that establish C-corporations, S-corporations and limited liability companies (LLCs), as well as other legal entities." DOE appreciates these concerns. Nevertheless, to ensure that responsible parties such as an affiliate are held responsible for the safety and health of workers, and to maintain consistency with the duties and responsibilities set forth in 10 CFR part 820, DOE has determined that it is necessary to continue to reference affiliated entities.

Based on the adjustment factors relating to a noncompliance as described in Appendix B section IX(b)(3), DOE could mitigate a civil penalty from the statutory maximum of \$70,000 per violation per day. Mitigation factors used to reduce a civil penalty include whether a DOE contractor promptly identified and reported a violation and took effective corrective actions. Factors used to increase penalties (but not over the statutory maximum of \$70,000) would include whether a violation is repeated or involves willfulness, death, serious physical harm, patterns of systemic violations, flagrant DOE-identified violations, repeated poor performance in an area of concern, or serious breakdowns in management controls.

One commenter (Ex. 13) suggested that the adjustment/mitigating factors should include percentages as in 10 CFR part 820. In response, DOE notes that in addition to establishing civil penalty percentages based on the severity of the violation, 10 CFR part 820 establishes adjustment factor percentages for two mitigating factors: (1) Reduction of up to 50% of civil penalty for selfidentification and -reporting and (2) increases or decreases of up to 50% of civil penalty for failure to take corrective action or for implementation of prompt corrective action, respectively. DOE has included similar percentage adjustments based on severity of hazards and based on selfidentification and -reporting in both the supplemental proposal and in the final rule at Appendix B section IX(b)(4). DOE has not included a specific adjustment percentage based on the promptness of corrective action for two reasons: (1) DOE already ties corrective action into the adjustment factor for self-identification and -reporting in section IX(b)(4) which states, "No consideration will be given to a reduction in penalty * * * if the immediate actions necessary to restore compliance with the worker safety and health requirements are not taken;" and (2) DOE is limited under section 234 C of the AEA to imposing a maximum civil penalty of \$70,000 per violation, per day. In other words, DOE is prohibited under the statute from applying a 50% increase to the base civil penalty of \$70,000.

Several commenters (Exs. 31, 37, 45, 51) suggested mitigating penalties based on a contractor's good faith, timely corrective action, and general inspection history, and providing a comprehensive list of positive mitigating factors in Appendix B. DOE discusses adjustment factors (including positive mitigating factors) in Appendix B, section IX(b)(3) of the final rule. This discussion touches upon many of the items listed by the commenters, however, DOE disagrees that a specific list of positive mitigating factors should be included in the rule. DOE believes that such a list would be limiting and could actually stifle contractor innovation in implementing their safety and health program. Mitigating factors, in different combinations, in different circumstances, may affect the penalty amount in different ways. Simply stated, DOE's intent in applying positive mitigating factors is to recognize proactive contractor safety and health measures when considering appropriate enforcement actions. The same commenter went on to support

enforcement immunity for contractors who self-identify violations. Contractors are responsible for providing a workplace free from recognized hazards, not just identifying hazards. Hazard identification is fundamental to the worker safety and health program. Contractors are also responsible for evaluating hazards, implementing interim protective measures and abating noncompliances. If contractors were granted immunity for identifying hazards, then inappropriate or inadequate contractor actions that normally follow hazard identification would not be citable by the Office of Price-Anderson Enforcement. The procedure retained in the final rule is consistent with enforcement actions in Appendix A of 10 CFR part 820.

Two commenters (Exs. 29, 36) argued that the rule should provide for personal errors and employee willful misconduct beyond the control of the contractor, including a responsibility for employees to comply (similar to section 5(b) of the Occupational Safety and Health Act) and should mirror the "unpreventable employee misconduct" defense recognized by OSHA. DOE agrees and added section 851.12(b) to the final rule to prohibit workers from taking actions inconsistent with the rule. DOE will develop enforcement guidance for the rule that will include provisions similar to OSHA's unpreventable employee misconduct defense outlined in OSHA's Field Inspection Reference Manual. Another commenter (Ex. 29) stated that an isolated case of a willful violation by an employee may be outside the control of the contractor should be eliminated from enforcement discretion, and should not be considered as grounds for classifying the violation as a "willful" violation. DOE agrees and intends for the policy regarding willful violations to address a willful violation on the part of contractor management.

