Babcock & Wilcox Technical Services Y-12, LLC Management Requirements

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B&W Y-12 Program Description

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REVISION LOG

Revision Date	Description of Change	Pages Affected
5/30/2013	DMR number 13-Y12-117	
	Incorporated security activities	Throughout
	Added "2410 Cherahala" to facility list	7
	Updated procedure titles and numbers that have been revised since May, 2011	Throughout
	Corrected typographical errors	Throughout
	Updated names of contractors and agencies	Throughout
5/10/2011	DMR number: 11-Y12-144	
	Changed Wackenhut Services to WSI-Oak Ridge	5,7
	Added "All Other Off-site Facilities" to facility list	7
	Updated procedure titles and numbers that have	All
	been revised since April, 2009.	All
	Corrected typographical errors	
Previous Revisions	On Record	

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1 SCOPE

1.1 Summary

This document describes the B&W Y-12 Worker Safety and Health (WSH) program for implementing the requirements of 10 Code of Federal Regulations (CFR) Part 851, Subpart C, *Worker Safety and Health Program Specific Program Requirements* (851.11(a)). Rule 10 CFR Part 851 codifies worker protection program requirements and establishes the following:

- requirements for a worker safety and health (WSH) program that will prevent occupational injuries, illnesses, and accidental losses by requiring U.S. Department of Energy (DOE) contractors to provide their employees with safe and healthful workplaces at DOE sites; and
- 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 (851.1).

In accordance with Subpart C of 10 CFR Part 851, B&W Y-12 is responsible for the safety and health of the B&W Y-12 workforce (851.20(a)). B&W Y-12 policies, programs, procedures, and processes will be used to comply with 10 CFR Part 851 and provide the basis for the WSH program. The WSH program supports the commitment to conduct activities in a manner protective of personnel, the public, and the environment, as described in Y72-001, *Environment*, *Safety and Health Policy*.

The B&W Y-12 WSH program is only for purposes of implementing the requirements of 10 CFR Part 851, Subpart C. It is intended to provide an understanding of how the applicable regulatory requirements will be flowed down to B&W Y-12 employees and subcontractors. The WSH program does not include all aspects of B&W Y-12 safety and health obligations or responsibilities flowing from either B&W Y-12's prime contract or imposed by its corporate parents. For example, B&W Y-12 is contractually responsible for the health and safety of its employees while they are engaged in company business regardless of their location, and B&W Y-12 will report work-related injuries without regard to where they occur.

1.2 Background

The Y-12 National Security Complex (Y-12 NSC) is a covered workplace as defined by 10 CFR 851.3, "a place at a DOE site where a contractor is responsible for performing work in furtherance of a DOE mission." The Y-12 NSC is located in Oak Ridge, Tennessee, and is part of the Oak Ridge Reservation. The Y-12 NSC is primarily a DOE National Nuclear Security Administration (NNSA) manufacturing facility that plays an integral role in DOE's Nuclear Weapons Complex. The Y-12 NSC role includes:

- providing critical elements of NNSA's missions that ensure the safety, reliability, and performance of the U.S. nuclear weapons deterrent;
- supplying the special nuclear material for use in naval reactors;
- promoting international nuclear safety and nonproliferation;
- reducing global dangers from weapons of mass destruction; and
- supporting U.S. leadership in science and technology.

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1 SCOPE (cont.)

1.2 Background (cont.)

The Y-12 NSC also uses its unique capabilities to support the Research Reactor programs for U.S. and international customers, other federal agencies (such as the U.S. Department of Defense and U.S. Department of Homeland Security), state and local governments, and private-sector companies.

The Y-12 NSC also has a number of facilities that belong to the DOE Office of Science or to DOE Environmental Management (DOE-EM). Further, environmental remediation activities at the Y-12 NSC are carried out by DOE-EM.

For many of the DOE NNSA activities at the Y-12 NSC, B&W Y-12 is the management and operating contractor set forth in prime contract DE-AC05-OR22800. B&W Y-12's responsibilities for NNSA include work at the Y-12 NSC within the Y-12 NSC Emergency Response Boundary (ERB), as identified in the NNSA-approved Y-12 Emergency Management Plan.

Approximately 6,000 personnel are located at the Y-12 NSC. This includes B&W Y-12 personnel, B&W Y-12 subcontractor personnel, and NPO personnel, employees of other federal agencies or other prime contractors. Examples include the Army Corps of Engineers, UT-Battelle, SCI Consulting Services Incorporated, URS/CH2M Oak Ridge (UCOR), and Verizon.

B&W Y-12's hourly employees are represented at the Y-12 NSC by the Atomic Trades and Labor Council (ATLC), the Knoxville Building and Construction Trades Council (KBCTC) and the United Steel Workers (USW). Since this program plan was issued in 2007, the International Guards Union of America (IGUA) has been added as a representative for the Security Police Officers at Y-12. B&W Y-12 provided the labor organizations with notice in accordance with 10 CFR 851.11(d) of the development and implementation of this WSH program.

B&W Y-12 Fire Protection Operations responders will continue to operate within contractual requirements regardless of on-site or off-site location of the actual response. B&W Y-12 will also be the primary responder to all emergencies within the Y-12 ERB defined by the approved Emergency Response Plan.

10 CFR Part 851 explicitly references specific editions of national consensus codes and standards. The editions listed in 10 CFR 851 may not be the latest published editions that are typically implemented at Y-12 to ensure worker safety or those implemented by commercial vendors in providing services and products to Y-12. In general, the organizations that publish national consensus codes and standards intend that the latest editions of their documents be used by industry and these codes/standards are vetted through their approval process to ensure that the latest editions provide equivalent levels of protection when compared to the previous editions. The responsible Y-12 organizations will typically follow the latest edition of these codes and standards, following evaluation to ensure at least equal protection to the 851 referenced version. For the design and construction of new or modified facilities, requirements are established through the development of the Code of Record during the conceptual design phase of a project. The Code of Record will specify the specific editions of the national consensus codes and standards to be used. The Code of Record is maintained under configuration control

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1 SCOPE (cont.)

1.2 Background (cont.)

through the remainder of a facility's life, with changes to the Code of Record evaluated by the project on a case-by-case basis.

1.3 Exclusions

This WSH program does not apply to the following:

- work at a DOE site that is regulated by the Occupational Safety and Health Administration (OSHA) (851.2(a)(1));
- work at a DOE site that is operated under the authority of the Director, Naval Nuclear Propulsion, pursuant to Executive Order 12344, as set forth in Public Law 98–525, 42 U.S.C. 7158 note (851.2(a)(2));
- radiological hazards or nuclear explosives operations to the extent regulated by 10 CFR Parts 20, 820, 830, or 835 (851.2(b)); or
- transportation to or from a DOE site (851.2(c)).

Specific to the Y-12 NSC, the following site activities are not covered by either 10 CFR Part 851 or B&W Y-12's WSH program:

- activities by DOE/NNSA personnel;
- activities by other DOE/NNSA contractors and their subcontractors that are not managed under the B&W Y-12 prime contract (e.g., DOE Office of Science, DOE Environmental Management facilities);
 - NOTE The employees of these entities are expected to follow B&W Y-12 safety and health requirements communicated to them by B&W Y-12, and also are expected to follow any safety and health programs applicable to them, such as the Federal Employees Occupational Safety and Health Program. Those persons requesting Y-12 site access via the Y-12 Visitor Control Office will receive a visitor brochure with site information. Persons requiring access to the Y-12 Property Protection Area for 10 days or more within a 12-month period are required to pass Y-12's General Employee Training, unless other exceptions apply. The visitor brochure and the General Employee Training both convey general safety information, including instructions in the event of emergency.
- activities by employees of other federal, state or local government agencies or government corporations [e.g., Army Corps of Engineers, Tennessee Valley Authority (TVA), the City of Oak Ridge];
- site visitors, students, visiting scientists, users and others not under contract with B&W Y-12: or
- construction of facilities that are on property that has been deeded to third parties (e.g., the Jack Case Center and New Hope Center).

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1 SCOPE (cont.)

1.3 Exclusions (cont.)

Specific to the Y-12 NSC, the following site activities are not covered by 10 CFR Part 851 but are subject to the safety and health requirements implemented in the applicable terms and conditions of their contract(s) with B&W Y-12:

- activities by vending contractors (e.g., Star Vending) and other suppliers of commercial items;
- activities by subcontractors that are providing operation and maintenance services for commercial items (e.g., X-ray technicians, machine tool technicians, fax/copier technicians, repair services for equipment under warranty, training activities for equipment operation); and
- work that is not performed on a DOE/NNSA owned, leased, or controlled site.

Activities and operations conducted by B&W Y-12 personnel in leased facilities will be in accordance with B&W Y-12's WSH program. The following table outlines the jurisdiction for leased facilities.

Facility	B&W Y-12 Activities	NNSA	TOSHA/OSHA
1099 Commerce Park Drive*	Office	X	
104 Union Valley Road*	Office	X	
113C Union Valley Road*	Laboratory	X	
115 Union Valley Road*	Office	X	
701 Scarboro Road*	Office	X	
1099 Commerce Park*	Office	X	
200 Summit Place*	Records Storage	X	
Office of Science and Technology Information (OSTI) T1	Office	X	
OSTI T2	Office and Warehouse Activities	Х	
New Hope Center*	Office and Laboratory	X	
Jack Case Center*	Office, Cafeteria, Medical and Wellness Services	X	
2410 Cherahala Y-12 Uranium Processing Facility (UPF)*	Office Work	Х	
All Other Off-site Facilities	Various	Х	

^{*}B&W Y-12 may seek clarification regarding the jurisdictional status of these facilities. Until further clarified, NNSA jurisdiction is assumed.

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1.4 Coordination with Other DOE Contractors

Multiple contractors at a covered workplace are required by 10 CFR 851.11(a)(2)(ii) to coordinate with each other to ensure that there are clear roles, responsibilities and procedures to ensure the safety and health of workers at multi-contractor workplaces. Other DOE contractors perform work at the Y-12 NSC but are not necessarily covered by B&W Y-12's WSH program, depending on the scope of work performed. Examples include prime contractors such as Verizon, and UT-Battelle L.L.C. B&W Y-12 will enter into coordination agreements with other prime contractors on site in accordance with 10 CFR 851.11(a)(2)(ii). These coordination agreements will define roles and responsibilities and suspend/stop work authority to ensure the safety and health of workers.

The coordination agreements will require that each contractor be responsible for the safety and health of its employees and they will follow their company's Worker Safety and Health Program and implementing procedures, unless otherwise specified. When employees of one contractor work in the facilities owned or managed by another prime contractor, the work will be performed under the worker safety and health plan of the company that has management responsibility for the facility unless otherwise designated. Each contractor has the responsibility to inform other contractors and their employees of hazards that they may encounter in facilities operated by the respective contractor. Finally, the coordination agreements will reinforce that every employee at a covered workplace has stop work authority regardless of the contractor performing the work.

The identity of other contractors to DOE/NNSA is subject to change at any time. B&W Y-12 will coordinate with DOE/NNSA to ensure that information is obtained regarding other contractors for coordination purposes. Once B&W Y-12 is informed of additional contractors to whom 10 CFR 851 applies, a coordination agreement will be negotiated.

2 SUBCONTRACT STRATEGY

2.1 Overview

B&W Y-12 uses a multifaceted approach to ensure that legal, contractual, and technical requirements are flowed down through B&W Y-12 organizations and then down to subcontractors. B&W Y-12 procedures have additional checks and balances for critical health and safety requirements. Health and safety requirements, including Suspend/Stop Work Authority, are flowed to the subcontractors by incorporating the Integrated Safety Management (ISM) DOE Acquisition Regulation (DEAR) clause into the contract terms and conditions of each contract and through implementation of Environment, Safety and Health (ES&H) Standards/Requirements Identification Documents, as defined in Y73-164, Subcontract Environment, Safety and Health Management. Additionally, early in the subcontracting bid process, subcontractors that perform complex and hazardous work are screened (pre-qualified) using the Experience Modification Rate and OSHA performance indicators.

The type of subcontract to be used is a factor that is considered to ensure appropriate requirements are transmitted to subcontractors. Using a graded approach to differentiate between suppliers allows greater focus on more critical and complex procurements. B&W Y-12 places subcontracts with commercial material suppliers, consultants, staff augmentation companies, construction subcontractors, equipment fabricators, and professional services suppliers. Y60-701, *Procurement Quality* management requirements

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2 SUBCONTRACT STRATEGY (cont.)

2.1 Overview (cont.)

ensures that appropriate technical and quality reviews for adequacy of requirements are performed for critical applications, complex items, and services.

Unless otherwise specified in the contract document, B&W Y-12 subcontractors working onsite will work under B&W Y-12's approved WSH program. The contract between B&W Y-12 and the subcontractor will contain specific contract scope, applicable worker safety and health requirements, and other terms and conditions.

B&W Y-12 requires subcontractors to comply with any OSHA medical surveillance requirements based on the subcontractors scope of work and the OSHA requirements for the treatment of illnesses and injuries. B&W Y-12 subcontractors are also subject to the Occupational Medical Requirements for DOE Approved Beryllium programs. B&W Y-12 subcontractors may be provided emergency medical services as appropriate before they are transported to an off-site medical facility.

The B&W Y-12 Occupational Medicine Program provides services to: B&W Y-12 employees, NNSA Production Office (NPO), and any subcontract employees who are placed in the Human Reliability Program (HRP). An application, which has not been acted upon by DOE, for a permanent variance has been submitted to exempt subcontract employees from certain requirements for Occupational Medicine. Subcontractors will provide a program under the direction of a licensed physician meeting the credentials requirements of Appendix A.8(b) and personnel providing health services meeting the credentials requirements of Appendix A8(c). A written description of the subcontractor's occupational medicine program including proof of staff credentials will be required submittal under the subcontract. Each subcontractor's occupational medicine program contents will be determined by their Occupational Medicine Director and based on the subcontractor's scope of work and associated hazards.

Should the variance for occupational medicine requirements for subcontractors be denied, a formal cost estimate for compliance will be developed. B&W Y-12 will submit a formal Implementation Plan to NPO containing a request for additional resources to meet the increased work scope presented by such denial. Pending approval of that Implementation Plan, the prudent OSHA-required medical surveillance requirements to subcontractors at all levels will continue to be flowed down.

2.2 NNSA-Approved Purchasing System

B&W Y-12 has purchasing system authority approved by the NPO Contracting Officer. The approved purchasing system is proceduralized in the Procurement Operating Practices (POPs). The POPs are under configuration control and substantive changes are approved by the NPO Contracting Officer.

2.3 Technical Staff and ES&H Responsibilities

When subcontracts are initiated, technical personnel draft the scope of work and technical specifications for work to be performed by subcontractors. When the scope and specifications are complete, a trained "requisitioner" inputs the request for subcontract into the B&W Y-12 Procurement system.

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2 SUBCONTRACT STRATEGY (cont.)

2.3 Technical Staff and ES&H Responsibilities (cont.)

For subcontractor on-site work, the requisition process cannot go forward without the completion of a Subcontractor Work Activity Evaluation form. ES&H personnel must approve all subcontractor on-site work (including a determination of the applicable health and safety requirements), before Procurement has authority to process the requisition and enter into a subcontract.

2.4 Procurement Interface

Once a requisition has been approved by ES&H, Procurement personnel identify subcontractors capable of performing the work. Depending on the value of the work, the subcontract may need to be competed against multiple subcontractors. Some types of procurements may only be competed against pre-qualified subcontractors. Subcontractors are pre-qualified on the basis of ES&H criteria as well as technical and quality criteria.

Where the scope of work is complex or hazardous, specific ES&H submittals may be required before subcontract mobilization. These submittals are coordinated between the B&W Y-12 Subcontract Administrator, the B&W Y-12 Subcontract Technical Representative and the appropriate ES&H subject matter experts.

2.5 Types of Flowdowns

There are several different types of requirements that flow down via the subcontracting process. Terms and Conditions are those standard business rules incorporated into the "boilerplate" legal requirements governing the business relationship between B&W Y-12 and its subcontractors. The statement of work, technical specifications, engineering data sheets, catalog cuts and other technical documents are requirements of the contract. In addition to the "boilerplate" contract clauses, there are a series of specific contract clauses, many of which are mandatory due to either governmental regulation and/or prime contract requirements that may apply. The 10 CFR Part 851 clauses have been incorporated into the contracting system.

2.6 Construction and Service Subcontracts

For construction subcontracts, the B&W Y-12 procedure Y73-164, *Subcontract Environment, Safety and Health Management*, as well as Construction management procedures, are used to define the process and flowdown of ES&H requirements to subcontractors. ES&H requirements are determined from the scope of work that subcontractors must follow in conjunction with ES&H requirements contained in the Engineering Specifications and "*Supplemental Conditions, Construction*" clause incorporated in all subcontracts. That clause requires ES&H requirements be implemented in subcontractors' ES&H documents.

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2 SUBCONTRACT STRATEGY (cont.)

2.6 Construction and Services Subcontracts (cont.)

ES&H requirements for service subcontracts are implemented through a graded approach, as defined in Y73-164, dependent on the level of hazard and job complexity. The B&W Y-12 ES&H organization reviews the work scope and the identified hazards for each subcontract, in accordance with ES&H requirements, and determines the applicable ES&H requirements for the subcontractor work activity. The requirement that the subcontractor flow down their ES&H requirements to their subcontracts (at any tier) to the extent necessary to ensure compliance with the specified ES&H requirements is included in the Safety and Health clause in the standard terms and conditions of subcontracts.

2.7 Lower Tier Subcontractors

Lower tier subcontractors will have requirements flowed to them via their higher tier contractor. The technical requirements and scope will be developed by the higher tier and communicated via statements of work. Subcontractors are also generally afforded general latitude to establish their own business rules with their lower tiers. However, some clauses are mandatory flow-downs from the government to any lower tier subcontractor. For example, DEAR 970.5223-1, Integration of Environment, Safety and Health into Work Planning and Execution (DEC 2000), requires that "The Contractor shall include a clause substantially the same as this clause in subcontracts involving complex or hazardous work on site at a DOE-owned or-leased facility."

3 REQUIREMENTS

Appendix C, List of Applicable Workplace Safety and Health Requirements, lists the applicable health and safety requirements for B&W Y-12 (and its subcontractors) work at the Y-12 NSC. This list details such requirements such as the American National Standards Institute (ANSI), ASME, DOE, and various CFR documents that are applicable to B&W Y-12's work at the Y-12 NSC.

4 INTERFACES/ROLES AND RESPONSIBILITIES

B&W Y-12 recognizes and supports the following roles and responsibilities essential to the implementation of this WSH program:

- Clear and unambiguous lines of authority and responsibility for ensuring ES&H
 performance will be established and maintained.
- Appropriate ES&H priorities and requirements will be established and maintained.
- Established ES&H programs and requirements will be followed.
- Line management will set and enforce requirements based on these ES&H programs.
- Workers will follow requirements by participating in established ES&H programs and procedures.

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4 INTERFACES/ROLES AND RESPONSIBILITIES (cont.)

4.1 Integrated Safety Management

B&W Y-12, through its people, programs, and procedures, seeks to meet its mission and customer expectations while ensuring adequate protection of the worker, the public, the environment, and DOE assets. B&W Y-12 recognizes there must be an appropriate balance: however, safety and health is considered a value and a priority when planning and performing work.

The Integrated Safety Management System (ISMS) applies to all work performed by B&W Y-12 employees. DOE P 450.4, *Safety Management System Policy*, identifies the following six primary components of ISMS:

- objectives,
- principles,
- functions,
- implementation,
- · responsibilities, and
- mechanisms.

The first three components are described in detail in DOE P 450.4 and apply universally across the DOE/NNSA complex. The last three are unique to each DOE/NNSA contractor and are tailored by each contractor according to its mission and organizational structure.

The objective of ISMS, simply stated, is to provide a safe and secure workplace and to perform work safely and securely while protecting the worker, the public, the environment, and DOE assets. The major tenants of the program at the Y-12 NSC include:

- defining the scope of work,
- · analyzing the hazards and risks,
- developing and implementing safety measures and controls,
- performing work within measures and controls, and
- providing feedback and continuous improvement.

The B&W Y-12 ISMS program is implemented by Y15-635PD, *Integrated Safety Management System*.

Employee involvement is a cornerstone for successful implementation of our Integrated Safety Management System for safety, quality, environmental protection, and security. While this system helps us achieve our safety goals, it is our culture that defines our character and influences our behavior. An effective safety culture can only be achieved within a safety-conscious work environment. We encourage and expect all employees to maintain a questioning attitude and raise safety concerns to their supervision or management. Retribution, harassment, or intimidation for raising safety concerns will not be tolerated.

4.2 Differing Professional Opinion

Y11-617, *Employee Concerns Programs*, describe the process for reporting concerns involving differing professional opinions. A Differing Professional Opinion (DPO) is an opinion involving a technical issue related to ES&H that: (1) differs from previous

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4 INTERFACES/ROLES AND RESPONSIBILITIES (cont.)

4.2 Differing Professional Opinion (cont.)

management decisions, stated positions, or established policies or practices; (2) in the opinion of the employee, has not been adequately considered; and (3) if not addressed, has a reasonable probability of having significant negative impact with respect to environment, safety, or health. A DPO is submitted using UCN-22782, *Differing Professional Opinion (DPO) Submittal Form* when all efforts to resolve the issue through the organization's routine work process have been exhausted without resolution. The DPO process provides for a final decision to be made with an appeal process and includes the option of filing a DPO with NPO.

4.3 Contractor Assurance System

The Contractor Assurance System (CAS) enables B&W Y-12 to demonstrate that work performed by B&W Y-12 at the Y-12 NSC is conducted in compliance with applicable laws, contractual obligations and corporate requirements. The system includes processes to identify and document requirements, manage risk, establish and maintain metrics, and define and document validation processes.

5 IMPLEMENTING ELEMENTS

5.1 Overview

10 CFR Part 851 codifies the worker protection program requirements generally established in DOE O 440.1A *Worker Protection Management for DOE Federal and Contractor Employees*. B&W Y-12 policies, programs, procedures, and processes utilized to comply with DOE O 440.1A provide the basis for this WSH program.

Appendix B, *B&W Y-12 Implementation Matrix for 10 CFR Part 851*, documents the mechanisms by which each criterion of 10 CFR Part 851 is implemented by B&W Y-12.

5.2 WSH Program – General Requirements

B&W Y-12 provides 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 and ensures that work is performed in accordance with applicable requirements of 10 CFR Part 851.

Key implementing mechanisms for 10 CFR Part 851, Sect. 851.10, *General requirements*, are detailed in Appendix B.

5.3 Development and Approval of the WSH Program

5.3.1 Preparation, Evaluation and Approval

This WSH program has been developed, evaluated, and approved to meet the requirements of 10 CFR Part 851, Sect. 851.11, *Development and approval of the worker safety and health program.*

5.3.2 Coordination with Labor Organizations

Labor organizations representing B&W Y-12 employees at the Y-12 NSC were invited to participate in the development of the WSH program. Union Officers and designated

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5 IMPLEMENTING ELEMENTS (cont.)

5.3.2 Coordination with Labor Organizations (cont.)

representatives will be notified in a timely manner of the development, implementation, updates and revisions of Y73-004PD, *B&W Y-12 10 CFR Part 851 Worker Safety and Health Program*. Notification shall be made by e-mail or other correspondence when the procedure is revised or updated. This notification complies with requirements established in in CFR 10 851.11(d).

5.3.3 Program Updates

B&W Y-12 will submit an update of this 851WSH program to the NPO Manager for review and approval whenever a significant change or addition to the program is made. A significant change or addition is defined as a newly recognized or added hazard that is not effectively controlled by measures outlined in the currently approved WSH Program.

B&W Y-12 will also submit annually to the NPO Manager either an updated worker safety and health program for approval or a letter stating that no significant changes are necessary in the currently approved worker safety and health program.

Applicable changes, conditions, or workplace safety and health standards directed by DOE consistent with the requirements of this part and DEAR 970.5204–2, *Laws, Regulations and DOE Directives* (December 2000) and associated contract clauses will be incorporated in Y-12 systems and procedures.

5.4 Compliance

Compliance with the WSH program was required to fulfill the requirements of 10 CFR Part 851, Sect. 851.13, no later than May 25, 2007. Any newly identified compliance gaps will be described in an implementation plan which will detail the issues, the costs, and the schedule to come into compliance with the requirement, if necessary.

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APPENDIX A Acronyms, Abbreviations, and Initialisms (Page 1 of 1)

ANSI American National Standards Institute
ASME American Society of Mechanical Engineers

ATLC Atomic Trades and Labor Council
CAS Contractor Assurance System
CFR Code of Federal Regulations

DEAR Department of Energy Acquisition Regulation

DOE U.S. Department of Energy

DOE-EM U.S. Department of Energy – Environmental Management

ERB Emergency Response Boundary
ES&H Environment, Safety and Health
IGUA International Guards Union of America

ISM Integrated Safety Management

ISMS Integrated Safety Management System

KBCTC Knoxville Building and Construction Trades Council

NNSA National Nuclear Security Administration

NPO NNSA Production Office

OSHA Occupational Safety and Health Administration

POP Procurement Operating Practice

S/RID Standards/Requirements Identification Document

TVA Tennessee Valley Authority UCOR URS/CH2M Oak Ridge, LLC

USW United Steel Workers WSH worker safety and health

Y-12 NSC Y-12 National Security Complex

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Appendix B B&W Y-12 Implementation Matrix for 10 CFR Part 851 (Page 1 of 44)

10 CFR 851 Requirement	Implementing Mechanisms
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.	Y73-004PD, B&W Y-12 10 CFR 851 Worker Safety and Health Program Y76-001, Enforcement Compliance Program
§ 851.2 Exclusions. (a) This part does not apply to work at a DOE site: (1) Regulated by the Occupational Safety and Health Administration; or (2) Operated under the authority of the Director, Naval Nuclear Propulsion, pursuant to Executive Order 12344, as set forth in Public Law 98–525, 42U.S.C. 7158 note. (b) This part does not apply to radiological hazards or nuclear explosives operations to the extent regulated by 10 CFR Parts 20, 820, 830 or 835. (c) This part does not apply to transportation to or from a DOE site.	Y73-004PD, B&W Y-12 10 CFR 851 Worker Safety and Health Program
§ 851.3 Definitions. (a) As used in this part: AEA means the Atomic Energy Act of 1954, 42 U.S.C. 2011 et seq. Affected worker means a worker who would be affected by the granting or denial of a variance, or any authorized representative of the worker, such as a collective bargaining agent. Closure facility means 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. Closure facility hazard means a facility-related condition within a closure facility involving deviations from the technical requirements of § 851.23 of this part that would require costly and extensive structural/ engineering modifications to be in compliance. Cognizant Secretarial Officer means, with respect to a particular situation, the Assistant Secretarial Officer means, with respect to a particular situation, the Assistant Secretarial Officer means, and particular function under this part. Compliance order means 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. Consent order means 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. Construction means 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. Construction contractor means the lowest tiered contractor with primary responsibility for the executi	Y73-004PD, B&W Y-12 10 CFR 851 Worker Safety and Health Program

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10 CFR 851 Requirement	Implementing Mechanisms
Construction project means the full scope of activities required on a construction	
worksite to fulfill the requirements of the construction procurement or authorization	
document.	
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.	
Contractor means any entity, including affiliated entities, such as a parent corporation,	
under contract with DOE, or a subcontractor at any tier, that has responsibilities for	
performing work at a DOE site in furtherance of a DOE mission.	
Covered workplace means a place at a DOE site where a contractor is responsible for	
performing work in furtherance of a DOE mission.	
Director means a DOE Official to whom the Secretary assigns the authority to	
investigate the nature and extent of compliance with the requirements of this part.	
DOE means the United States Department of Energy, including the National Nuclear	
Security Administration.	
DOE Enforcement Officer means a DOE official to whom the Director assigns the	
authority to investigate the nature and extent of compliance with the requirements of this	
part.	
DOE site means a DOE-owned or -leased area or location or other area or location	
controlled by DOE where activities and operations are performed at one or more facilities	
or places by a contractor in furtherance of a DOE mission.	
Final notice of violation means a document that determines a contractor has violated	
or is continuing to violate a requirement of this part and 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.	
Final Order means an order of DOE that represents final agency action and, if	
appropriate, imposes a remedy with which the recipient of the order must comply.	
General Counsel means the General Counsel of DOE.	
Head of DOE Field Element means an individual who is the manager or head of the	
DOE operations office or field office.	
Interpretative ruling means a statement by the General Counsel concerning the	
meaning or effect of a requirement of this part which 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.	
National defense variance means relief from a safety and health standard, or portion	
thereof, to avoid serious impairment of a national defense mission.	
NNSA means the National Nuclear Security Administration.	
Nuclear explosive means 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).	
Nuclear explosive operation means any activity involving a nuclear explosive,	
including activities in which main charge high-explosive parts and pit are collocated. Occupational medicine provider means the designated site occupational medicine	
director (SOMD) or the individual providing medical services.	
Permanent variance means relief from a safety and health standard, or portion thereof,	
to contractors who can prove that their methods, conditions, practices, operations, or	
processes provide workplaces that are as safe and healthful as those that follow the	
workplace safety and health standard required by this part.	
moniples select and hould standard required by this part.	

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10 CFR 851 Requirement	Implementing Mechanisms
Preliminary notice of violation means a document that sets forth the preliminary	Wechanisms
conclusions that a contractor has violated or is continuing to violate a requirement of this	
part and 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 means 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.	
Remedy means any action (including, 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.	
Safety and health standard means 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.	
Secretary means the Secretary of Energy.	
Temporary variance means a short term relief for 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. Unauthorized discharge means 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.	
Under Secretary means, with respect to a particular situation, the DOE official who	
serves as 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 who has primary line management responsibility for a contractor.	
Variance means an exception to compliance with some part of a safety and health	
standard granted by the Under Secretary to a contractor.	
Worker means an employee of a DOE contractor person who performs work in	
furtherance of a DOE mission at a covered workplace.	
Workplace hazard means a physical, chemical, biological, or safety hazard with any	
potential to cause illness, injury, or death to a person.	
(b) Terms undefined in this part that are defined in the Atomic Energy Act of 1954 must	
have the same meaning as under that Act.	
§ 851.4 Compliance order.	• Y73-004PD, B&W Y-12
(a) The Secretary may issue to any contractor a Compliance Order that:	10 CFR 851 Worker
(1) Identifies a situation that violates, potentially violates, or otherwise is inconsistent	Safety and Health
with a requirement of this part;	Program
(2) Mandates a remedy, work stoppage, or other action; and,	• Y76-001, Enforcement
(3) States the reasons for the remedy, work stoppage, or other action.(b) A Compliance order is a final order that is effective immediately unless the Order	Compliance Program
specifies a different effective date.	
(c) Within 15 calendar days of the issuance of a Compliance Order, the recipient of the	
Order may request the Secretary to rescind or modify the Order. A request does not stay	
the effectiveness of a Compliance Order unless the Secretary issues an order to that	
effect.	
(d) A copy of the Compliance Order must be prominently posted, once issued, at or	
near the location where the violation, potential violation, or inconsistency occurred until it	
is corrected.	

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10 CFR 851 Requirement	Implementing Mechanisms
§ 851.5 Enforcement. (a) A contractor that is indemnified under section 170d. of the AEA (or any subcontractor or supplier thereto) and that violates (or whose employee violates) any requirement of this part shall be subject to a civil penalty of up to \$70,000 for each such violation. If any violation under this subsection is a continuing violation, each day of the violation shall constitute a separate violation for the purpose of computing the civil penalty. (b) A contractor that violates any requirement of this part may be subject to a reduction in fees or other payments under a contract with DOE, pursuant to the contract's Conditional Payment of Fee clause, or other contract clause providing for such reductions. (c) DOE may not penalize a contractor under both paragraphs (a) and (b) of this section for the same violation of a requirement of this part. (d) For contractors listed in subsection d. of section 234A of the AEA, 42 U.S.C. 2282a(d), the total amount of civil penalties under paragraph (a) and contract penalties under paragraph (b) of this section may not exceed the total amount of fees paid by DOE to the contractor in that fiscal year. (e) DOE shall not penalize a contractor under both sections 234A and 234C of the AEA for the same violation. (f) DOE enforcement actions through civil penalties under paragraph (a) of this section,	Y73-004PD, B&W Y-12 10 CFR 851 Worker Safety and Health Program Y76-001, Enforcement Compliance Program
start on February 9, 2007. § 851.6 Petitions for generally applicable rulemaking. (a) Right to file. Any person may file a petition for generally applicable rulemaking to amend or interpret provisions of this part. (b) How to file. Any person who wants to file a petition for generally applicable rulemaking pursuant to this section must file by mail or messenger in an envelope addressed to the Office of General Counsel, GC–1, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585. (c) Content of rulemaking petitions. A petition under this section must: (1) Be labeled "Petition for Rulemaking Under 10 CFR 851;" (2) Describe with particularity the provision of this part to be amended and the text of regulatory language to be added; and (3) Explain why, if relevant, DOE should not choose to make policy by precedent through adjudication of petitions for assessment of civil penalty. (d) Determinations upon rulemaking petitions. After considering the petition and other information DOE deems relevant, DOE may grant the petition and issue an appropriate rulemaking notice, or deny the petition because the rule being sought: (1) Would be inconsistent with statutory law; (2) Would establish a generally applicable policy in a subject matter area that should be left to case-by-case determinations; or	Y73-004PD, B&W Y-12 10 CFR 851 Worker Safety and Health Program
(3) For other good cause. § 851.7 Requests for a binding interpretative ruling. (a) Right to file. Any person subject to this part shall have the right to file a request for an interpretive ruling that is binding on DOE with regard to a question as to how the regulations in this part would apply to particular facts and circumstances. (b) How to file. Any person who wants to file a request under this section must file by mail or messenger in an envelope addressed to the Office of General Counsel, GC–1, U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585. (c) Content of request for interpretive ruling. A request under this section must: (1) Be in writing; (2) Be labeled "Request for Interpretive Ruling Under 10 CFR 851;"	Y73-004PD, B&W Y-12 10 CFR 851 Worker Safety and Health Program