As noted previously, when both remedies are available, DOE may consider a reduction in contract fees if a violation is especially egregious or indicates a general failure to perform under the contract with respect to worker safety and health. One commenter (Ex. 29) inquired as to whether mitigating factors would be applied to contract penalties as they might be applied to civil penalties. In response, DOE notes that except where a violation is considered a continuing violation, and each day is considered a separate day for the purposes of computing the penalty, the maximum contract penalty for each violation will not exceed \$70,000. DOE further notes that adjustment factors also apply to contract penalties. Section IX.2(e)

indicates that DOE will evaluate the relationship between a contractor and affiliated entities in determining whether a contractor is able to pay a proposed penalty. DOE will generally consider the scope and magnitude of the contract and associated fees and/or profit, among other factors. It is not the intent of DOE to put a contractor out of business by assessing large penalties. In rare circumstances, when the nature of a contractor's violations and conduct are especially egregious, then contract termination may be more appropriate. In determining whether to refer a violation to the appropriate DOE official responsible for administering reductions in fee pursuant to the Conditional Payment of Fee clause, the Director will generally focus on the factors stated above, such as willfulness, repeated violations, death, serious injury patterns of systemic violations, flagrant DOE-identified violations, repeated poor performance in an area of concern, or serious breakdown in management controls. In cases where DOE may elect between civil penalties and a contract penalty, these kinds of factors may also lead DOE to consider a reduction in fee if they raise doubts about a contractor's overall performance or ability to perform its contract with proper regard for worker safety and health.

One commenter (Ex. 25) favored a penalty structure more in line with OSHA's penalty structure. In establishing the base civil penalties for the types of violations in this policy, DOE set the starting base amounts at levels higher than the average OSHA penalty for several reasons. DOE's activities are conducted by large, experienced management and operating contractors and their subcontractors. Through the contractual relationships that DOE has with these entities, DOE is in constant dialogue concerning the management and operation of DOE's sites and the performance of its governmental missions. DOE has the authority to require these contractors to develop their own worker safety and health programs for DOE approval. Moreover, DOE may unilaterally direct contractors to include various provisions in their programs. Thus, the Director is in a position to enforce against these programs and can provide incentives for proactive compliance. The policy strongly encourages selfidentification of violations, selfreporting, tracking systems, and corrective action programs. Moreover, DOE also has the authority and flexibility to coordinate and choose either a civil penalty or fee reduction remedy based on the enforcement policy and the fee reduction contract clause. The proposed enforcement structure of this rule fits the DOE complex better than would a generic system as found in OSHA's enforcement programs.

Finally, as a tool for implementing the enforcement policy, Appendix B section IX(b)(5) clarifies that DOE intends to provide a computerized database system to allow contractors to voluntarily report worker safety and health noncompliances. DOE will enhance its NTS, currently used for reporting of noncompliances of the DOE nuclear safety requirements, to permit its use for reporting noncompliances with this rule. DOE will develop appropriate reporting thresholds unique to worker safety and health to assure that the system will focus on issues with the greatest potential consequences for worker safety and health.

Numerous commenters believed that contractor reporting into NTS is the most important issue to resolve, and that details about reporting thresholds, recording noncompliances, integration of reporting with existing DOE reporting requirements, among other issues, will have a bearing on contractor operations and their cost of doing business. All commenters (Exs. 5, 9, 15, 25, 28, 29, 30, 31, 35, 38, 39, 42, 45, 47, 49, 51, 57) stated that doing so places contractors in a position of making "an admission against interest," that DOE should provide immunity for self-reported violations, and that reporting would have a negative economic impact. DOE disagrees and views contractor reporting of noncompliances as responsible and in the best interest of the contractor, since up to 50 percent mitigation of the base penalty may be granted for selfreporting. While contractors should track all their noncompliances locally, only a subset would be reported into NTS based on reasonable reporting thresholds that will be established in a future enforcement guidance supplement (EGS). DOE anticipates that the NTS reporting thresholds will be established such that only severity level I and certain severity level II

noncompliances will be reported. The EGS will also provide guidance on the reporting of noncompliances involving repeat, willful, programmatic, etc. issues.

The NTS reporting scheme is similar to that already in use for nuclear safety enforcement. One commenter (Ex. 29 queried as to whether contractors would eventually move toward trending deficiencies and programmatic deficiencies. Enforcement of the requirements of this rule will be conducted from the Office of Price-Anderson Enforcement. DOE notes that a well-developed contractor worker safety and health program should involve trending and include an evaluation to determine whether identified noncompliances are of a programmatic nature. This type of evaluation would impact the contractor's response to identified noncompliances.