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	Mechanisms		
(3) Identify the name, address, telephone number, e-mail address, and any designated			
representative of the person filing the request;			
(4) State the facts and circumstances relevant to the request;			
(5) Be accompanied by copies of relevant supporting documents if any;			
(6) Specifically identify the pertinent regulations and the related question on which an			
interpretive ruling is sought; and			
(7) Include explanatory discussion in support of the interpretive ruling being sought.			
(d) Public comment. DOE may give public notice of any request for an interpretive			
ruling and provide an opportunity for public comment.			
(e) Opportunity to respond to public comment. DOE may provide an opportunity to any			
person who requests an interpretive ruling to respond to public comments relating to the			
request.			
(f) Other sources of information. DOE may:			
(1) Conduct an investigation of any statement in a request;			
(2) Consider any other source of information in evaluating a request for an interpretive			
ruling; and			
(3) Rely on previously issued interpretive rulings with addressing the same or a related			
issue.			
(g) Informal conference. DOE may convene an informal conference with the person			
requesting the interpretive ruling.			
(h) Effect of interpretive ruling. Except as provided in paragraph (i) of this section, an			
interpretive ruling under this section is binding on DOE only with respect to the person			
who requested the ruling.			
(i) Reliance on interpretive ruling. If DOE issues an interpretive ruling under this			
section, then DOE may not subject the person who requested the ruling to an			
enforcement action for civil penalties for actions reasonably taken in reliance on the ruling,			
but a person may not act in reliance on an interpretive ruling that is administratively			
rescinded or modified after opportunity to comment, judicially invalidated, or overruled by			
statute or regulation.			
(j) Denial of requests for an interpretive ruling. DOE may deny a request for an			
interpretive ruling if DOE determines that:			
(1) There is insufficient information upon which to base an interpretive ruling;			
(2) The interpretive question posed should be treated in a general notice of proposed			
rulemaking;			
(3) There is an adequate procedure elsewhere in this part for addressing the			
interpretive question such as a petition for variance; or			
(4) For other good cause.			
(k) <i>Public availability of interpretive rulings</i> . For information of interested members of the			
public, DOE may file a copy of interpretive rulings on a DOE internet web site.			
§ 851.8 Informal requests for information.	• Y73-004PD, B&W Y-12		
(a) Any person may informally request information under this section as to how to	10 CFR 851 Worker		
comply with the requirements of this part, instead of applying for a binding interpretive	Safety and Health		
ruling under § 851.7. DOE responses to informal requests for information under this	Program Plan		
section are not binding on DOE and do not preclude enforcement actions under this part.	, rogram man		
(b) Inquiries regarding the technical requirements of the standards required by this part			
must be directed to the Office of Environment, Safety and Health, Office of Health (EH–5),			
U.S. Department of Energy, 1000 Independence Avenue, SW., Washington, DC 20585.			
(c) Information regarding the general statement of enforcement policy in the appendix			
to this part must be directed to the Office of Environment, Safety and Health, Office of			
Price-Anderson Enforcement (EH–6), U.S. Department of Energy, 1000 Independence			
Avenue, SW., Washington, DC 20585.			

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10 CFR 851 Requirement	Implementing Mechanisms
Subpart B—Program Requirements: (a) With respect to a covered workplace for which a contractor is responsible, the contractor must: (1) 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; and (2) Ensure that work is performed in accordance with: (i) All applicable requirements of this part; and (ii) With the worker safety and health program for that workplace. (b) The written worker safety and health program must describe how the contractor complies with the: (1) Requirements set forth in Subpart C of this part that are applicable to the hazards associated with the contractor's scope of work; and (2) Any compliance order issued by the Secretary pursuant to § 851.4. § 851.11 Development and approval of the worker safety and health program. (a) Preparation and submission of worker safety and health program. By February 26, 2007, contractors must submit to the appropriate Head of DOE Field Element for approval a written worker safety and health program that provides the methods for implementing the requirements of Subpart C of this part. (1) If a contractor is responsible for more than one covered workplace at a DOE site, the contractor must establish and maintain a single worker safety and health program for the covered workplaces for which the contractor is responsible. (2) If more than one contractor is responsible for covered workplaces, each contractor must: (i) Establish and maintain a worker safety and health program for the workplaces for which the contractor responsible for work at the covered workplaces to ensure that there are clear roles, responsible for work at the covered workplaces to ensure that there are clear roles, responsible for work at the covered workplaces to ensure that there are clear roles, responsible for the workplaces to ensure that there are clear roles, responsibilities and procedures to ensure that there are clear roles, responsibilities and procedures to ensure that there	Mechanisms • Y15-635PD, B&W Y-12 Integrated Safety Management System • Y17-001, Engineering, Design, and Support During Construction • Y72-001, Environment, Safety and Health Policy • Y73-001, B&W Y-12 Safety Program • Y73-164, Subcontract Environment, Safety and Health Management • Y73-200PD, Industrial Hygiene Program • Y73-004PD, B&W Y-12 10 CFR Part 851 Worker Safety and Health Program • Y15-635PD, B&W Y-12 Integrated Safety Management System

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10 CFR 851 Requirement	Implementing Mechanisms
(b) DOE evaluation and approval. The Head of DOE Field Element must complete a review and provide written approval of the contractor's worker safety and health program, within 90 days of receiving the document. The worker safety and health program and any updates are deemed approved 90 days after submission if they are not specifically approved or rejected by DOE earlier. (1) Beginning May 25, 2007, no work may be performed at a covered workplace unless an approved worker safety and health program is in place for the workplace. (2) Contractors must send a copy of the approved program to the Assistant Secretary for Environment, Safety and Health. (3) Contractors must furnish a copy of the approved worker safety and health program, upon written request, to the affected workers or their designated representatives. (c) Updates. (1) Contractors must submit an update of the worker safety and health program to the appropriate 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. (2) Contractors must submit annually to DOE either an updated worker safety and health program for approval or a letter stating that no changes are necessary in the currently approved worker safety and health program. (3) Contactors must incorporate in the worker safety and health program any changes, conditions, or workplace safety and health standards directed by DOE consistent with the requirements of this part and DEAR 970.5204–2, Laws, Regulations and DOE Directives (December, 2000) and associated contract clauses. (d) Labor Organizations. If a contractor employs or supervises workers who are represented for collective bargaining by a labor organization, the contractor must: (1) Give the labor organization timely notice of the development and implementation of the worker safety and health program and any updates thereto; and (2) Upon timely request, bargain concerning implementation of this part, consistent with the Federal labor law	
§ 851.12 Implementation. (a) Contractors must implement the requirements of this part. (b) Nothing in this part precludes a contractor from taking any additional protective action that is determined to be necessary to protect the safety and health of workers.	 Y15-635PD, B&W Y-12 Integrated Safety Management System Y72-001, Environment, Safety and Health Policy Y73-001, B&W Y-12 Safety Program Y73-200PD, Industrial Hygiene Program

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10 CFR 851 Requirement	Implementing Mechanisms
§ 851.13 Compliance. (a) Contractors must achieve compliance with all the requirements of Subpart C of this part, and their approved worker safety and health program no later than May 25, 2007. Contractors may be required to comply contractually with the requirements of this rule before February 9, 2007. (b) In the event a contractor has established a written safety and health program, an Integrated Safety Management System (ISMS) description pursuant to the DEAR Clause, or an approved Work Smart Standards (WSS) process before the date of issuance of the final rule, the Contractor may use that program, description, or process as the worker safety and health program required by this part 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 the existing program, description, or process, that satisfy the requirements of this part and that provide a workplace as safe and healthful as would be provided by the requirements of this part. (c) Nothing in this part shall be construed to limit or otherwise affect contractual obligations of a contractor to comply with contractual requirements that are not inconsistent with the requirements of this part.	Y73-004PD, B&W Y-12 10 CFR Part 851 Worker Safety and Health Program – Appendix B Y15-635PD, B&W Y-12 Integrated Safety Management System
Subpart C—Specific Program Requirements § 851.20 Management responsibilities and worker rights and responsibilities. (a) Management responsibilities. Contractors are responsible for the safety and health of their workforce and must ensure that contractor management at a covered workplace: (1) Establish written policy, goals, and objectives for the worker safety and health program;	 Y72-001, Environment, Safety and Health Policy Y73-001, B&W Y-12 Safety Program Y73-200PD, Industrial Hygiene Program
(2) Use qualified worker safety and health staff (e.g., a certified industrial hygienist, or safety professional) to direct and manage the program;	 Y73-001, B&W Y-12 Safety Program Y73-200PD, Industrial Hygiene Program Y11-512, Employment
(3) Assign worker safety and health program responsibilities, evaluate personnel performance, and hold personnel accountable for worker safety and health performance;	 Y11-415, Employee Discipline Y15-635PD, B&W Y-12 Integrated Safety Management System Y73-001, B&W Y-12 Safety Program Y73-200PD, Industrial Hygiene Program

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10 CFR 851 Requirement	Implementing Mechanisms
(4) Provide mechanisms 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;	 Y15-636, Integrated Safety Management Program Y17-001, Engineering, Design, and Support During Construction Y73-001, B&W Y-12 Safety Program Y73-045, Job Hazard Analysis Y73-200PD, Industrial Hygiene Program
(5) Provide workers with access to information relevant to the worker safety and health program;	 Y73-001, B&W Y-12 Safety Program Y73-004PD, B&W Y-12 10 CFR Part 851 Worker Safety and Health Program Y15-635PD, B&W Y-12 Integrated Safety Management System
(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;	 Y15-635PD, B&W Y-12 Integrated Safety Management System Y72-001, Environment, Safety and Health Policy Y73-001, B&W Y-12 Safety Program Y73-200PD, Industrial Hygiene Program
(7) Provide for prompt response to such reports and recommendations;	Y15-635PD, B&W Y-12 Integrated Safety Management System
(8) Provide for regular communication with workers about workplace safety and health matters;	Y73-001, B&W Y-12 Safety Program Y15-635PD, B&W Y-12 Integrated Safety Management System
(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 of death, serious physical harm, or other serious hazard to workers, in circumstances where the workers believe there is insufficient time to utilize 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 Poster in the workplace where it is accessible to all workers.	Y15-635PD, B&W Y-12 Integrated Safety Management System Y73-001, B&W Y-12 Safety Program Y15-635PD, B&W Y-12 Integrated Safety Management System Y73-001, B&W Y-12 Safety Program Y73-170, Safety and Health Incident and Near-miss Investigation and Reporting

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10 CFR 851 Requirement	Implementing Mechanisms
(b) Worker rights and responsibilities. Workers must comply with the requirements of this part, including the worker safety and health program, which are applicable to their own actions and conduct. Workers at a covered workplace have the right, without reprisal, to:	General Employee Training (GET)
(1) Participate in activities described in this section on official time; (2) Have access to:	Y15-635PD, B&W Y-12 Integrated Safety Management System Y72-001, Environment, Safety and Health Policy Y73-001, B&W Y-12 Safety Program Y73-200PD, Industrial Hygiene Program
(2) Have access to: (i) DOE safety and health publications; (ii) The worker safety and health program for the covered workplace; (iii) The standards, controls, and procedures applicable to the covered workplace; (iv) The safety and health poster that informs the worker of relevant rights and responsibilities; (v) Limited information on any recordkeeping log (OSHA Form 300). Access is subject to Freedom of Information Act requirements and restrictions; and (vi) The DOE Form 5484.3 (the DOE equivalent to OSHA Form 301) that contains the employee's name as the injured or ill worker;	 Y15-635PD, B&W Y-12 Integrated Safety Management System Y72-001, Environment, Safety and Health Policy Y73-001, B&W Y-12 Safety Program Y73-200PD, Industrial Hygiene Program
(3) Be notified when monitoring results indicate the worker was overexposed to hazardous materials;	Y15-635PD, B&W Y-12 Integrated Safety Management System Y72-001, Environment, Safety and Health Policy Y73-001, B&W Y-12 Safety Program Y73-200PD, Industrial Hygiene Program
(4) Observe monitoring or measuring of hazardous agents and have the results of their own exposure monitoring;	 Y15-635PD, B&W Y-12 Integrated Safety Management System Y72-001, Environment, Safety and Health Policy Y73-001, B&W Y-12 Safety Program Y73-200PD, Industrial Hygiene Program
(5) Have a representative authorized by employees accompany the Director or his authorized personnel during the physical inspection of the workplace for the purpose of aiding the inspection. When no authorized employee representative is available, the Director or his authorized representative must consult, as appropriate, with employees on matters of worker safety and health;	 Y15-635PD, B&W Y-12 Integrated Safety Management System Y72-001, Environment, Safety and Health Policy Y73-001, B&W Y-12 Safety Program Y73-200PD, Industrial Hygiene Program

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10 CFR 851 Requirement	Implementing Mechanisms	
(6) Request and receive results of inspections and accident investigations;	 Y15-635PD, B&W Y-12 Integrated Safety Management System Y72-001, Environment, Safety and Health Policy Y73-001, B&W Y-12 Safety Program Y73-200PD, Industrial Hygiene Program 	
(7) Express concerns related to worker safety and health;	 Y15-635PD, B&W Y-12 Integrated Safety Management System Y72-001, Environment, Safety and Health Policy Y73-001, B&W Y-12 Safety Program Y73-200PD, Industrial Hygiene Program 	
(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 physical harm to the worker coupled with a reasonable belief that there is insufficient time to seek effective redress through normal hazard reporting and abatement procedures; and	 Y15-635PD, B&W Y-12 Integrated Safety Management System Y72-001, Environment, Safety and Health Policy Y73-001, B&W Y-12 Safety Program Y73-200PD, Industrial Hygiene Program 	
(9) Stop work when the worker discovers employee exposures to imminently dangerous conditions or other serious hazards; provided that any stop work authority must be exercised in a justifiable and responsible manner in accordance with procedures established in the approved worker safety and health program.	 Y15-635PD, B&W Y-12 Integrated Safety Management System Y73-001, B&W Y-12 Safety Program 	
§ 851.21 Hazard identification and assessment. (a) Contractors must establish procedures to identify existing and potential workplace hazards and assess the risk of associated workers injury and illness. Procedures must include methods to: (1) Assess worker exposure to chemical, physical, biological, or safety workplace hazards through appropriate workplace monitoring; (2) Document assessment for chemical, physical, biological, and safety workplace hazards using recognized exposure assessment and testing methodologies and using of 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 analyses; (7) Review site safety and health experience information; and (8) Consider interaction between workplace hazards and other hazards such as radiological hazards.	 SP-610-004, Hazard Analysis Y13-009, Project Risk Management Y15-635PD, B&W Y-12 Integrated Safety Management System Y15-636, Integrated Safety Management Program Y17-001, Engineering, Design, and Support During Construction Y17-64-301, Construction Work Planning Y17-64-302, Execution of Direct Hire Work Y17-64-401, Construction Subcontract Management 	

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(b) Contractors must submit to the Head of DOE Field Element a list of closure facility hazards and the established controls within 90 days after identifying such hazards. The	Y18-012, Integrated Work Control Manual Y73-001, B&W Y-12 Safety Program Y73-04-007, Performing and Documenting Standard Industrial Hazards Analyses Y73-045, Job Hazard Analysis Y73-029, Ergonomics Program Instruction Y73-200PD, Industrial Hygiene Program Y73-004PD, B&W Y-12 10 CFR Part 851 Worker
Head of DOE Field Element, with concurrence by the Cognizant Secretarial Officer, has 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.	Safety and Health Program
(c) Contractors must perform the activities identified in paragraph (a) of this section, initially to obtain baseline information and as often thereafter as necessary to ensure compliance with the requirements in this Subpart.	 Y73-200PD, Industrial Hygiene Program Y15-635PD, B&W Y-12 Integrated Safety Management System Y79-001, Y-12 Fire Protection Program Manual
§ 851.22 Hazard prevention and abatement. (a) Contractors must 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. (1) For hazards identified either in the facility design or during the development of procedures, controls must be incorporated in the appropriate facility design or procedure. (2) For existing hazards identified in the workplace, contractors must: (i) Prioritize and implement abatement actions according to the risk to workers; (ii) Implement interim protective measures pending final abatement; and (iii) Protect workers from dangerous safety and health conditions;	 Y13-009, Project Risk Management Y15-232, Technical Procedure Process Y15-312, Issues Management Y15-635PD, B&W Y-12 Integrated Safety Management System Y15-636, Integrated Safety Management Program Y17-001, Engineering, Design, and Support During Construction Y17-64-301, Construction Work Planning Y17-64-302, Execution of Direct Hire Work Y17-64-401, Construction Subcontract Management

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10 CFR 851 Requirement	Implementing Mechanisms
	Y18-012, Integrated Work Control Manual Y18-35-AD-0201, Electrical Caution Tags Y18-102, Power Distribution Work Permit Y18-34-4202, ORR Power Distribution Work Permit Process Y73-001, B&W Y-12 Safety Program Y73-04-007, Performing and Documenting Standard Industrial Hazards Analyses Y73-045, Job Hazard Analysis Y73-200PD, Industrial Hygiene Program Y79-001, Y-12 Fire Protection Program Manual
 (b) Contractors must 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. 	 Y13-009INS, Project Risk Management Y15-232, Technical Procedure Process Y15-312, Issues Management Y15-635PD, B&W Y-12 Integrated Safety Management System Y15-636, Integrated Safety Management Program Y17-001, Engineering, Design, and Support During Construction Y17-64-301, Construction Work Planning Y17-64-302, Execution of Direct Hire Work Y17-64-401, Construction Subcontract Management Y18-012, Integrated Work Control Manual Y18-34-4202, ORR Power Distribution Work Permit Process Y18-35-AD-0201, Electrical Caution Tags Y18-102, Power Distribution Work Permit

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10 CFR 851 Requirement	Implementing Mechanisms
	 Y73-001, B&W Y-12 Safety Program Y73-045, Job Hazard Analysis Y73-116, Personal Protective Equipment Program Y73-164, Subcontract Environment, Safety and Health Management Y73-200PD, Industrial Hygiene Program
(c) Contractors must address hazards when selecting or purchasing equipment, products, and services.	Y13-009INS, Project Risk Management Y15-232, Technical Procedure Process Y15-312, Issues Management Y15-635PD, B&W Y-12 Integrated Safety Management System Y15-636, Integrated Safety Management Program Y17-001, Engineering, Design, and Support During Construction Y17-64-301, Construction Y17-64-301, Construction Work Planning Y17-64-401, Construction Subcontract Management Y18-012, Integrated Work Control Manual Y13-001, B&W Y-12 Safety Program Y73-04-007, Performing and Documenting Standard Industrial Hazards Analyses Y73-045, Job Hazard Analysis Y73-164, Subcontract Environment, Safety and Health Management
	Y73-200PD, Industrial Hygiene Program

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10 CFR 851 Requirement	Implementing Mechanisms
	Y73-219, Y-12 Plant Lead Worker Protection Program
§ 851.23 Safety and health standards. (a) Contractors must comply with the following safety and health standards that are applicable to the hazards at their covered workplace:	See Subsections Below
(1) Title 10 Code of Federal Regulations (CFR) 850, "Chronic Beryllium Disease Prevention Program."	 Y17-001, Engineering, Design, and Support During Construction Y73-116, Personal Protective Equipment Program Y73-201, Chronic Beryllium Disease 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."	Y73-170, Safety and Health Incident and Near-miss Investigation and Reporting
(3) Title 29 CFR, Part 1910, "Occupational Safety and Health Standards," excluding 29 CFR 1910.1096, "Ionizing Radiation."	 Y15-635PD, B&W Y-12 Integrated Safety Management System Y15-636, Integrated Safety Management Program Y17-001, Engineering, Design, and Support During Construction Y17-015, Welding Program Manual Y17-64-301, Construction Work Planning Y17-64-302, Execution of Direct Hire Work Y17-64-401, Construction Subcontract Management Y17-69-410, Initiation, Review, Issue, and Termination of Excavation/ Penetration Permit(s) Y18-012, Integrated Work Control Manual Maintenance Job Planning and Execution Y73-001, B&W Y-12 Safety Program

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10 CFR 851 Requirement	Implementing Mechanisms
	 Y73-200PD, Industrial Hygiene Program Y79-001, Y-12 Fire Protection Program Manual
(4) Title 29 CFR, Part 1915, "Shipyard Employment."	Not Applicable at Y-12
(5) Title 29 CFR, Part 1917, "Marine Terminals."	Not Applicable at Y-12
(6) Title 29 CFR, Part 1918, "Safety and Health Regulations for Longshoring."	Not Applicable at Y-12
(7) Title 29 CFR, Part 1926, "Safety and Health Regulations for Construction."	Y15-635PD, B&W Y-12 Integrated Safety Management System Y15-636, Integrated Safety Management Program Y17-64-301, Construction Work Planning Y73-528, Electrical Safety Manual Y17-64-302, Execution of Direct Hire Work Y17-64-401, Construction Subcontract Management Y17-69-410, Initiation, Review, Issue, and Termination of Excavation/ Penetration Permit(s) Y73-001, B&W Y-12 Safety Program Y73-164, Subcontract Environment, Safety and Health Management Y73-200PD, Industrial Hygiene Program Y79-001, Y-12 Fire Protection Program Manual

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10 CFR 851 Requirement	Implementing Mechanisms
(8) Title 29 CFR, Part 1928, "Occupational Safety and Health Standards for Agriculture."	Not Applicable at Y-12
(9) American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices," (2005) (incorporated by reference, see § 851.27) 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.	 Y73-001, B&W Y-12 Safety Program Y73-114, Laser Hazard Control Program Y73-200PD, Industrial Hygiene Program
(10) American National Standards Institute (ANSI) Z88.2, "American National Standard for Respiratory Protection," (1992) (incorporated by reference, see § 851.27).	 Y73-001, B&W Y-12 Safety Program Y73-050, Respiratory Program Y73-063, Supplied-Air Respirator Instruction Y73-066, Powered Air Purifying Respirator (PAPR) Y73-067, Self-Contained Breathing Apparatus (SCBA)
(11) ANSI Z136.1, "Safe Use of Lasers," (2000) (incorporated by reference, see § 851.27).	Y73-114, Laser Hazard Control
(12) ANSI Z49.1, "Safety in Welding, Cutting and Allied Processes," sections 4.3 and E4.3 (1999) (incorporated by reference, see § 851.27).	 Y73-001, B&W Y-12 Safety Program Y73-116, Personal Protective Equipment Program Y73-164, Subcontract Environment, Safety and Health Management Y73-200PD, Industrial Hygiene Program Y79-002, Welding Burning and Hotwork Y17-015, Welding Program Description
(13) National Fire Protection Association (NFPA) 70, "National Electrical Code," (2005) (incorporated by reference, see § 851.27).	Y73-001, B&W Y-12 Safety Program Y73-063, Supplied-Air Respirator Instruction Y73-107PD, Lockout/ Tagout for Personnel Protection Program Description Y73-164, Subcontract Environment, Safety and Health Management

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10 CFR 851 Requirement	Implementing Mechanisms
	 Y73-200PD, Industrial Hygiene Program Y73-750, Confined Space Entry Program Y73-528, Electrical Safety Manual
(14) NFPA 70E, "Standard for Electrical Safety in the Workplace," (2004) (incorporated by reference, see §851.27).	 Y18-35-AD-0201, Electrical Caution Tags Y18-102, Power Distribution Work Permit Y40-35-4202, ORR Power Distribution Work Permit Process Y73-001, B&W Y-12 Safety Program Y73-528, Electrical Safety Manual Y73-107PD, Lockout/ Tagout for Personnel Protection Program Description Y73-200PD, Industrial Hygiene Program Y73-528, Electrical Safety Manual Y18-102, Power Distribution Work Permit
(b) Nothing in this part must be construed as relieving a contractor from complying with any additional specific safety and health requirement that it determines to be necessary to protect the safety and health of workers.	Y73-004PD, B&W Y-12 10 CFR Part 851 Worker Safety and Health Program
§ 851.24 Functional areas. (a) Contractors must have a structured approach to their worker safety and health program which at a minimum, include provisions for the following applicable functional areas in their worker safety and health program: construction safety; fire protection; firearms safety; explosives safety; pressure safety; electrical safety; industrial hygiene; occupational medicine; biological safety; and motor vehicle safety. (b) In implementing the structured approach required by paragraph (a) of this section, contractors must comply with the applicable standards and provisions in Appendix A of this part, entitled "Worker Safety and Health Functional Areas."	 Y11-542, Subcontracting for Staff Augmentation Services Y17-001, Engineering, Design, and Support During Construction Y72-005, Y-12 Site Fire Protection Policy Y73-164, Subcontract Environment, Safety and Health Management Y73-200PD Industrial Hygiene Program Y73-402, Pressure Safety Program Y79-001, Y-12 Fire Protection Program Manual

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10 CFR 851 Requirement	Implementing Mechanisms
§ 851.25 Training and information. (a) Contractors must develop and implement a worker safety and health training and information program to ensure that all workers exposed or potentially exposed to hazards are provided with the training and information on that hazard in order to perform their duties in a safe and healthful manner. (b) The 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 trained and informed; and (3) Additional training when safety and health information or a change in workplace conditions indicates that a new or increased hazard exists. (c) Contractors must provide training and information to workers who have worker safety and health program responsibilities that is necessary for them to carry out those responsibilities.	 Y73-001, <i>B&W Y-12</i> Safety Program Y73-200PD, Industrial Hygiene Program Y73-208INS, Hazard Communication Program Instruction. Y79-001, Y-12 Fire Protection Program Manual Y90-027, Conduct of Training Manual
§ 851.26 Recordkeeping and reporting. (a) Recordkeeping. Contractors must: (1) Establish and maintain complete and accurate records of all hazard inventory information, hazard assessments, exposure measurements, and exposure controls. (2) Ensure that the work-related injuries and illnesses of its workers and subcontractor workers are recorded and reported accurately and consistent with DOE Manual 231.1–1A, Environment, Safety and Health Reporting Manual, September 9, 2004 (incorporated by reference, see § 851.27). (3) Comply with the applicable occupational injury and illness recordkeeping and reporting workplace safety and health standards in § 851.23 at their site, unless otherwise directed in DOE Manual 231.1–1A. (4) Not conceal nor destroy any information concerning non-compliance or potential noncompliance with the requirements of this part.	 Y73-045, Job Hazard Analysis Y73-164, Subcontract Environment, Safety and Health Management Y73-170, Safety and Health Incident and Near-miss Investigation and Reporting Y73-200PD, Industrial Hygiene Program Y79-001, Y-12 Fire Protection Program Manual
(b) Reporting and investigation. Contractors must: (1) Report and investigate accidents, injuries and illness; and (2) Analyze related data for trends and lessons learned (reference DOE Order 225.1A, Accident Investigations, November 26, 1997).	 Y14-192, Occurrence Notification and Reporting Y15-331, Lessons Learned Y73-001, B&W Y-12 Safety Program Y73-170, Safety and Health Incident and Near-miss Investigation and Reportings Y79-001, Y-12 Fire Protection Program Manual

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10 CFR 851 Requirement	Implementing
10 Of K 031 Kequitement	Mechanisms
§ 851.27 Reference sources. (a) Materials incorporated by reference. (1) General. The following standards which are not otherwise set forth in part 851 are incorporated by reference and made a part of part 851. The standards listed in this section have been approved for incorporation by reference by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. (2) Availability of standards. The standards incorporated by reference are available for inspection at: (i) National Archives and Records Administration (NARA). For more information on the availability of this material at NARA, call 202–741–6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html (ii) U.S. Department of Energy, Office of Environment, Safety and Health, Forrestal Building, 1000 Independence Ave., SW., Washington, DC 20585. (iii) American National Standards Institute Headquarters, 25 West 43rd Street, New York, NY 10036. Telephone number: 212–642–4980, or go to: http://www.ansi.org.	 Y17-001, Engineering, Design, and Support During Construction Y17-004, Pressure Vessels, Systems, and Relief Devices Y17-015, Welding Program Manual Y17-69-351PD, Evaluation Process for Use-of National Consensus Codes and Standards Y73-528, Electrical Safety Manual
(iv) National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169. Telephone: 617 770–3000, or go to: http://www.nfpa.org. (v) American Conference of Governmental Industrial Hygienist (ACGIH), 1330 Kemper Meadow Drive, Cincinnati, OH 45240. Telephone number 513–742–2020, or go to: http://www.acgih.org. (vi) American Society of Mechanical Engineers (ASME), P.O. Box 2300 Fairfield, NJ 07007. Telephone: 800–843–2763, or got to: http://www.asme.org. (b) List of standards incorporated by reference. (1) American National Standards Institute (ANSI) 288.2, "American National Standard for Respiratory Protection," (1992). (2) ANSI Z136.1, "Safe Use of Lasers," (2000). (3) ANSI Z49.1, "Safety in Welding, Cutting and Allied Processes," sections 4.3 and E4.3, (1999). (4) National Fire Protection Association (NFPA) 70, "National Electrical Code," (2005). (5) NFPA 70E, "Standard for Electrical Safety in the Workplace," (2004). (6) American Conference of Governmental Industrial Hygienists, "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices," (2005). (7) American Society of Mechanical Engineers (ASME) Boilers and Pressure Vessel Code, sections I through XII including applicable Code Cases, (2004). (8) ASME B31 (ASME Code for Pressure Piping) as follows: (i) B31.4—2001—Power Piping, and B31.1a—2002—Addenda to ASME B31.1—2001; (ii) B31.2—1968—Fuel Gas Piping; (iii) B31.3—2002—Process Piping; (iv) B31.4—2002—Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids; (v) B31.8—2001—Refrigeration Piping and Heat Transfer Components, and B31.5a—2004, Addenda to ASME B31.5—2001; (vi) B31.8—2003—Gas Transmission and Distribution Piping Systems; (vii) B31.8—2003—Gas Transmission and Distribution Piping Systems; (vii) B31.9—1996—Building Services Piping; (vii) B31.9—1996—Building Services Piping; (vii) B31.9—1996—Building Services Piping; (vii) B31.9—1996—Building Services Piping; (vii) B31.9—1906—Building Services Piping) (vii) B31.9—1006—	 Safety Manual Y73-001, B&W Y-12 Safety Program Y73-115, Personal Protective Equipment Program Y73-402, Pressure Safety Program Y73-528, Electrical Safety Manual Y79-001, Y-12 Fire Protection Program Manual The scope of ASME B31.4, B31.8, B31.8S, and B31.11 is not applicable to work performed at Y-12. Notes: (1) B31.3 or NFPA 54 will be used as equivalent to B31.2 since this code is no longer used by industry or supported by ASME. (2) B31.8 and B31.8S do not apply to the installation and operation of gas piping and gas equipment on DOE premises. On-site gas piping and equipment are addressed by NFPA 54 or B31.3. (3) The reference versions of these codes and standards are out of date. The current version will be implemented unless a previous version is established by a Code

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Subpart D—Variances	• Y73-004PD, B&W Y-	
§ 851.30 Consideration of variances.	12 10 CFR Part 851	
(a) Variances shall be granted by the Under Secretary after considering the	Worker Safety and	
recommendation of the Assistant Secretary for Environment, Safety and Health. The	Health Program	
authority to grant a variance cannot be delegated.		
(b) The application must satisfy the requirements for applications specified in § 851.31.		
§ 851.31 Variance process.	 Y73-004PD, B&W Y- 	
(a) Application. Contractors desiring a variance from a safety and health standard, or	12 10 CFR Part 851	
portion thereof, may submit a written application containing the information in paragraphs (c)	Worker Safety and	
and (d) of this section to the appropriate CSO.	Health Program	
(1) The CSO may forward the application to the Assistant Secretary for Environment,		
Safety and Health.		
(2) If the CSO does not forward the application to the Assistant Secretary for		
Environment, Safety and Health, the CSO must return the application to the contractor with		
a written statement explaining why the application was not forwarded. (3) Upon receipt of an application from a CSO, the Assistant Secretary for Environment,		
Safety and Health must review the application for a variance and make a written		
recommendation to:		
(i) Approve the application;		
(ii) Approve the application with conditions; or		
(iii) Deny the application.		
(b) Defective applications. If an application submitted pursuant to § 851.31(a) is		
determined by the Assistant Secretary for Environment, Safety and Health to be incomplete,		
the Assistant Secretary may:		
(1) Return the application to the contractor with a written explanation of what information		
is needed to permit consideration of the application; or		
(2) Request the contractor to provide necessary information.		
(c) Content. All variance applications submitted pursuant to paragraph (a) of this section		
must include:		
(1) The name and address of the contractor;		
(2) The address of the DOE site or sites involved;		
(3) A specification of the standard, or portion thereof, from which the contractor seeks a		
variance; (4) A description of the steps that the contractor has taken to inform the affected workers		
of the application, which must include giving a copy thereof to their authorized		
representative, posting a statement, giving a summary of the application and specifying		
where a copy may be examined at the place or places where notices to workers are		
normally posted; and		
(5) A description of how affected workers have been informed of their right to petition the		
Assistant Secretary for Environment, Safety and Health or designee for a conference; and		
(6) Any requests for a conference, as provided in § 851.34.		
(d) Types of variances. Contractors may apply for the following types of variances:		
(1) Temporary variance. Applications for a temporary variance pursuant to paragraph (a)		
of this section must be submitted at least 30 days before the effective date of a new safety		
and health standard and, in addition to the content required by paragraph (c) of this section,		
must include:		
(i) A statement by the contractor explaining the contractor is unable to comply with the		
standard or portion thereof by its effective date and a detailed statement of the factual basis		
and representations of qualified persons that support the contractor's statement;		
(ii) A statement of the steps the contractor has taken and plans to take, with specific dates if appropriate, to protect workers against the hazard covered by the standard;		
(iii) A statement of when the contractor expects to be able to comply with the standard		
and of what steps the contractor has taken and plans to take, with specific dates if		
appropriate, to come into compliance with the standard;		
Sept. Sp. 300, to come into compilation with the citation,		