Several commenters (Exs. 10, 13, 16, 29, 31, 37, 42, 49) took issue with reporting noncompliances into NTS and argued that this reporting would result in increased operating and management costs since these represent new requirements. These commenters argued that DOE should coordinate NTS with the Occurrence Reporting and Processing System (ORPS) to eliminate duplication of reporting. One of the commenters (Ex. 37) recommended eliminating contractor reporting altogether and suggested that DOE should require local DOE reporting of violations that result in actual endangerment to contractor employees. DOE disagrees with the commenter and believes that contractors are in the best position to identify noncompliances in their covered workplaces, not local DOE officials. In addition, local DOE representatives are not part of the enforcement program. Contractors operating under the requirements of DOE Order 440.1A are responsible for identifying, analyzing and abating noncompliances and reporting certain noncompliances to ORPS and Computerized Accident/Incident

Reporting System (CAIRS). While future enforcement guidance supplements (EGSs) may identify what reportable information may be common to various reporting systems, it is generally left to the contractor to develop efficiencies in its own operating environment. DOE will continue to look at economies of scale between its different reporting systems. Final rule section 851.26 now requires reporting in accordance with DOE Manual 231.1-1A, Environment, Safety and Health Reporting Manual (DOE M 231.1-1A), May 9, 2005. Section 851.20(a) establishes requirements for worker involvement in the safety and health program and 851.20(b) establishes worker rights to access certain information, including limited access to OSHA Form 300 and 301 information. Another commenter (Ex. 29) questioned what was meant in supplemental proposed Appendix A section IX(b)(5)(c) by requiring that DOE have "access" to the contractor's tracking system. DOE's intent with this statement is that if requested, contractors would provide DOE information/data on noncompliances tracked locally.

With respect to contractors relying on direction given by DOE, and this reliance contributing to a violation, one commenter (Ex. 47) stated that supplemental proposed Appendix A section IX(b)(8) should indicate that DOE "shall" (instead of "may") refrain from issuing a notice of violation, or "shall" (instead of "may") mitigate, either partially or entirely, any proposed civil penalty when DOE has a contributing role according to provisions in the rule. DOE disagrees. The word may, instead of shall, gives the Director the discretion that is needed. Whether or not a notice of violation is issued depends on the nature of the direction given by DOE to the contractor, not simply that direction was given by DOE, and the extent to which a contractor relies on the direction from DOE.

LIST OF COMMENTERS

Exhibit No.	Company/organization
1	Robert Burger, CEM. Richard Lewis. Beverly Brookshire. Robert P. Sierzputoowski. Waste Isolation Pilot Plant.
8	Jane Lataille. Honeywell Federal Manufacturing & Technologies. Glenn Bell.

LIST OF COMMENTERS—Continued

Exhibit No.	Company/organization
12	Geoffrey Gorsuch.
13	CH2M Hill Corporation.
14	Peter Washburn.
15	University of California—Los Alamos National Laboratory; Lawrence Berkeley National Laboratory; Lawrence Livermore National Laboratory.
16	Westinghouse Savannah River Company.
17	R&D Electrical Safety Meeting and Workshop Attendees.
18	R&D Electrical Safety Meeting and Workshop-Group #2.
19	Duke Cogema Stone & Webster, LLC.
20	BWXT Pantex.
21	S & V Wallace.
22	National Fire Protection Association (NFPA).
23	Gai Oglesbee.
24	International Code Council.
25	Princeton Plasma Physics laboratory.
26	Sandia National Laboratory.
27	Jefferson Laboratory.
28	Fluor Fernald, Incorporated.
29	Brookhaven Science Associates.
30	Paper, Allied Industrial Chemical & Energy Workers Union (PACE).
31	Bechtel Hanford.
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32	Charles R. Briggs.
33	Universities Research Association, Inc.
34	University of Chicago—Argonne National Laboratory.
35	CH2M Hill Hanford Group.
36	Pacific Northwest National Laboratory—Battelle Memorial Institute.
37	Honeywell International, Inc.
38	Stanford Linear Accelerator Center.
39	Bechtel Jacobs Company, LLC.
40	Building and Construction Trades Department, AFL-CIO.
41	James Seward, MD.
42	UT-Battelle, LLC.
43	Voluntary Protection Program Participant's Association (VPPPA).
44	Senators Jim Bunning & Edward M. Kennedy.
45	Fluor Corporation.
46	BWXT Technologies, Inc.
47	Idaho National Laboratory.
48	Bechtel National, Inc. Hanford Waste Treatment and Immobilization Plant.
49	BWXT-Y12.
50	Edward Jacobson.
51	Fluor.
52	Chris Blankner.
53	Randall Unger.
54	The International Chemical Workers Union Council of the United Food and Commercial Workers Union.
55	Atomic Trades and Labor Council.
56	American Conference of Governmental Industrial Hygienists (ACGIH).
57	DOE Contractor Attorneys' Association, Inc.
58	Bechtel Nevada Corporation.
59	Donald Stedem, James Dotts, Scott Wood, Bo Kim, Graham Giles, Barbara Yoerg, Robert Griffith, Allen Herrbach, Roger Goldie, Roger Smith, Joseph Cohen.
60	Ted Strickland, U.S. Representative.
61	David Mowrer.
62	Government Accountability Project.