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10 CFR 851 Requirement	Implementing Mechanisms
(iv) A statement of the facts the contractor would show to establish that: (A) The contractor is unable to comply with the standard by its effective date because of unavailability of professional or technical personnel or materials and equipment needed to come into compliance with the standard or because necessary construction or alteration of facilities cannot be completed by the effective date; (B) The contractor is taking all available steps to safeguard the workers against the hazards covered by the standard; and (C) The contractor has an effective program for coming into compliance with the standard as quickly as practicable. (2) Permanent variance. An application submitted for a permanent variance pursuant to paragraph (a) of this section must, in addition to the content required in paragraph (c) of this section, include: (i) A description of the conditions, practices, means, methods, operations, or processes used or proposed to be used by the contractor; and (ii) A statement showing how the conditions, practices, means, methods, operations, or processes used or proposed to be used would provide workers a place of employment which is as safe and healthful as would result from compliance with the standard from which a variance is sought. (3) National defense variance. (i) An application submitted for a national defense variance pursuant to paragraph (a) of this section must, in addition to the content required in paragraph (c) of this section, include: (A) A statement by the contractor showing that the variance sought is necessary to avoid serious impairment of national defense; and (B) A statement showing how the conditions, practices, means, methods, operations, or processes used or proposed to be used would provide workers a safe and healthful place of employment in a manner that, to the extent practical taking into account the national defense wariance may be granted for a maximum of six months, unless there is a showing that a longer period is essential to carrying out a national defense miss	
§ 851.32 Action on variance requests. (a) Procedures for an approval recommendation. (1) If the Assistant Secretary for Environment, Safety and Health recommends approval of a variance application, the Assistant Secretary must forward to the Under Secretary the variance application and the approval recommendation including a discussion of the basis for the recommendation and any terms and conditions proposed for inclusion as part of the approval. (2) If the Under Secretary approves a variance, the Under Secretary must notify the Assistant Secretary for Environment, Safety and Health who must notify the Office of Price-Anderson Enforcement and the CSO who must promptly notify the contractor. (3) The notification must include 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. (4) If the Under Secretary denies a variance, the Under Secretary must notify the Assistant Secretary for Environment, Safety and Health who must notify the appropriate CSO who must notify the contractor. (5) The notification must include the grounds for denial. (b) Approval criteria. A variance may be granted if the variance: (1) Is consistent with section 3173 of the NDAA; (2) Does 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 variance requested.	Y73-004PD, B&W Y-12 10 CFR Part 851 Worker Safety and Health Program

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(c) Procedures for a denial recommendation. (1) If the Assistant Secretary for Environment, Safety and Health recommends denial of a variance application, the Assistant Secretary must notify the CSO of the denial recommendation and the grounds for the denial recommendation. (2) Upon receipt of a denial recommendation, the CSO may: (i) Notify the contractor that the variance application is denied on the grounds cited by the Assistant Secretary; or (ii) Forward to the Under Secretary the variance application, the denial recommendation, the grounds for the denial recommendation, and any information that supports an action different than that recommended by the Assistant Secretary. (3) If the CSO forwards the application to the Under Secretary, the procedures in paragraphs (a)(2), (3), (4) and (5) of this section apply. (4) A denial of an application pursuant to this section shall be without prejudice to submitting of another application (d) Grounds for denial of a variance. A variance may be denied if: (1) Enforcement of the violation would be handled as a de minimis violation (defined as a deviation from the requirement of a standard that has no direct or immediate relationship to safety or health, and no enforcement action will be taken); (2) When a variance is not necessary for the conditions, practice, means, methods, operations, or processes used or proposed to be used by contractor; (3) Contractor does not demonstrate that the approval criteria are met.	•	Y73-004PD, B&W Y-12 10 CFR Part 851 Worker Safety and Health Program	
§ 851.33 Terms and conditions. A variance may contain appropriate terms and conditions including, but not limited to, provisions that: (a) Limit its duration; (b) Require alternative action; (c) Require partial compliance; and (d) Establish a schedule for full or partial compliance.	•	Y73-004PD, B&W Y-12 10 CFR Part 851 Worker Safety and Health Program	

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10 CFR 851 Requirement	Implementing
	Mechanisms
§ 851.34 Requests for conferences. (a) Within the time allotted by a notice of the filling of an application, any affected contractor or worker may file with the Assistant Secretary for Environment, Safety and Health a request for a conference on the application for a variance. (b) A request for a conference filed pursuant to paragraph (a) of this section must include: (1) A concise statement explaining how the contractor or worker would be affected by the variance applied for, including relevant facts; (2) A specification of any statement or representation in the application which is denied, and a concise summary of the evidence that would be adduced in support of each	Y73-004PD, B&W Y-12 10 CFR Part 851 Worker Safety and Health Program
denial; and (3) Any other views or arguments on any issue of fact or law presented. (c) The Assistant Secretary for Environment, Safety and Health, or designee, must respond to a request within fifteen days and, if the request is granted, indicate the time and place of the conference and the DOE participants in the conference.	
Subpart E—Enforcement Process	Y76-001, Enforcement
§ 851.40 Investigations and inspections. (a) The Director may initiate and conduct investigations and inspections relating to the scope, nature and extent of compliance by a contractor with the requirements of this part and take such action as the Director deems necessary and appropriate to the conduct of the investigation or inspection. DOE Enforcement Officers have the right to enter work areas without delay to the extent practicable, to conduct inspections under this subpart. (b) Contractors must fully cooperate with the Director during all phases of the enforcement process and provide complete and accurate records and documentation as requested by the Director during investigation or inspection activities. (c) Any worker or worker representative may request that the Director initiate an investigation or inspection pursuant to paragraph (a) of this section. A request for an investigation or inspection must describe the subject matter or activity to be investigated or inspected as fully as possible and include supporting documentation and information. The worker or worker representative has the right to remain anonymous upon filing a request for an investigation or inspection. (d) The Director must inform any contractor that is the subject of an investigation or inspection in writing at the initiation of the investigation or inspection and must inform the contractor of the general purpose of the investigation or inspection. (e) DOE shall not disclose information or documents that are obtained during any investigation or inspection unless the Director directs or authorizes the public disclosure of the investigation. Prior to such authorization, DOE must determine that disclosure is not precluded by the Freedom of Information Act, 5 U.S.C. 552 and part 1004 of this title. Once disclosed pursuant to the Director's authorization, the information or documents are a matter of public record.	Compliance Program

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(f) A request for confidential treatment of information for purposes of the Freedom of Information Act does not prevent disclosure by the Director if the Director determines	
Information Act does not prevent disclosure by the Director if the Director determines	
disclosure to be in the public interest and otherwise permitted or required by law.	
(g) During the course of an investigation or inspection, any contractor may submit any	
document, statement of facts, or memorandum of law for the purpose of explaining the	
contractor's position or furnish information which the contractor considers relevant to a	
matter or activity under investigation or inspection.	
(h) The Director may convene an informal conference to discuss any situation that	
might be a violation of a requirement of this part, its significance and cause, any corrective	
action taken or not taken by the contractor, any mitigating or aggravating circumstances,	
and any other information. A conference is not normally open to the public and DOE does	
not make a transcript of the conference. The Director may compel a contractor to attend	
the conference.	
(i) If facts disclosed by an investigation or inspection indicate that further action is	
unnecessary or unwarranted, the Director may close the investigation without prejudice.	
(j) The Director may issue enforcement letters that communicate DOE's expectations	
with respect to any aspect of the requirements of this part, including identification and	
reporting of issues, corrective actions, and implementation of the contractor's safety and	
health program; provided that an enforcement letter may not create the basis for any	
legally enforceable requirement pursuant to this part.	
(k) The Director may sign, issue and serve subpoenas.	
§ 851.41 Settlement. • -Y76-001, Enforcer	nent
(a) DOE encourages settlement of a proceeding under this subpart at any time if the Compliance Progra	
settlement is consistent with this part. The Director and a contractor may confer at any	
time concerning settlement. A settlement conference is not open to the public and DOE	
does not make a transcript of the conference.	
(b) Notwithstanding any other provision of this part, the Director may resolve any	
issues in an outstanding proceeding under this subpart with a consent order.	
(1) The Director and the contractor, or a duly authorized representative thereto, must	
sign the consent order and indicate agreement to the terms contained therein.	
(2) A contractor is not required to admit in a consent order that a requirement of this	
part has been violated. (3) DOE is not required to make a finding in a consent order that a	
contractor has violated a requirement of this part.	
(4) A consent order must set forth the relevant facts that form the basis for the order	
and what remedy, if any, is imposed.	
(5) A consent order shall constitute a final order.	
§ 851.42 Preliminary notice of violation. • Y76-001, Enforcement	nent
(a) Based on a determination by the Director that there is a reasonable basis to Compliance Progra	m
believe a contractor has violated or is continuing to violate a requirement of this part, the	
Director may issue a preliminary notice of violation (PNOV) to the contractor.	
(b) A PNOV must indicate:	
(1) The date, facts, and nature of each act or omission upon which each alleged	
violation is based;	
(2) The particular requirement involved in each alleged violation;	
(3) The proposed remedy for each alleged violation, including the amount of any civil	
penalty; and	
(4) The obligation of the contractor to submit a written reply to the Director within 30	
calendar days of receipt of the PNOV.	
(c) A reply to a PNOV must contain a statement of all relevant facts pertaining to an	
alleged violation.	
(1) The reply must:	
(i) State any facts, explanations and arguments that support a denial of the alleged	
violation;	
(ii) Demonstrate any extenuating circumstances or other reason why a proposed	
remedy should not be imposed or should be mitigated;	

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10 CFR 851 Requirement	Implementing Mechanisms
(iii) Discuss the relevant authorities that support the position asserted, including	
rulings, regulations, interpretations, and previous decisions issued by DOE; and	
(iv) Furnish full and complete answers to any questions set forth in the preliminary	
notice.	
(2) Copies of all relevant documents must be submitted with the reply.	
(d) If a contractor fails to submit a written reply within 30 calendar days of receipt of a	
PNOV:	
(1) The contractor relinquishes any right to appeal any matter in the preliminary notice;	
and	
(2) The preliminary notice, including any proposed remedies therein, constitutes a final	
order.	
(e) A copy of the PNOV must be prominently posted, once final, at or near the location	
where the violation occurred until the violation is corrected.	\(\frac{1}{2} = \frac{1}{2} = \fracc{1}{2} = \
§ 851.43 Final notice of violation.	• -Y76-001, Enforcement
(a) If a contractor submits a written reply within 30 calendar days of receipt of a	Compliance Program
preliminary notice of violation (PNOV), that presents a disagreement with any aspect of	
the PNOV and civil penalty, the Director must review the submitted reply and make a final	
determination whether the contractor violated or is continuing to violate a requirement of	
this part. (b) Based on a determination by the Director that a contractor has violated or is	
continuing to violate a requirement of this part, the Director may issue to the contractor a	
final notice of violation that states concisely the determined violation and any remedy,	
including the amount of any civil penalty imposed on the contractor. The final notice of	
violation must state that the contractor may petition the Office of Hearings and Appeals for	
review of the final notice in accordance with 10 CFR part 1003, subpart G.	
(c) If a contractor fails to submit a petition for review to the Office of Hearings and	
Appeals within 30 calendar days of receipt of a final notice of violation pursuant to §	
851.42:	
(1) The contractor relinquishes any right to appeal any matter in the final notice; and	
(2) The final notice, including any remedies therein, constitutes a final order.	
§ 851.44 Administrative appeal.	Y76-001, Enforcement
(a) Any contractor that receives a final notice of violation may petition the Office of	Compliance Program
Hearings and Appeals for review of the final notice in accordance with part 1003, subpart	
G of this title, within 30 calendar days from receipt of the final notice.	
(b) In order to exhaust administrative remedies with respect to a final notice of	
violation, the contractor must petition the Office of Hearings and Appeals for review in	
accordance with paragraph (a) of this section.	
§ 851.45 Direction to NNSA contractors.	• Y73-004PD, <i>B&W Y-12</i>
(a) Notwithstanding any other provision of this part, the NNSA Administrator, rather	10 CFR Part 851 Worker
than the Director, signs, issues and serves the following actions that direct NNSA	Safety and Health
contractors:	Program
(1) Subpoenas;	
(2) Orders to compel attendance; (3) Disclosures of information or decuments obtained during an investigation or	
(3) Disclosures of information or documents obtained during an investigation or	
inspection; (4) Proliminary notices of violations; and	
(4) Preliminary notices of violations; and (5) Final notices of violations.	
(b) The NNSA Administrator shall act after consideration of the Director's	
recommendation.	
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level of detail within the construction project safety and health plan should be

and approved as required by § 851.11.

commensurate with the size, complexity and risk level of the construction project. The content of this plan need not duplicate those provisions that were previously submitted

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10 CFR 851 Requirement **Implementing** Mechanisms Appendix A to Part 851—Worker Safety and Health Functional Areas Y15-635PD, B&W Y-12 This appendix establishes the mandatory requirements for implementing the Integrated Safety applicable functional areas required by §851.24. Management System 1. Construction Safety Y15-636, Integrated (a) For each separately definable construction activity (e.g., excavations, foundations, Safety Management structural steel, roofing) the construction contractor must: Program (1) Prepare and have approved by the construction manager an activity hazard Y17-64-301, analysis prior to commencement of affected work. Such analyses must: Construction Work (i) Identify foreseeable hazards and planned protective measures; Planning (ii) Address further hazards revealed by supplemental site information (e.g., site Y17-64-302, Execution of characterization data, as-built drawings) provided by the construction manager; Direct Hire Work (iii) Provide drawings and/or other documentation of protective measures for which Y17-64-401, applicable Occupational Safety and Health Administration (OSHA) standards require Construction Subcontract preparation by a Professional Engineer or other qualified professional, and (iv) Identify Management competent persons required for workplace inspections of the construction activity, where • Y73-001, B&W Y-12 required by OSHA standards. Safety Program (2) Ensure workers are aware of foreseeable hazards and the protective measures Y73-045, Job Hazard described within the activity analysis prior to beginning work on the affected activity. Analysis (3) Require that workers acknowledge being informed of the hazards and protective Y73-164, Subcontract measures associated with assigned work activities. Those workers failing to utilize Environment, Safety and appropriate protective measures must be subject to the construction contractor's Health Management disciplinary process. Y73-200PD, Industrial (b) During periods of active construction (i.e., excluding weekends, weather delays, or Hygiene Program other periods of work inactivity), the construction contractor must have a designated representative on the construction worksite who is knowledgeable of the project's hazards and has full authority to act on behalf of the construction contractor. The contractor's designated representative must make frequent and regular inspections of the construction worksite to identify and correct any instances of noncompliance with project safety and health requirements. (c) Workers must be instructed to report to the construction contractor's designated representative, hazards not previously identified or evaluated. If immediate corrective action is not possible or the hazard falls outside of project scope, the construction contractor must immediately notify affected workers, post appropriate warning signs, implement needed interim control measures, and notify the construction manager of the action taken. The contractor or the designated representative must stop work in the affected area until appropriate protective measures are established. (d) The construction contractor must prepare a written construction project safety and health plan to implement the requirements of this section and obtain approval of the plan by the construction manager prior to commencement of any work covered by the plan. In the plan, the contractor must designate the individual(s) responsible for on-site implementation of the plan, specify qualifications for those individuals, and provide a list of those project activities for which subsequent hazard analyses are to be performed. The

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10 CFR 851 Requirement	Implementing
·	Mechanisms
2. Fire Protection (a) Contractors must implement a comprehensive fire safety and emergency response program to protect workers commensurate with the nature of the work that is performed. This includes appropriate facility and site-wide fire protection, fire alarm notification and egress features, and 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. (b) An acceptable fire protection program must include those fire protection criteria and procedures, analyses, hardware and systems, apparatus and equipment, and personnel that would comprehensively ensure that the objective in paragraph 2(a) of this section is met. This includes meeting applicable building codes and National Fire Protection Association codes and standards.	 Y17-008, Fire Hazards Analysis Y18-002, Emergency and Exit Lighting Equipment Testing and Maintenance Y18-006, Freeze Protection Y40-136, Emergency Management Drills Y72-005, Y-12 Site Fire Protection Policy Y79-001, Y-12 Fire Protection Program Manual Y79-002, Welding, Burning, and Hotwork Operations Y79-54-FPE-004, Facility Related Fire Protection Engineering Assessment IA-02-084, Fire Protection Baseline Needs Assessment
3. Explosives Safety (a) Contractors responsible for the use of explosive materials must establish and implement a comprehensive explosives safety program. (b) Contractors must comply with the policy and requirements specified in the DOE Manual 440.1–1A, DOE Explosives Safety Manual, Contractor Requirements Document (Attachment 2), January 9, 2006 (incorporated by reference, see § 851.27). A Contractor may choose a successor version, if approved by DOE. (c) Contractors must determine the applicability of the explosives safety directive requirements to research and development laboratory type operations consistent with the DOE level of protection criteria described in the explosives safety directive.	Y79-001, Y-12 Fire Protection Program Manual
4. Pressure Safety (a) 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. (b) Contractors must ensure that all pressure vessels, boilers, air receivers, and supporting piping systems conform to: (1) The applicable American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (2004); sections I through section XII including applicable Code Cases (incorporated by reference, see §851.27) (2) The applicable ASME B31 (Code for Pressure Piping) standards as indicated below; and or as indicated in paragraph (b)(3) of this section: (i) B31.1—2001—Power Piping, and B31.1a—2002—Addenda to ASME B31.1—2001 (incorporated by reference, see §851.27); (ii) B31.2—1968—Fuel Gas Piping (incorporated by reference, see § 851.27); (iii) B31.3—2002—Process Piping (incorporated by reference, see § 851.27); (iv) B31.4—2002—Pipeline Transportation Systems for Liquid Hydrocarbons and Other Liquids (incorporated by reference, see §851.27); (v) B31.5—2001—Refrigeration Piping and Heat Transfer Components, and B31.5a—2004, Addenda to ASME B31.5—2001 (incorporated by reference, see § 851.27);	 Y17-001, Engineering, Design, and Support During Construction Y17-004, Pressure Vessels, Systems, and Relief Devices Y17-015, Welding Program Manual Y54-41-EI-301, Inspection & Testing of Pressure Relieving Devices Y53-41-EI-408, Inspections Testing of Pressure Systems and components Y54-41-EI-412, Inspection and Testing of welding and other pressure hazards

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(Page 29 of 44) 10 CFR 851 Requirement **Implementing Mechanisms** Y54-41-RI-413, Testing (vi) B31.8—2003—Gas Transmission and Distribution Piping Systems (incorporated by reference, see § 851.27); of Hydrogen Excess (vii) B31.8S—2001—Managing System Integrity of Gas Pipelines (incorporated by Flow Valve. reference, see § 851.27); Y54-41-EI-801, (viii) B31.9—1996—Building Services Piping (incorporated by reference, see §851.27); Inspection and Test of (ix) B31.11—2002—Slurry Transportation Piping Systems (incorporated by reference, Weld Hose Flash see § 851.27); and Arresters (x) B31G—1991—Manual for Determining Remaining Strength of Corroded Pipelines • Y73-164, Subcontract (incorporated by reference, see § 851.27). Environment, Safety and (3) The strictest applicable state and local codes. Health Management (c) When national consensus codes are not applicable (because of pressure range, • Y73-400, Compressed vessel geometry, use of special materials, etc.), contractors must implement measures to Gas Cylinder Safety provide equivalent protection and ensure a level of safety greater than or equal to the • Y73-402 Pressure Safety level of protection afforded by the ASME or applicable state or local code. Measures must Program include the following: The scope of ASME B31.4, (1) Design drawings, sketches, and calculations must be reviewed and approved by a B31.8, B31.8S, and B31.11 qualified independent design professional (i.e., professional engineer). Documented is not applicable to work organizational peer review is acceptable. performed at Y-12. (2) Qualified personnel must be used to perform examinations and inspections of materials, in-process fabrications, non-destructive tests, and acceptance test. Notes: (1) B31.3 or NFPA (3) Documentation, traceability, and accountability must be maintained for each unique

- 54 will be used as equivalent to B31.2 since this code is no longer used by industry or supported by ASME.
- (2) B31.8 and B31.8S do not apply to the installation and operation of gas piping and gas equipment on DOE premises. On-site gas piping and equipment are addressed by NFPA 54 or B31.3.
- (3) The reference versions of these codes and standards are out of date. The current version will be implemented unless a previous version is established by a Code of Record

5. Firearms Safety

(a) A contractor engaged in DOE activities involving the use of firearms must establish firearms safety policies and procedures for security operations, and training to ensure proper accident prevention controls are in place.

pressure vessel or system, including descriptions of design, pressure conditions, testing,

- (1) Written procedures must address firearms safety, engineering and administrative controls, as well as personal protective equipment requirements.
 - (2) As a minimum, procedures must be established for:

inspection, operation, repair, and maintenance.