V. Procedural Requirements

A. Review Under Executive Order 12866

Today's regulatory action has been determined to be a "significant regulatory action" under Executive Order 12866, "Regulatory Planning and Review" (58 FR 51735, October 4, 1993), as amended by Executive Order 13258 (67 FR 9385, February 26, 2002). Accordingly, DOE submitted this final rule to the Office of Information and Regulatory Affairs of the Office of

Management and Budget, which has completed its review.

B. Review Under Executive Order 12988

With respect to the review of existing regulations and the promulgation of new regulations, section 3(a) of Executive Order 12988, "Civil Justice Reform" (61 FR 4779, February 7, 1996) imposes on Federal agencies the general duty to adhere to the following requirements: eliminate drafting errors and needless ambiguity, write regulations to minimize litigation,

provide a clear legal standard for affected conduct rather than a general standard, and promote simplification and burden reduction. Section 3(b) requires Federal agencies to make every reasonable effort to ensure that a regulation, among other things: clearly specifies the preemptive effect, if any, adequately defines key terms, and addresses other important issues affecting the clarity and general draftsmanship under guidelines issued by the Attorney General. Section 3(c) of Executive Order 12988 requires

Executive agencies to review regulations in light of applicable standards in section 3(a) and section 3(b) to determine whether they are met or it is unreasonable to meet one or more of them. DOE has completed the required review and determined that, to the extent permitted by law, this final rule meets the relevant standards of Executive Order 12988.

C. Review Under Executive Order 13132

Executive Order 13132 (64 FR 43255, August 10, 1999), imposes certain requirements on agencies formulating and implementing policies or regulations that preempt State law or that have federalism implications. Agencies are required to examine the constitutional and statutory authority supporting any action that would limit the policymaking discretion of the States and carefully assess the necessity for such actions.

Today's regulatory action has been determined not to be a "policy that has federalism implications," that is, it does not have substantial direct effects on the states, on the relationship between the national government and the states, nor on the distribution of power and responsibility among the various levels of government under Executive Order 13132 (64 FR 43255, August 10, 1999). Accordingly, no "federalism summary impact statement" was prepared or subjected to review under the Executive Order by the Director of the Office of Management and Budget.

D. Review Under Executive Order 13175

Under Executive Order 13175 (65 FR 67249, November 6, 2000) on "Consultation and Coordination with Indian Tribal Governments," DOE may not issue a discretionary rule that has "tribal implications" and imposes substantial direct compliance costs on Indian tribal governments. DOE has determined that this final rule does not have such effects and concluded that Executive Order 13175 does not apply to this rule.

E. Reviews Under the Regulatory Flexibility Act

The Regulatory Flexibility Act of 1980 (5 U.S.C. 601 et seq.) requires that an agency prepare an initial regulatory flexibility analysis for any regulation which a general notice of proposed rulemaking is required, unless the agency certifies that the rule, if promulgated, will not have a significant economic impact on a substantial number of small entities (5 U.S.C. 605(b)).

Today's regulation establishes DOE's requirements for worker safety and

health at DOE sites. The contractors who manage and operate DOE facilities are principally responsible for implementing the rule requirements. DOE considered whether these contractors are "small businesses," as that term is defined in the Regulatory Flexibility Act's (5 U.S.C. 601(3)). The Regulatory Flexibility Act's definition incorporates the definition of "small business concern" in the Small Business Act, which the Small Business Administration (SBA) has developed through size standards in 13 CFR part 121. The DOE contractors subject to this rule exceed the SBA's size standards for small businesses. In addition, DOE expects that any potential economic impact of this rule on small businesses would be minimal because DOE sites perform work under contracts to DOE or the prime contractor at the site. DOE contractors are reimbursed through their contracts with DOE for the costs of complying with DOE safety and health program requirements. They would not, therefore, be adversely impacted by the requirements in this rule. For these reasons, DOE certifies that today's rule does not have a significant economic impact on a substantial number of small entities, and therefore, no regulatory flexibility analysis has been prepared. See 68 FR 7990 at III.1. and III.1.c. (February 19, 2003).

F. Review Under the Paperwork Reduction Act

The information collection provisions of this rule are not substantially different from those contained in DOE contracts with DOE prime contractors covered by this rule and were previously approved by the Office of Management and Budget (OMB) and assigned OMB Control No. 1910-5103. That approval covered submission of a description of an integrated safety management system required by the Integration of Environment, Health and Safety into Work Planning and Execution clause set forth in the DOE procurement regulations, 48 CFR 952.223-71 and 970.5223-1, 62 FR 34842, 34859-60 (June 17, 1997). If contractors at a DOE site fulfill their contractual responsibilities for integrated safety management properly, the worker safety and health program required by this regulation should require little if any new analysis or new documents to the extent that existing analysis and documents are sufficient for purposes of the regulations. Accordingly, no additional Office of Management and Budget clearance is required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.) and

the procedures implementing that Act, 5 CFR 1320.1 *et seq.*

G. Review Under the National Environmental Policy Act

DOE currently implements its broad authority to regulate worker safety and health through internal DOE directives incorporated into contracts to manage and operate DOE facilities, contract clauses and DOE regulations. This rule implements the statutory mandate to promulgate worker safety and health regulations for DOE facilities that provide a level of protection for workers at DOE facilities that is substantially equivalent to the level of protection currently provided to such workers and to provide procedures to ensure compliance with the rule. DOE anticipates that the contractor's work and safety programs required by this regulation is based on existing programs and that this rule generally does not require the development of a new program. DOE has therefore concluded that promulgation of these regulations falls into the class of actions that does not individually or cumulatively have a significant impact on the human environment as set forth in the DOE regulations implementing the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.). Specifically, the rule is covered under the categorical exclusion in paragraph A6 of Appendix A to Subpart D, 10 CFR Part 1021, which applies to the establishment of procedural rulemakings. Accordingly, neither an environmental assessment nor an environmental impact statement is required.

H. Review Under the Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104-4) requires each Federal agency to prepare a written assessment of the effects of any Federal mandate in a proposed or final agency regulation that may result in the expenditure by states, tribal, or local governments, in the aggregate, or by the private sector, of \$100 million in any one year. The Act also requires a Federal agency to develop an effective process to permit timely input by elected officials of state, tribal, or local governments on a proposed "significant intergovernmental mandate," and requires an agency plan for giving notice and opportunity to provide timely input to potentially affected small governments before establishing any requirements that might significantly or uniquely affect small governments. DOE has determined that the rule published today does not contain any Federal

mandates affecting small governments, so these requirements do not apply.

I. Review Under Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use), 66 FR 28355 (May 22, 2001) requires preparation and submission to OMB of a Statement of Energy Effects for significant regulatory actions under Executive Order 12866 that are likely to have a significant adverse effect on the supply, distribution, or use of energy. DOE has determined that the rule published today does not have a significant adverse effect on the supply, distribution, or use of energy and thus the requirement to prepare a Statement of Energy Effects does not apply.

J. Review Under the Treasury and General Government Appropriations Act, 1999

Section 654 of the Treasury and General Government Appropriations Act, 1999 (Pub. L. 105–277) requires Federal agencies to issue a "Family Policymaking Assessment" for any rule that may affect family well-being. This rule has no impact on the autonomy or integrity of the family as an institution. Accordingly, DOE has concluded that it is not necessary to prepare a Family Policymaking Assessment.

K. Review Under the Treasury and General Government Appropriations Act, 2001

The Treasury and General Government Appropriations Act, 2001 (44 U.S.C. 3516, note) provides for agencies to review most dissemination of information to the public under guidelines established by each agency pursuant to general guidelines issued by OMB. OMB's guidelines were published at 67 FR 8452 (Feb. 22, 2002), and DOE's guidelines were published at 67 FR 62446 (Oct. 7, 2002). DOE has reviewed today's final rule under the OMB and DOE guidelines, and has concluded that it is consistent with applicable policies in those guidelines.