- (i) Storage, handling, cleaning, inventory, and maintenance of firearms and associated ammunition;
- (ii) 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;
 - (iii) Use and storage of pyrotechnics, explosives, and/or explosive projectiles;
 - (iv) Handling misfires, duds, and unauthorized discharges;
 - (v) Live fire training, qualification, and evaluation activities;

- SP 232-011, Y-12 Protective Force Firearms, Lasers, and Special Issue Equipment
- CTF Range Risk **Analysis**
- M 630-001, Manual for the Conduct of Drills, Exercises, and Performance Tests Employing Engagement Simulations Systems (ESS)

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10 CFR 851 Requirement	Implementing Mechanisms			
(vii) Training and exercises using engagement simulation systems; (vii) Medical response at firearms training facilities; and (viii) Use of firing ranges by personnel other than DOE or DOE contractor protective forces personnel. (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. (c) 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. Personnel must not be allowed to conduct activities for which they have not been certified. (d) Contractors must 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. (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. Authorization to remain in armed status will continue only if the employee demonstrates the technical and practical knowledge of firearms safety semi- annually; (2) Authorized armed personnel must demonstrate through documented limited scope performance tests both technical and practical knowledge of firearms handling and safety on a semi-annual basis; (3) All firearms training lesson plans must incorporate safety for all aspects of firearms training task performance standards. The lesson plans must follow the standards set forth by the Safeguards and Security Central Training Academy's standard training programs; (4) Firearms safety briefings must immediately precede training, qualifications, and evaluation activities involving live fire and/or engagement simulation systems;	 SP 232-009, WSI Oak Ridge Ammunition Control SP 232-011, Y12 Protective Force Firearms, Lasers, and Special Issue Equipment SP 610-004, Hazard Analysis SOP 320-002, General Operating Rules at Central Training Facility SOP 320-004, Safety at Central Training Facility SOP 320-005, Range Use Agreement at the Central Training Facility SP 330-003, Lesson Plan Development and Review 			
munitions conform to the applicable DOE requirements. 6. Industrial Hygiene Contractors must implement a comprehensive industrial hygiene program that includes	Y17-001, Engineering, Design, and Support			
at least the following elements: (a) 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	During Construction • Y73-029, Ergonomics Program			
risks; (b) Coordination with planning and design personnel to anticipate and control health hazards that proposed facilities and operations would introduce; (c) Coordination with cognizant occupational medical, environmental, health physics, and work planning professionals; (d) Policies and procedures to mitigate the risk from identified and potential occupational carcinogens;	 Y73-045, Job Hazard Analysis Y73-050, Respiratory Protection Program Y73-063, Supplied Air Respiratory 			
(e) Professionally and technically qualified industrial hygienists to manage and implement the industrial hygiene program; and	Y73-066, Powered Air- Purifying Respirator (PAPR)			

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10 CFR 851 Requirement	Implementing
(f) Use of respiratory protection equipment tested under the DOE Respirator Acceptance Program for Supplied-air Suits (DOE-Technical Standard-1167–2003) when National Institute for Occupational Safety and Health-approved respiratory protection does not exist for DOE tasks that require such equipment. For security operations conducted in accordance with Presidential Decision Directive 39, U.S. POLICY ON COUNTER TERRORISM, use of Department of Defense military type masks for respiratory protection by security personnel is acceptable.	Mechanisms • Y73-067, Self-Contained Breathing Apparatus (SCBA) • Y73-116, Personal Protective Equipment Program • Y73-164, Subcontract Environment, Safety and Health Management • Y73-181, Hazardous Material Management Program • Y73-200PD, Industrial Hygiene Program • Y73-202, Exhaust Ventilation for Personnel Protection • Y73-204, Asbestos Program • Y73-204, Testing and Use of Laboratory-Type Hoods • Y73-208INS, Hazard Communication Program Instruction • Y73-219, Y-12 Plant Lead Worker Protection Program
7. Biological Safety (a) Contractors must establish and implement a biological safety program that: (1) Establishes an Institutional Biosafety Committee (IBC) or equivalent. The IBC must: (i) Review any work with biological etiologic agents for compliance with applicable Centers for Disease Control and Prevention (CDC), National Institutes of Health (NIH), World Health Organization (WHO), and other international, Federal, State, and local guidelines and assess the containment level, facilities, procedures, practices, and training and expertise of personnel; and (ii) Review the site's security, safeguards, and emergency management plans and procedures to ensure they adequately consider work involving biological etiologic agents. (2) Maintains an inventory and status of biological etiologic agents, and provide to the responsible field and area office, through the laboratory IBC (or its equivalent), an annual status report describing the status and inventory of biological etiologic agents and the biological safety program. (3) Provides for submission to the appropriate Head of DOE Field Element, for review and concurrence before transmittal to the Centers for Disease Control and Prevention (CDC), each Laboratory Registration/Select Agent Program registration application package requesting registration of a laboratory facility for the purpose of transferring, receiving, or handling biological select agents.	Not Applicable To Work By B&W Y-12

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(4) Provides 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. Submit to the appropriate Head of DOE Field Element the completed copy of the Form EA—101, documenting final disposition and/or destruction of the select agent, within 10 days of completion of the Form EA—101. (5) Confirms that the site safeguards and security plans and emergency management programs address biological etiologic agents, with particular emphasis on biological select agents. (5) Establishes an immunization policy for personnel working with biological etiologic agents based on the evaluation of risk and benefit of immunization. (b) [Reserved] 8. Occupational Medicine (a) Contractors must establish and provide comprehensive occupational medicine services to workers employed at a covered work place who: (1) Work on a DOE site for more than 30 days in a 12-month period; or (2) 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. (b) The 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. (c) Occupational medical physicians, occupational health purson, provides access to hazard information by promoting its communication, coordination, and sharing among operating and environment, safety, and health protection organizations. (1) Contractors must provide the occupational medicine providers with access to information by promoting its communication, coordination, and sharing among operating in the provide the provides and provides work shared to provide the provide the provides work has been absent because of an inj	(Page 32 of 44)	
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. Submit to the appropriate Head of DDC Field Element the completed copy of the Form EA-101, documenting final disposition and/or destruction of the select agent, within 10 days of completion of the Form EA-101. (5) Confirms that the site safeguards and security plans and emergency management programs address biological ediologic agents, with particular emphasis on biological select agents. (6) Establishes an immunization policy for personnel working with biological eliologic agents based on the evaluation of risk and benefit of immunization. (b) [Reserved] 8. Occupational Medicine (a) Contractors must establish and provide comprehensive occupational medicine services to workers employed at a covered work place who: (1) Work on a DDE site for more than 30 days in a 12-month period; or control control control control control control control collegation. (b) The 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. (c) Occupational medicial physicians, occupational health personnel providing occupational medicine services must be licensed, (d) Contractors must provide the occupational medicine providers access to hazard information by promoting its communication, coordination, and sharing among operating and environment, safety, and health protection organizations. (1) Cournel information about actual or potential work-related site hazards (chemical, radiological, physical, biological, or ergonomic); (ii) Current information about actual or potential work-related site hazards (chemical, radiological, physical, biological, or ergonomic); (iii) Current information about actual or potential work-related site hazards or exposures. (2) Contractors m	10 CFR 851 Requirement	
services to workers employed at a covered work place who: (1) Work on a DOE site for more than 30 days in a 12-month period; or (2) Are enrolled for any length of time in a medical or exposure monitoring program required by this rule and/or any other applicable Federial, State or local regulation, or other obligation. (b) The 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. (c) Occupational medical physicians, occupational health rurses, 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. (d) Contractors must provide the occupational medicine providers access to hazard information by promoting its communication, coordination, and sharing among operating and environment, safety, and health protection organizations. (1) Contractors must provide the occupational medicine providers with access to information on the following: (1) Contractors must provide the occupational medicine providers with access to information on the following: (1) Current information about actual or potential work-related site hazards (chemical, radiological, physical, biological, or ergonomic); (ii) Employee job-task and hazard analysis information, including essential job functions; (iii) Actual or potential work-site exposures of each employee; and (iv) Personnel actions resulting in a change of job functions, hazards or exposures. (2) Contractors must provide the occupational medicine providers when an employee has been absent because of an injury or illness for more than 5 consecutive workdays (ran equivalent time period for those individuals on an alternative work schedule); (a) Contractors must provide the occupational medicine providers access to the workplace of the op	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. Submit to the appropriate Head of DOE Field Element the completed copy of the Form EA–101, documenting final disposition and/or destruction of the select agent, within 10 days of completion of the Form EA–101. (5) Confirms that the site safeguards and security plans and emergency management programs address biological etiologic agents, with particular emphasis on biological select agents. (6) Establishes an immunization policy for personnel working with biological etiologic agents based on the evaluation of risk and benefit of immunization. (b) [Reserved] 8. Occupational Medicine	• Y11-201, Attendance
	(a) Contractors must establish and provide comprehensive occupational medicine services to workers employed at a covered work place who: (1) Work on a DOE site for more than 30 days in a 12-month period; or (2) 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. (b) The 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. (c) Occupational medical 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. (d) Contractors must provide the occupational medicine providers access to hazard information by promoting its communication, coordination, and sharing among operating and environment, safety, and health protection organizations. (1) Contractors must provide the occupational medicine providers with access to information on the following: (i) Current information about actual or potential work-related site hazards (chemical, radiological, physical, biological, or ergonomic); (ii) Employee job-task and hazard analysis information, including essential job functions; (iii) Actual or potential work-site exposures of each employee; and (iv) Personnel actions resulting in a change of job functions, hazards or exposures. (2) Contractors must 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); (3) Contractors must provide the occupational medicine provider information on, and the opportunity to participate in, wor	and Absence Monitoring Y15-101, Records and Controlled Documents Y40-011, Emergency Medical Response Team Y40-100, Response to a Nuclear Criticality Y40-139, Y-12 NSC Emergency Response Organization Y40-165, Emergency Control Center Operations Y73-029, Ergonomics Program Y73-050, Respiratory Protection Program Y73-201, Chronic Beryllium Disease Prevention Program Manual Y73-204, Asbestos Program Manual Y78-001, Occupational Medicine Program Y78-002, Identification of Employees Requiring Medical Certification, Qualification, and Surveillance Y78-66-HS-017, Requirements for Medical Surveillance, Certification, and Qualification

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- (1) 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. Psychological records must be maintained separately from medical records and in the custody of the designated psychologist in accordance with 10 CFR 712.38(b)(2).
- (2) 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.
- (g) The occupational medicine services provider must determine the content of the worker health evaluations, which must be conducted under the direction of a licensed physician, in accordance with current sound and acceptable medical practices and all pertinent statutory and regulatory requirements, such as the Americans with Disabilities
- (1) Workers must be informed of the purpose and nature of the medical evaluations and tests offered by the occupational medicine provider.
- (i) The purpose, nature and results of evaluations and tests must be clearly communicated verbally and in writing to each worker provided testing:
 - (ii) The communication must be documented in the worker's medical record; and
- (2) The following health evaluations must be conducted when determined necessary by the occupational medicine provider for the purpose of providing initial and continuing assessment of employee fitness for duty.
- (i) 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 will establish a baseline record of physical condition and assure fitness for duty.
- (ii) Periodic, hazard-based medical monitoring or qualification-based fitness for duty evaluations required by regulations and standards, or as recommended by the occupational medicine services provider, will be provided on the frequency required.
- (iii) Diagnostic examinations will evaluate employee's injuries and illnesses to determine work-relatedness, the applicability of medical restrictions, and referral for definitive care, as appropriate.
- (iv) 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.
- (v) At the time of separation from employment, individuals shall be offered a general health evaluation to establish a record of physical condition.
- (h) The occupational medicine provider must monitor ill and injured workers to facilitate their rehabilitation and safe return to work and to minimize lost time and its associated costs.
- (1) The occupational medicine provider must place an individual under medical restrictions when health evaluations indicate that the worker should not perform certain job tasks. The occupational medicine provider must notify the worker and contractor management when employee work restrictions are imposed or removed.
- (i) Occupational medicine provider physician and medical staff must, on a timely basis, communicate results of health evaluations to management and safety and health protection specialists to facilitate the mitigation of worksite hazards.
- (j) Occupational medicine provider physician and medical staff must, on a timely basis, communicate results of health evaluations to management and safety and health protection specialists to facilitate the mitigation of worksite hazards.

Implementing Mechanisms

- Y78-66-HS-018, Exposure Control Plan/Management of Medical Waste
- Y78-66-HS-020, Occupational Health Self-Assessment Program, Section A
- Y78-66-HS-036, Wellness and Health Education
- Y78-66-HS-051. Maintenance, Review and Release, and Disposition of Medical Files
- Y78-66-HS-074, Evaluation, Treatment, & Reporting of Workers Overexposed to Hazardous Materials. Chemicals, & Products
- Y78-66-HS-077, Quality Improvement and Risk Management
- Y78-66-HS-083, Treatment of Cyanide Poisoning
- Y78-001, Occupational Medicine Program
- Y78-002. Identification of Employees Requiring Medical Certification, Qualification, and Surveillance, Sections A and B
- EMPO 500, Y-12 NSC Emergency Plan, Sections 2 & 8
- UCN-21302, Essential Job Function Analysis Form

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10 CFR 851 Requirement	Implementing
To of Requirement	Mechanisms
(1) The contractor must include programs to prevent and manage these causes of morbidity when evaluations demonstrate their cost effectiveness. (2) Contractors must 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. (k) The occupational medicine services provider must review and approve the medical and behavioral aspects of employee counseling and health promotional programs, including the following types: (1) Contractor-sponsored or contractor-supported EAPs; (2) Contractor-sponsored or contractor-supported alcohol and other substance abuse rehabilitation programs; and (3) Contractor-sponsored or contractor-supported wellness programs. (4) 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. (5) The occupational medicine services provider must develop and periodically review medical emergency response procedures included in site emergency and disaster preparedness plans. The medical emergency responses must be integrated with nearby community emergency and disaster plans. 9. Motor Vehicle Safety (a) Contractors must 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). (b) 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. (c) The motor vehicle safety program must address, as applicable to the contractor's operations: (1) Minimum licensing requirements (including appropriate testing an	 Y18-010, Use of Government Vehicles, Leased Vehicles, and Mobile Carts Y50-41-El-210, Inspection of Aerial Devices Y73-001, B&W Y-12 Safety Program. Y73-008, Y-12 Motor Vehicle Safety Program Y73-115, B&W Y-12 Hoisting and Rigging Manual Y73-676, Powered Industrial Trucks ES-1.10-1, Motive Power Battery-Servicing Areas ES-1.10-2, Motive Power Battery-Charging Stations
10. Electrical Safety	Same Implementing
Contractors must implement a comprehensive electrical safety program appropriate for	Mechanisms as listed under
the activities at their site. This program must meet the applicable electrical safety codes and standards referenced in § 851.23.	Section 851.23(14)
11. Nanotechnology Safety—Reserved	• N/A
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	• N/A
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 Procedure Act.	

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10 CFR 851 Requirement

Appendix B to Part 851—General Statement of Enforcement Policy I. Introduction

- (a) This policy statement sets forth the general framework through which the U.S. Department of Energy (DOE) will seek to ensure compliance with its worker safety and health regulations, and, in particular, exercise the civil penalty authority provided to DOE in section 3173 of Public Law 107-314, Bob Stump National Defense Authorization Act for Fiscal Year 2003 (December 2, 2002) ("NDAA"), amending the Atomic Energy Act (AEA) to add section 234C. The policy set forth herein is applicable to violations of safety and health regulations in this part by DOE contractors, including DOE contractors who are indemnified under the Price-Anderson Act, 42 U.S.C. 2210(d), and their subcontractors and suppliers (hereafter collectively referred to as DOE contractors). This policy statement is not a regulation and is intended only to provide general guidance to those persons subject to the regulations in this part. It is not intended to establish a "cookbook" approach to the initiation and resolution of situations involving noncompliance with the regulations in this part. Rather, DOE intends to consider the particular facts of each noncompliance in determining whether enforcement sanctions are appropriate and, if so, the appropriate magnitude of those sanctions. DOE may well deviate from this policy statement when appropriate in the circumstances of particular cases. This policy statement is not applicable to activities and facilities covered under E.O. 12344, 42 U.S.C. 7158 note, pertaining to Naval Nuclear Propulsion, or otherwise excluded from the scope of the rule.
- (b) The DOE goal in the compliance arena is to enhance and protect the safety and health of workers at DOE facilities by fostering a culture among both the DOE line organizations and the contractors that actively seeks to attain and sustain compliance with the regulations in this part. The enforcement program and policy have been developed with the express purpose of achieving safety inquisitiveness and voluntary compliance. DOE will establish effective administrative processes and positive incentives to the contractors for the open and prompt identification and reporting of noncompliances, performance of effective root cause analysis, and initiation of comprehensive corrective actions to resolve both noncompliance conditions and program or process deficiencies that led to noncompliance.
- (c) In the development of the DOE enforcement policy, DOE recognizes that the reasonable exercise of its enforcement authority can help to reduce the likelihood of serious incidents. This can be accomplished by placing greater emphasis on a culture of safety in existing DOE operations, and strong incentives for contractors to identify and correct noncompliance conditions and processes in order to protect human health and the environment. DOE wants to facilitate, encourage, and support contractor initiatives for the prompt identification and correction of noncompliances. DOE will give due consideration to such initiatives and activities in exercising its enforcement discretion.
- (d) DOE may modify or remit civil penalties in a manner consistent with the adjustment factors set forth in this policy with or without conditions. DOE will carefully consider the facts of each case of noncompliance and will exercise appropriate discretion in taking any enforcement action. Part of the function of a sound enforcement program is to assure a proper and continuing level of safety vigilance. The reasonable exercise of enforcement authority will be facilitated by the appropriate application of safety requirements to DOE facilities and by promoting and coordinating the proper contractor and DOE safety compliance attitude toward those requirements.

Implementing Mechanisms

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II. Purpose	Y76-001, Enforcement
The purpose of the DOE enforcement program is to promote and protect the safety	Compliance Program
and health of workers at DOE facilities by:	, , , , , , ,
(a) Ensuring compliance by DOE contractors with the regulations in this part.	
(b) Providing positive incentives for DOE contractors based on:	
(1) Timely self-identification of worker safety noncompliances;	
(2) Prompt and complete reporting of such noncompliances to DOE;	
(3) Prompt correction of safety noncompliances in a manner that precludes	
recurrence; and	
(4) Identification of modifications in practices or facilities that can improve worker	
safety and health.	
(c) Deterring future violations of DOE requirements by a DOE contractor.	
(d) Encouraging the continuous overall improvement of operations at DOE facilities.	
III. Statutory Authority	Y76-001, Enforcement
The Department of Energy Organization Act, 42 U.S.C. 7101–73850, the Energy	Compliance Program
Reorganization Act of 1974 (ERA), 42 U.S.C. 5801–5911, and the Atomic Energy Act of	
1954, as amended, (AEA) 42 U.S.C. 2011, require DOE to protect the public safety and	
health, as well as the safety and health of workers at DOE facilities, in conducting its	
activities, and grant DOE broad authority to achieve this goal. Section 234C of the AEA	
makes DOE contractors (and their subcontractors and suppliers thereto) covered by the	
DOE Price-Anderson indemnification system, subject to civil penalties for violations of the	
worker safety and health requirements promulgated in this part. 42U.S.C. 2282c.	
IV. Responsibilities	Y76-001, Enforcement
(a) The Director, as the principal enforcement officer of the DOE, has been delegated	Compliance Program
the authority to:	Jennames i regium
(1) Conduct enforcement inspections, investigations, and conferences;	
(2) Issue Notices of Violations and proposed civil penalties, Enforcement Letters,	
Consent Orders, and subpoenas; and	
(3) Issue orders to compel attendance and disclosure of information or documents	
obtained during an investigation or inspection. The Secretary issues Compliance Orders.	
(b) The NNSA Administrator, rather than the Director, signs, issues and serves the	
following actions that direct NNSA contractors:	
(1) Subpoenas;	
(2) Orders to compel attendance; and	
(3) Determines to disclose information or documents obtained during an investigation	
or inspection, PNOVs, Notices of Violations, and Final Notices of Violations. The NNSA	
Administrator acts after consideration of the Director's recommendation.	
V. Procedural Framework	Y76-001, Enforcement
(a) Title 10 CFR part 851 sets forth the procedures DOE will use in exercising its	Compliance Program
enforcement authority, including the issuance of Notices of Violation and the resolution of	Compliance Fregram
an administrative appeal in the event a DOE contractor elects to petition the Office of	
Hearings and Appeals for review.	
(b) Pursuant to 10 CFR part 851 subpart E, the Director initiates the enforcement	
process by initiating and conducting investigations and inspections and issuing a	
Preliminary Notice of Violation (PNOV) with or without a proposed civil penalty. The DOE	
contractor is required to respond in writing to the PNOV within 30 days, either:	
(1) Admitting the violation and waiving its right to contest the proposed civil penalty	
and paying it;	
(2) admitting the violation but asserting the existence of mitigating circumstances that	
warrant either the total or partial remission of the civil penalty; or	
(3) denying that the violation has occurred and providing the basis for its belief that the	
PNOV is incorrect.	
After evaluation of the DOE contractor's response, the Director may determine:	
(1) That no violation has occurred;	
(2) that the violation occurred as alleged in the PNOV but that the proposed civil	
(=) that the violation cocarros do anogos in the river but that the proposed of the	1

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(3) that the violation occurred as alleged in the PNOV and that the proposed civil	Mechanisms
penalty is appropriate, notwithstanding the asserted mitigating circumstances. In the latter	
two instances, the Director will issue a Final Notice of Violation (FNOV) or an FNOV and	
proposed civil penalty.	
(c) An opportunity to challenge an FNOV is provided in administrative appeal	
provisions. See 10 CFR 851.44. Any contractor that receives an FNOV may petition the	
Office of Hearings and Appeals for review of the final notice in accordance with 10 CFR	
part 1003, Subpart G, within 30 calendar days from receipt of the final notice. An administrative appeal proceeding is not initiated until the DOE contractor against which an	
FNOV has been issued requests an administrative hearing rather than waiving its right to	
contest the FNOV and proposed civil penalty, if any, and paying the civil penalty.	
However, it should be emphasized that DOE encourages the voluntary resolution of a	
noncompliance situation at any time, either informally prior to the initiation of the	
enforcement process or by consent order before or after any formal proceeding has	
begun.	
VI. Severity of Violations	Y76-001, Enforcement
(a) Violations of the worker safety and health requirements in this part have varying	Compliance Program
degrees of safety and health significance. Therefore, the relative safety and health risk of	
each violation must be identified as the first step in the enforcement process. Violations of the worker safety and health requirements are categorized in two levels of severity to	
identify their relative seriousness. Notices of Violation issued for noncompliance when	
appropriate, propose civil penalties commensurate with the severity level of the violations	
involved.	
(b) To assess the potential safety and health impact of a particular violation, DOE will	
categorize the potential severity of violations of worker safety and health requirements as	
follows:	
(1) A Severity Level I violation is a serious violation. A serious violation shall be	
deemed to exist in a place of employment if there is a potential that death or serious	
physical harm could result from a condition which exists, or from one or more practices, means, methods, operations, or processes which have been adopted or are in use, in	
such place of employment. A Severity Level I violation would be subject to a base civil	
penalty of up to 100% of the maximum base civil penalty of \$70,000.	
(2) A Severity Level II violation is an other-than-serious violation. An other-than-	
serious violation occurs where the most serious injury or illness that would potentially	
result from a hazardous condition cannot reasonably be predicted to cause death or	
serious physical harm to employees but does have a direct relationship to their safety and	
health. A Severity Level II violation would be subject to a base civil penalty up to 50% of	
the maximum base civil penalty (\$35,000). (c) De minimis violations, defined as a deviation from the requirement of a standard	
that has no direct or immediate relationship to safety or health, will not be the subject of	
formal enforcement action through the issuance of a Notice of Violation.	
VII. Enforcement Conferences	Y76-001, Enforcement
(a) The purpose of the enforcement conference is to:	Compliance Program
(1) Assure the accuracy of the facts upon which the preliminary determination to	
consider enforcement action is based;	
(2) Discuss the potential or alleged violations, their significance and causes, and the	
nature of and schedule for the DOE contractor's corrective actions; (3) Determine whether there are any aggravating or mitigating circumstances; and	
(4) Obtain other information which will help determine whether enforcement action is	
appropriate and, if so, the extent of that enforcement action.	
(b) All enforcement conferences are convened at the discretion of the Director.	
(c) The PNOV will normally be issued promptly, before the opportunity for an	
enforcement conference, following the inspection/investigation. In some cases an	
enforcement conference may be conducted onsite at the conclusion of an	
inspection/investigation.	

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(d) The contractor may request an enforcement conference if they believe additional information pertinent to the enforcement action could best be conveyed through a meeting. (e) DOE contractors will be informed prior to a meeting when that meeting is considered to be an enforcement conference. Such conferences are informal mechanisms for candid discussions regarding potential or alleged violations and will not normally be open to the public. In circumstances for which immediate enforcement action is necessary in the interest of worker safety and health, such action will be taken prior to the enforcement conference, which may still be held after the necessary DOE action has been taken.	meenansms
VIII. Enforcement Letter (a) In cases where DOE has decided not to conduct an investigation or inspection or issue a Preliminary Notice of Violation (PNOV), DOE may send an Enforcement Letter, signed by the Director to the contractor. The Enforcement Letter is intended to communicate the basis of the decision not to pursue enforcement action for a noncompliance. The Enforcement Letter is intended to direct contractors to the desired level of worker safety and health performance. It may be used when DOE concludes that the specific noncompliance at issue is not of the level of significance warranted to conduct an investigation or inspection or for issuance of a PNOV. Even where a noncompliance may be significant, the Enforcement Letter may recognize that the contractor's actions may have attenuated the need for enforcement action. The Enforcement Letter will typically recognize how the contractor handled the circumstances surrounding the noncompliance, address additional areas requiring the contractor's attention, and address DOE's expectations for corrective action. (b) In general, Enforcement Letters communicate DOE's expectations with respect to any aspect of the requirements of this part, including identification and reporting of issues,	Y76-001, Enforcement Compliance Program
corrective actions, and implementation of the contractor's safety and health program. DOE might, for example, wish to recognize some action of the contractor that is of particular benefit to worker safety and health that is a candidate for emulation by other contractors. On the other hand, DOE may wish to bring a program shortcoming to the attention of the contractor that, but for the lack of worker safety and health significance of the immediate issue, might have resulted in the issuance of a PNOV. An Enforcement Letter is not an enforcement action. (c) With respect to many noncompliances, an Enforcement Letter may not be required. When DOE decides that a contractor has appropriately corrected a noncompliance or that the significance of the noncompliance is sufficiently low, it may close out its review simply through an annotation in the DOE Noncompliance Tracking System (NTS). A closeout of a noncompliance with or without an Enforcement Letter may only take place after DOE has confirmed that corrective actions have been completed.	
IX. Enforcement Actions (a) This section describes the enforcement sanctions available to DOE and specifies the conditions under which each may be used. The basic sanctions are Notices of Violation and civil penalties. (b) The nature and extent of the enforcement action is intended to reflect the seriousness of the violation. For the vast majority of violations for which DOE assigns severity levels as described previously, a Notice of Violation will be issued, requiring a formal response from the recipient describing the nature of and schedule for corrective actions it intends to take regarding the violation.	Y76-001, Enforcement Compliance Program
1. Notice of Violation (a) A Notice of Violation (either a Preliminary or Final Notice) is a document setting forth the conclusion of DOE and the basis to support the conclusion, which one or more violations of the worker safety and health requirements have occurred. Such a notice normally requires the recipient to provide a written response which may take one of several positions described in section V of this policy statement. In the event that the recipient concedes the occurrence of the violation, it is required to describe corrective steps which have been taken and the results achieved; remedial actions which will be taken to prevent recurrence; and the date by which full compliance will be achieved.	Y76-001, Enforcement Compliance Program

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10 CEP 851 Paguirement	Implementing
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(b) DOE will use the Notice of Violation as the standard method for formalizing the existence of a violation and, in appropriate cases as described in this section, the Notice of Violation will be issued in conjunction with the proposed imposition of a civil penalty. In certain limited instances, as described in this section, DOE may refrain from the issuance of an otherwise appropriate Notice of Violation. However, a Notice of Violation will virtually always be issued for willful violations, or if past corrective actions for similar violations have not been sufficient to prevent recurrence and there are no other mitigating circumstances. (c) DOE contractors are not ordinarily cited for violations resulting from matters not within their control, such as equipment failures that were not avoidable by reasonable quality assurance measures, proper maintenance, or management controls. With regard to the issue of funding, however, DOE does not consider an asserted lack of funding to be a justification for noncompliance with the worker safety and health requirements. (d) DOE expects its contractors to have the proper management and supervisory systems in place to assure that all activities at covered workplaces, regardless of who performs them, are carried out in compliance with all the worker safety and health requirements. Therefore, contractors are normally held responsible for the acts of their employees and subcontractor employees in the conduct of activities at covered workplaces. Accordingly, this policy should not be construed to excuse personnel errors. (e) The limitations on remedies under section 234C will be implemented as follows: (1) DOE may assess civil penalties of up to \$70,000 per violation per day on contractors (and their subcontractors and suppliers) that are indemnified by the Price-Anderson Act, 42 U.S.C. 2210(d). See 10 CFR 851.5(a). (2) DOE may seek contract fee reduction, but not both. See 10 CFR 851.5(b). (3) For the sem oritication of a worker safety and health requirement in this par	• Y76-001, Enforcement Compliance Program
quality assurance measures, proper maintenance, or management controls. With regard to the issue of funding, however, DOE does not consider an asserted lack of funding to be a justification for noncompliance with the worker safety and health requirements. (d) DOE expects its contractors to have the proper management and supervisory systems in place to assure that all activities at covered workplaces, regardless of who performs them, are carried out in compliance with all the worker safety and health requirements. Therefore, contractors are normally held responsible for the acts of their employees and subcontractor employees in the conduct of activities at covered workplaces. Accordingly, this policy should not be construed to excuse personnel errors. (e) The limitations on remedies under section 234C will be implemented as follows: (1) DOE may assess civil penalties of up to \$70,000 per violation per day on contractors (and their subcontractors and suppliers) that are indemnified by the Price-Anderson Act, 42 U.S.C. 2210(d). See 10 CFR 851.5(a). (2) DOE may seek contract fee reductions through the contract's Conditional Payment of Fee Clause in the Department of Energy Acquisition Regulation (DEAR). See 10 CFR 851.4(b); 48 CFR parts 923, 952, 970. Policies for contract fee reductions are not established by this policy statement. The Director and appropriate contracting officers will coordinate their efforts in compliance with the statute. See 10 CFR 851.5(b). (3) For the same violation of a worker safety and health requirement in this part, DOE may pursue either civil penalties (for indemnified contractors and their subcontractors and suppliers) or a contract fee reduction, but not both. See 10 CFR 851.5(c). (4) A ceiling applies to civil penalties assessed on certain contractors specifically listed in 170d. of the Atomic Energy Act, 42 U.S.C. 2282a(d), for activities conducted at specified facilities. For these contractors, the total amount of civil penalties and contract penalties in a fiscal year. See	
 (a) A civil penalty is a monetary penalty that may be imposed for violations of requirements of this part. See 10 CFR 851.5(a). Civil penalties are designed to emphasize the need for lasting remedial action, deter future violations, and underscore the importance of DOE contractor self-identification, reporting, and correction of violations of the worker safety and health requirements in this part. (b) Absent mitigating circumstances as described below, or circumstances otherwise warranting the exercise of enforcement discretion by DOE as described in this section, civil penalties will be proposed for Severity Level I and II violations. (c) DOE will impose different base level penalties considering the severity level of the violation. Table A–1 shows the daily base civil penalties for the various categories of severity levels. However, as described below in section IX, paragraph b.3, the imposition of civil penalties will also take into account the gravity, circumstances, and extent of the violation or violations and, with respect to the violator, any history of prior similar violations and the degree of culpability and knowledge. (d) Enforcement personnel will use risk-based criteria to assist the Director in determining appropriate civil penalties for violations found during investigations and 	

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(e) Regarding the factor of ability of DOE contractors to pay the civil penalties, it is not DOE's intention that the economic impact of a civil penalty be such that it puts a DOE contractor out of business. Contract termination, rather than civil penalties, is used when the intent is to terminate these activities. The deterrent effect of civil penalties is best served when the amount of such penalties takes this factor into account. However, DOE will evaluate the relationship of affiliated entities to the contractor (such as parent corporations) when the contractor asserts that it cannot pay the proposed penalty. (f) DOE will review each case on its own merits and adjust the base civil penalty values upward or downward. As indicated below, Table A–1 identifies the daily base civil penalty values for different severity levels. After considering all relevant circumstances, civil penalties may be adjusted up or down based on the mitigating or aggravating factor described later in this section. In no instance will a civil penalty for any one violation exceed the statutory limit of \$70,000 per day. In cases where the DOE contractor had knowledge of a violation and has not reported it to DOE and taken corrective action despite an opportunity to do so, DOE will consider utilizing its per day civil penalty authority. Further, as described in this section, the duration of a violation will be taken into account in adjusting the base civil penalty. TABLE A–1.—SEVERITY LEVEL BASE CIVIL PENALTIES	
Severity Level Base civil penalty amount (Percentage of maximum per violation per day) 1 100 II 50	
(a) DOE may reduce a penalty based on mitigating circumstances or increase a penalty based on aggravating circumstances. DOE's enforcement program is not an end in itself, but a means to achieve compliance with the worker safety and health requirements in this part. Civil penalties are intended to emphasize the importance of compliance and to deter future violations. The single most important goal of the DOE enforcement program is to encourage early identification and reporting of violations of the worker safety and health requirements in this part by the DOE contractors themselves rather than by DOE, and the prompt correction of any violations so identified. DOE believes that DOE contractors are in the best position to identify and promptly correct noncompliance with the worker safety and health requirements in this part. DOE expects that these contractors should have in place internal compliance programs which will ensure the detection, reporting, and prompt correction of conditions that may constitute, or lead to, violations of the worker safety and health requirements in this part, before, rather than after, DOE has identified such violations. Thus, DOE contractors should almost always be aware of worker safety and health noncompliances before they are discovered by DOE. Obviously, worker safety and health is enhanced if noncompliances are discovered (and promptly corrected) by the DOE contractor, rather than by DOE, which may not otherwise become aware of a noncompliance until later, during the course of an inspection, performance assessment, or following an incident at the facility. Early identification of worker safety and health-related noncompliances by DOE contractors has the added benefit of allowing information that could prevent such noncompliances at other facilities in the DOE complex to be shared with other appropriate DOE contractors. (b) Pursuant to this enforcement philosophy, DOE will provide substantial incentive for the early self-identification, reporting, and prompt correction of condit	Y76-001, Enforcement Compliance Program

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(d) Further, in cases involving factors of willfulness, repeated violations, death, serious injury, patterns of systemic violations, DOE-identified flagrant violations, repeated poor performance in an area of concern, or serious breakdown in management controls, DOE intends to apply its full statutory enforcement authority where such action is warranted. (e) Additionally, adjustment to the amount of civil penalty will be dependent, in part, on the degree of culpability of the DOE contractor with regard to the violation. Thus, inadvertent violations will be viewed differently from those in which there is gross negligence, deception, or willfulness. In addition to the severity of the underlying violation and level of culpability involved, DOE will also consider the position, training and experience of those involved in the violation. Thus, for example, a violation may be deemed to be more significant if a senior manager of an organization is involved rather than a foreman or non-supervisory employee. (f) Other factors that will be considered in determining the civil penalty amount are the duration of the violation (how long the condition has presented a potential exposure to workers), the extent of the condition (number of instances of the violation), the frequency of the exposure (how often workers are exposed), the proximity of the workers to the exposure, and the past history of similar violations. (g) DOE expects contractors to provide full, complete, timely, and accurate information and reports. Accordingly, the penalty amount for a violation involving either a failure to make a required report or notification to the DOE or an untimely report or notification, will be based upon the circumstances surrounding the matter that should have been reported. A contractor was aware or should have been aware of the condition or event that it failed to	
report. 4. Identification and Reporting Reduction of up to 50% of the base civil penalty shown in Table A–1 may be given when a DOE contractor identifies the violation and promptly reports the violation to the DOE. Consideration will be given to, among other things, the opportunity available to discover the violation, the ease of discovery and the promptness and completeness of any required report. No consideration will be given to a reduction in penalty if the DOE contractor does not take prompt action to report the problem to DOE upon discovery, or if the immediate actions necessary to restore compliance with the worker safety and health requirements are not taken.	Y76-001, Enforcement Compliance Program
5. Self-Identification and Tracking Systems (a) DOE strongly encourages contractors to self-identify noncompliances with the worker safety and health requirements before the noncompliances lead to a string of similar and potentially more significant events or consequences. When a contractor identifies a noncompliance, DOE will normally allow a reduction in the amount of civil penalties, unless prior opportunities existed for contractors to identify the noncompliance. DOE will normally not allow a reduction in civil penalties for self-identification if significant DOE intervention was required to induce the contractor to report a noncompliance. (b) Self-identification of a noncompliance is possibly the single most important factor in considering a reduction in the civil penalty amount. Consideration of self-identification is linked to, among other things, whether prior opportunities existed to discover the violation, and if so, the age and number of such opportunities; the extent to which proper contractor controls should have identified or prevented the violation; whether discovery of the violation resulted from a contractor's self-monitoring activity; the extent of DOE involvement in discovering the violation or in prompting the contractor to identify the violation; and the promptness and completeness of any required report. Self-identification is also considered by DOE in deciding whether to pursue an investigation. (c) DOE will use the voluntary Noncompliance Tracking System (NTS) which allows contractors to elect to report noncompliances. In the guidance document supporting the NTS, DOE will establish reporting thresholds for reporting noncompliances of potentially greater worker safety and health significance into the NTS. Contractors are expected,	Y76-001, Enforcement Compliance Program

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however, to use their own self-tracking systems to track noncompliances below the reporting threshold. This self-tracking is considered to be acceptable self-reporting as long as DOE has access to the contractor's system and the contractor's system notes the item as a noncompliance with a DOE safety and health requirement. For noncompliances that are below the NTS reportability thresholds, DOE will credit contractor self-tracking as representing self-reporting. If an item is not reported in NTS but only tracked in the contractor's system and DOE subsequently determines that the noncompliance was significantly mischaracterized, DOE will not credit the internal tracking as representing appropriate self-reporting.	
6. Self-Disclosing Events (a) DOE expects contractors to demonstrate acceptance of responsibility for worker safety and health by proactively identifying noncompliances. When the occurrence of an event discloses noncompliances that the contractor could have or should have identified before the event, DOE will not generally reduce civil penalties for self-identification, even if the underlying noncompliances were reported to DOE. In deciding whether to reduce any civil penalty proposed for violations revealed by the occurrence of a self-disclosing event, DOE will consider the ease with which a contractor could have discovered the noncompliance and the prior opportunities that existed to discover the noncompliance. If a contractor simply reacts to events that disclose potentially significant consequences or downplays noncompliances which did not result in significant consequences to worker safety and health, such contractor actions do not constitute the type of proactive behavior necessary to prevent significant events from occurring and thereby to improve worker safety and health. (b) The key test is whether the contractor reasonably could have detected any of the underlying noncompliances that contributed to the event. Examples of events that provide opportunities to identify noncompliances include, but are not limited to: (1) Prior notifications of potential problems such as those from DOE operational experience publications or vendor equipment deficiency reports; (2) Normal surveillance, quality assurance performance assessments, and postmaintenance testing; (3) Readily observable parameter trends; and (4) Contractor employee or DOE observations of potential worker safety and health problems. (c) Failure to utilize these types of events and activities to address noncompliances may result in higher civil penalty assessments or a DOE decision not to reduce civil penalty amounts. (d) Alternatively, if, following a self-disclosing event, DOE finds that the contractor's processes and procedures, DOE could	Y76-001, Enforcement Compliance Program
7. Corrective Action To Prevent Recurrence The promptness (or lack thereof) and extent to which the DOE contractor takes corrective action, including actions to identify root cause and prevent recurrence, may result in an increase or decrease in the base civil penalty shown in Table A–1. For example, appropriate corrective action may result in DOE's reducing the proposed civil penalty up to 50% from the base value shown in Table A–1. On the other hand, the civil penalty may be increased if initiation of corrective action is not prompt or if the corrective action is only minimally acceptable. In weighing this factor, consideration will be given to, among other things, the appropriateness, timeliness and degree of initiative associated with the corrective action. The comprehensiveness of the corrective action will also be considered, taking into account factors such as whether the action is focused narrowly to the specific violation or broadly to the general area of concern.	Y76-001, Enforcement Compliance Program

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8. DOE's Contribution to a Violation	Y76-001, Enforcement
There may be circumstances in which a violation of a DOE worker safety and health requirement results, in part or entirely, from a direction given by DOE personnel to a DOE contractor to either take or forbear from taking an action at a DOE facility. In such cases, DOE may refrain from issuing an NOV, or may mitigate, either partially or entirely, any	Compliance Program
proposed civil penalty, provided that the direction upon which the DOE contractor relied is documented in writing, contemporaneously with the direction. It should be emphasized, however, that pursuant to 10 CFR 851.7, interpretative ruling of a requirement of this part must be issued in accordance with the provisions of 851.7 to be binding. Further, as discussed above in this policy statement, lack of funding by itself will not be considered as	
a mitigating factor in enforcement actions.	
9. Exercise of Discretion	Y76-001, Enforcement
Because DOE wants to encourage and support DOE contractor initiative for prompt self-identification, reporting and correction of noncompliances, DOE may exercise discretion as follows:	Compliance Program
(a) In accordance with the previous discussion, DOE may refrain from issuing a civil penalty for a violation that meets all of the following criteria:	
(1) The violation is promptly identified and reported to DOE before DOE learns of it or the violation is identified by a DOE independent assessment, inspection or other formal program effort.	
(2) The violation is not willful or is not a violation that could reasonably be expected to have been prevented by the DOE contractor's corrective action for a previous violation. (3) The DOE contractor, upon discovery of the violation, has taken or begun to take	
prompt and appropriate action to correct the violation. (4) The DOE contractor has taken, or has agreed to take, remedial action satisfactory	
to DOE to preclude recurrence of the violation and the underlying conditions that caused it. (b) DOE will not issue a Notice of Violation for cases in which the violation discovered	
by the DOE contractor cannot reasonably be linked to the conduct of that contractor in the design, construction or operation of the DOE facility involved, provided that prompt and appropriate action is taken by the DOE contractor upon identification of the past violation to report to DOE and remedy the problem.	
(c) In situations where corrective actions have been completed before termination of an inspection or assessment, a formal response from the contractor is not required and	
the inspection report serves to document the violation and the corrective action. However,	
in all instances, the contractor is required to report the noncompliance through established reporting mechanisms so the noncompliance and any corrective actions can be properly tracked and monitored.	
(d) If DOE initiates an enforcement action for a violation, and as part of the corrective action for that violation, the DOE contractor identifies other examples of the violation with	
the same root cause, DOE may refrain from initiating an additional enforcement action. In determining whether to exercise this discretion, DOE will consider whether the DOE contractor acted reasonably and in a timely manner appropriate to the severity of the initial	
violation, the comprehensiveness of the corrective action, whether the matter was reported, and whether the additional violation(s) substantially change the significance or	
character of the concern arising out of the initial violation. (e) The preceding paragraphs are examples indicating when enforcement discretion	
may be exercised to forego the issuance of a civil penalty or, in some cases, the initiation of any enforcement action at all. However, notwithstanding these examples, a civil penalty may be proposed or Notice of Violation issued when, in DOE's judgment, such action is	
warranted.	

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10 CFR 851 Requirement	Implementing Mechanisms
X. Inaccurate and Incomplete Information	Y76-001, Enforcement
X. Inaccurate and Incomplete Information (a) A violation of the worker safety and health requirements to provide complete and accurate information to DOE, 10 CFR 851.40, can result in the full range of enforcement sanctions, depending upon the circumstances of the particular case and consideration of the factors discussed in this section. Violations involving inaccurate or incomplete information or the failure to provide significant information identified by a DOE contractor normally will be categorized based on the guidance in section IX, "Enforcement Actions." (b) DOE recognizes that oral information may in some situations be inherently less reliable than written submittals because of the absence of an opportunity for reflection and management review. However, DOE must be able to rely on oral communications from officials of DOE contractors concerning significant information. In determining whether to take enforcement action for an oral statement, consideration will be given to such factors	Y76-001, Enforcement Compliance Program
as: (1) The degree of knowledge that the communicator should have had regarding the	
matter in view of his or her position, training, and experience;	
(2) The opportunity and time available prior to the communication to assure the	
accuracy or completeness of the information; (3) The degree of intent or negligence, if any, involved;	
(4) The formality of the communication;	
(5) The reasonableness of DOE reliance on the information;	
(6) The importance of the information that was wrong or not provided; and	
(7) The reasonableness of the explanation for not providing complete and accurate information.	
(c) Absent gross negligence or willfulness, an incomplete or inaccurate oral statement	
normally will not be subject to enforcement action unless it involves significant information	
provided by an official of a DOE contractor. However, enforcement action may be taken for	
an unintentionally incomplete or inaccurate oral statement provided to DOE by an official of	
a DOE contractor or others on behalf of the DOE contractor, if a record was made of the oral information and provided to the DOE contractor thereby permitting an opportunity to	
correct the oral information, such as if a transcript of the communication or meeting	
summary containing the error was made available to the DOE contractor and was not	
subsequently corrected in a timely manner.	
(d) When a DOE contractor has corrected inaccurate or incomplete information, the	
decision to issue a citation for the initial inaccurate or incomplete information normally will be dependent on the circumstances, including the ease of detection of the error, the	
timeliness of the correction, whether DOE or the DOE contractor identified the problem with	
the communication, and whether DOE relied on the information prior to the correction.	
Generally, if the matter was promptly identified and corrected by the DOE contractor prior	
to reliance by DOE, or before DOE raised a question about the information, no enforcement action will be taken for the initial inaccurate or incomplete information. On the	
other hand, if the misinformation is identified after DOE relies on it, or after some question	
is raised regarding the accuracy of the information, then some enforcement action normally	
will be taken even if it is in fact corrected.	
(e) If the initial submission was accurate when made but later turns out to be erroneous	
because of newly discovered information or advances in technology, a citation normally	
would not be appropriate if, when the new information became available, the initial submission was promptly corrected.	
(f) The failure to correct inaccurate or incomplete information that the DOE contractor does	
not identify as significant normally will not constitute a separate violation. However, the	
circumstances surrounding the failure to correct may be considered relevant to the	
determination of enforcement action for the initial inaccurate or incomplete statement. For example, an unintentionally inaccurate or incomplete submission may be treated as a more	
severe matter if a DOE contractor later determines that the initial submission was in error	
and does not promptly correct it or if there were clear opportunities to identify the error.	

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Appendix C List of Applicable Workplace Safety and Health Requirements (Page 1 of 1)

The following requirements from 10 CFR 851, Sect. 851.23 and Sect. 851.27 are applicable to work by B&W Y-12:

- Title 10 Code of Federal Regulations (CFR) 850, Chronic Beryllium Disease Prevention Program'
- 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
- Title 29 CFR, Part 1910, Occupational Safety and Health Standards, excluding 29 CFR 1910.1096, Ionizing Radiation
- Title 29 CFR, Part 1926, Safety and Health Regulations for Construction
- American Conference of Governmental Industrial Hygienists (ACGIH), Threshold
 Limit Values for Chemical Substances and Physical Agents and Biological Exposure
 Indices, (2005) (incorporated by reference, see Sect. 851.27) 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.
- American National Standards Institute (ANSI) Z88.2, *American National Standard for Respiratory Protection*, (1992)
- ANSI Z136.1, Safe Use of Lasers, (2000)
- ANSI Z49.1, Safety in Welding, Cutting and Allied Processes, Sects. 4.3 and E4.3 (1999)
- National Fire Protection Association (NFPA) 70, National Electrical Code, (2005)
- NFPA 70E, Standard for Electrical Safety in the Workplace, (2004)
- American Society of Mechanical Engineers (ASME) *Boilers and Pressure Vessel Code*, Sect. I through XII including applicable Code Cases, (2004).
- ASME B31 (ASME Code for Pressure Piping) as follows:
 - o B31.1—2001—*Power Piping*, and B31.1a—2002—Addenda to ASME B31.1—2001
 - o B31.3—2002—Process Piping
 - B31.5—2001—Refrigeration Piping and Heat Transfer Components, and B31.5a—2004, Addenda to ASME B31.5—2001
 - o B31.9—1996—Building Services Piping
 - B31G -1991, Manual for Determining Remaining Strength of Corroded Pipelines
- DOE Manual 231.1–1A, Environment, Safety and Health Reporting Manual, September 9, 2004
- NFPA Codes and Standards as applicable to worker health and safety
- DOE Manual 440.1-1A, DOE Explosives Safety Manual
- DOE Order 473.3, Protection Program Operations