L. Congressional Notification

As required by 5 U.S.C. 801, DOE will submit to Congress a report regarding the issuance of today's final rule prior to the effective date set forth at the outset of this notice. The report will state that it has been determined that the rule is not a "major rule" as defined by 5 U.S.C. 801(2).

VI. Approval of the Office of the Secretary

The Secretary of Energy has approved publication of this final rule.

List of Subjects

10 CFR Part 850

Beryllium, Chronic beryllium disease, Hazardous substances, Lung diseases, Occupational safety and health, Reporting and recordkeeping requirements.

10 CFR Part 851

Civil penalty, Federal buildings and facilities, Incorporation by reference, Occupational safety and health, Safety, Reporting and recordkeeping requirements.

Issued in Washington, DC, on January 20, 2006.

John Spitaleri Shaw,

Assistant Secretary for Environment, Safety and Health.

■ For the reasons set forth in the preamble, the Department of Energy is amending chapter III of title 10 of the Code of Federal Regulations as follows:

PART 850—CHRONIC BERYLLIUM DISEASE PREVENTION PROGRAM

■ 1. The authority citation for part 850 is revised to read as follows:

Authority: 42 U.S.C. 2201(i)(3), (p); 42 U.S.C. 2282c; 29 U.S.C. 668; 42 U.S.C. 7101 *et seq.*; 50 U.S.C. 2401 *et seq.*, E.O. 12196, 3 CFR 1981 comp., at 145 as amended.

■ 2. Section 850.1 is revised to read as follows:

§850.1 Scope.

This part provides for establishment of a chronic beryllium disease prevention program (CBDPP) that supplements and is deemed an integral part of the worker safety and health program under part 851 of this chapter.

■ 3. Section 850.4 is revised to read as follows:

§850.4 Enforcement.

DOE may take appropriate steps pursuant to part 851 of this chapter to enforce compliance by contractors with this part and any DOE-approved CBDPP.

■ 4. A new part 851 is added to Chapter III to read as follows:

PART 851—WORKER SAFETY AND HEALTH PROGRAM

Subpart A—General Provisions

Sec.

851.1 Scope and purpose.

851.2 Exclusions.

851.3 Definitions.

851.4 Compliance order.

851.5 Enforcement.

851.6 Petitions for generally applicable rulemaking.

851.7 Request for a binding interpretive ruling.

851.8 Informal requests for information.

Subpart B—Program Requirements

851.10 General requirements.

851.11 Development and approval of worker safety and health program.

851.12 Implementation.

851.13 Compliance.

Subpart C—Specific Program Requirements

851.20 Management responsibilities and worker rights and responsibilities.

851.21 Hazard identification and assessment.

851.22 Hazard prevention and abatement.

851.23 Safety and health standards.

851.24 Functional areas.

851.25 Training and information.

851.26 Recordkeeping and reporting.

851.27 Reference sources.

Subpart D-Variances

851.30 Consideration of variances.

851.31 Variance process.

851.32 Action on variance requests.

851.33 Terms and conditions.

851.34 Requests for conferences.

Subpart E—Enforcement Process

851.40 Investigations and inspections.

851.41 Settlement.

851.42 Preliminary notice of violation.

851.43 Final notice of violation.

851.44 Administrative appeal.

851.45 Direction to NNSA contractors.

Appendix A to Part 851—Worker Safety and Health Functional Areas

Appendix B to Part 851—General Statement of Enforcement Policy

Authority: 42 U.S.C. 2201(i)(3), (p); 42 U.S.C. 2282c; 42 U.S.C. 5801 *et seq.*; 42 U.S.C. 7101 *et seq.*; 50 U.S.C. 2401 *et seq.*

Subpart A—General Provisions

§ 851.1 Scope and purpose.

(a) The worker safety and health requirements in this part govern the conduct of contractor activities at DOE sites

(b) This part establishes the:

(1) Requirements for a worker safety and health program that reduces or prevents occupational injuries, illnesses, and accidental losses by providing DOE contractors and their workers with safe and healthful workplaces at DOE sites; and

(2) Procedures for investigating whether a violation of a requirement of this part has occurred, for determining the nature and extent of any such violation, and for imposing an appropriate remedy.

§851.2 Exclusions.

(a) This part does not apply to work at a DOE site: