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The Secretary of Energy
Washington, DC 20585

December 22, 1997

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DNF SAFETY BOARD

The Honorable John T. Conway
Chairman
Defense Nuclear Facilities Safety Board
625 Indiana Avenue, NW, Suite 700
Washington, D.C. 20004

Dear Mr. Chairman:

Thank you for your October 7, 1997, letter forwarding comments on the Department's Functions, Responsibilities, and Authorities Manuals (FRAMs). The appropriate Departmental managers are available to discuss with the Board how the current line and oversight functions and responsibilities are reflected in these documents. I have approved the enclosed Department FRAM that directs all Department elements to further develop and maintain documentation defining delegation of authority for safety management functions within their organizations.

The Department considers the FRAMs to be "living documents" that will be periodically updated and improved. We will carefully consider all of your comments and observations and the Department looks forward to further interaction with the Board on this matter. The Department's Safety Management Implementation Team will guide the implementation and improvements to these documents.

If you have any questions, please contact me or have a member of your staff contact Mr. Richard Crowe, Director, Safety Management Implementation Team at (202) 586-1418.

Sincerely,

A handwritten signature in cursive script, appearing to read "Federico Peña".

Federico Peña

Attachment

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DOE M 411.1-1

10-8-97

MANUAL OF SAFETY MANAGEMENT FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES



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U.S. DEPARTMENT OF ENERGY

Distribution:
All Departmental Elements

Initiated By:
Assistant Secretary for
Environment, Safety
and Health

**MANUAL OF
SAFETY MANAGEMENT FUNCTIONS, RESPONSIBILITIES,
AND AUTHORITIES**

1. **PURPOSE.** This document responds to the recommendation by the Defense Nuclear Facilities Safety Board (95-2) that the Department of Energy (DOE) develop and maintain lists of safety-related functions along with the DOE organizations and employees responsible for their proper execution. The requirements set forth in this Manual apply to DOE-wide safety management functions, and are to be used to develop lower-tier documents by those Headquarters and Field Element offices that have responsibilities for the detailed execution of these functions within each of those offices.
2. **REFERENCES.** DOE P 411.1, SAFETY MANAGEMENT FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES; and DOE P 450.4, SAFETY MANAGEMENT SYSTEM POLICY.
3. **CONTACT.** Jacques B. J. Read, Office of Nuclear Safety Policy and Standards, Office of the Assistant Secretary for Environment, Safety and Health (EH-31), 301-903-2535.

BY ORDER OF THE SECRETARY OF ENERGY:



FEDERICO F. PEÑA
Secretary of Energy

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1. INTRODUCTION

The Department of Energy (DOE) is committed to a management systems approach to ensure work is performed safely. This approach is reflected in the guiding principles and core management functions established in DOE Policy (DOE P) 450.4, SAFETY MANAGEMENT SYSTEM POLICY. Among these guiding principles are the responsibility of DOE line management⁽¹⁾ for safety⁽²⁾ and the necessity for clearly defining and understanding DOE functions, responsibilities, and authorities (see the definitions in Appendix C for the meanings of "responsibility," "accountability," and "authority" as used in this Manual).

The strategy for implementing these two guiding principles is further defined by DOE P 411.1, SAFETY MANAGEMENT FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES POLICY. This policy requires:

- development of a corporate-level document that defines the Department's primary safety management functions, responsibilities, and authorities, and
- a framework for the development of lower-tier documents to further describe line, support, oversight, and enforcement organization implementation.

Together, the corporate-level and lower-tier documents replace the "Manual of Functions, Assignments, and Responsibilities for Nuclear Safety" and the interim statement of responsibilities described in the Secretary's October 21, 1994, letter to Chairman Conway of the Defense Nuclear Facilities Safety Board (DNFSB).

2. OBJECTIVE

The purpose of the corporate-level and lower-tier documents is to ensure Department functions, responsibilities, and authorities for safety management are clearly defined. In achieving this objective, this Manual is consistent with the Department's guiding principles established in DOE P 450.4, and the safety management functions outlined in DOE P 411.1. DOE corporate safety functions are described here in the sequence in which they appear in DOE P 450.4, and the responsibilities and authorities for their execution are assigned to various Secretarial Offices, along with requirements covering any further delegations and provisions for dealing with potential conflicts among DOE organizations. While this Manual is part of the DOE directives system, the

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- 1 "DOE line management" refers to that portion of the Department organization having a linear reporting relationship extending from the Secretary to the people in the facilities directly performing the Department's missions. It is distinct from "DOE support organizations," such as those of the Office of the Assistant Secretary for Environment, Safety and Health, the Office of the Assistant Secretary for Human Resources and Administration, and the Office of the Associate Deputy Secretary for Field Management, which also have safety support responsibilities and functions.
 - 2 Throughout this document, the term "safety" is used synonymously with environment, safety and health to encompass protection of the public, the workers, and the environment.

associated lower-tier documents, which describe further delegations of safety authority within each of the Secretarial Offices, are not.

3. SCOPE

This Manual addresses the corporate-level functions, responsibilities, and authorities for DOE organizations responsible for the overall direction of integrated safety management systems throughout the DOE complex, including both nuclear and non-nuclear facilities. The corporate-level responsibilities of this Manual are based on the corporate-level responsibilities in DOE directives and actual work practices. Functions, responsibilities, and authorities below the corporate level, such as the responsibilities for specific disciplines and/or functional areas, shall be incorporated or dispositioned, as appropriate, in the organizational documents required by DOE P 411.1. Contractor functions, responsibilities, and authorities for safety management are described in the safety management system descriptions and implementation plans required by their contracts.

This Manual applies to all Department organizations performing safety management functions except for the Naval Nuclear Propulsion Program, the Power Marketing Administrations, and privatized activities where these functions are not included in the contract. Program offices, field elements, and the Office of Environment, Safety and Health are to implement this Manual through the creation and maintenance of lower-tier functions, responsibilities and authorities documents as required by DOE P 411.1.

As required by DOE M 251.1-1, DIRECTIVES SYSTEM, this Manual will be reviewed every 2 years and updated as necessary by the Office of Environment, Safety and Health.

4. HOW THE DEPARTMENT INTENDS TO DO WORK

DOE P 450.4 identifies five core functions of the Department's integrated safety management system. Figure 1 illustrates the flow and the relationship of these functions.⁽³⁾ In addition to the five core functions, Figure 1 also illustrates the role of *direction* in safety management (i.e., corporate-level involvement). Those activities that define and shape the missions of the Department, such as the development of strategic plans, budget execution plans, and safety policies and requirements, are considered to be direction. The five core safety management functions, together with corporate direction, define the necessary structure for any work activity that could potentially affect the safety of the public, the workers, or the environment. The degree of rigor in addressing these functions at a particular facility will vary based on the work activity and the hazards involved. The following sections of this Manual identify the corporate functions in each area to be performed by DOE employees. Taken together with the delegations of authority and details of execution identified in the lower-tier functions, responsibilities, and authorities (FRA) documents, procedures, and contractor management documents, they identify

(3) Figure 1 has been taken from Figure 3 of the Defense Nuclear Facilities Safety Board Recommendation 95-2 Implementation Plan.

both the activities necessary to provide reasonable assurance that the public, the workers, and the environment are adequately protected, and the organizations and individuals are accountable for effective accomplishment of those activities.

5. OVERVIEW OF DOE SAFETY MANAGEMENT

DOE has a diverse set of missions and responsibilities that include research, dissemination of scientific information, production and maintenance of special nuclear materials and weapons for

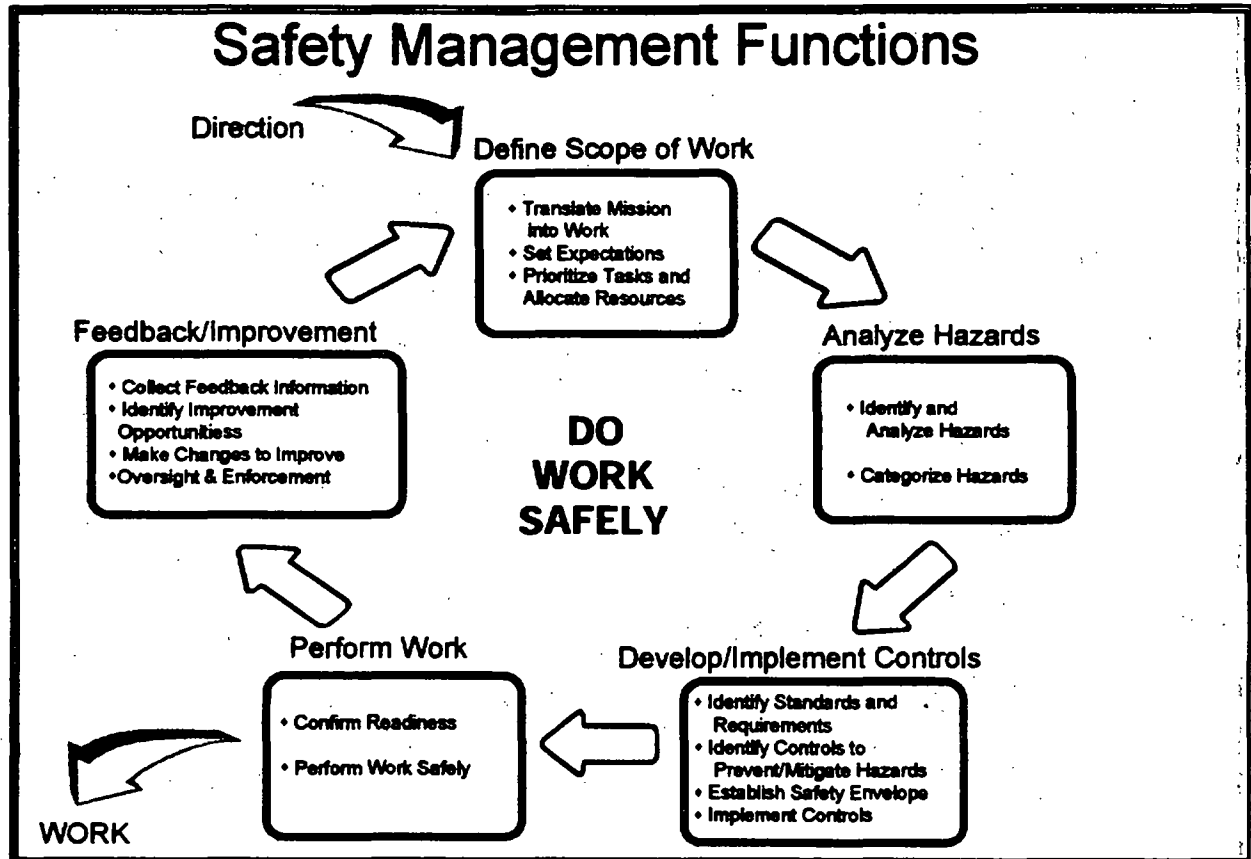


Figure 1: Safety Management Functions

national defense, development of energy technologies, development of energy and safety regulations and standards, cleanup of nuclear production sites, and encouragement of nuclear energy for peaceful purposes. Headquarters and field organizations with responsibility for mission-related work are considered to be line organizations. The primary responsibility for safety lies with line management. At Government-Owned Contractor-Operated (GOCO) facilities, DOE line management flows from the Secretary through the program offices to the Operations or Field Office (i.e., the field element) to DOE management and operating contractors. (At Government-Owned-Government-Operated (GOGO) facilities, Department employees are responsible for operating the facility and performing the work, and contractors are not involved. DOE is totally responsible for all aspects of safety management at GOGO facilities.)

Program Offices provide direction and define the missions and budgets to be implemented by the field. Accordingly, the cognizant Secretarial Officer (CSO) of the Headquarters line organization,

(Program Office) usually delegates operating authority of an installation/facility to the Field Element Manager (FEM), who has the direct responsibility for day-to-day control. However, delegation of safety authority to the FEM does not relieve the CSO of responsibility for safety. Program Offices are responsible for providing the direction necessary to ensure that missions are performed safely and within budget; FEMs at Operations and Field Offices (field elements) direct, plan, and monitor the activities of DOE and contractor employees.

The CSO monitors field element safety management activities in a manner similar to that which he/she uses to oversee his/her other programmatic responsibilities. Accordingly, field elements keep CSOs informed of program status and forward timely information on issues that affect those programs so that the CSO can make decisions on program direction and resource allocation. Figure 2 outlines this flow of information and responsibility for GOCO facilities. Due to differences among the CSOs in delegation of authority, a more accurate description of these flows in particular cases would require additional lines of interaction.

The Office of the Associate Deputy Secretary for Field Management (FM) is not shown in Figure 2. FM is neither injected into the line management of DOE programs, nor is it responsible for defining program goals or requirements. Rather, FM works to ensure the program offices coordinate their activities in a way that addresses field concerns.

The Office of Environment, Safety and Health (EH), which is not a line management organization, is responsible for carrying out the following three functions in support of the safety management system at Headquarters and in the field:

Independent Oversight. EH is the sole Headquarters element conducting independent oversight of environment, safety, and health (ES&H) activities.

Enforcement. EH carries out the Department's function under the Price-Anderson Amendments Act of 1988 for investigation and enforcement of potential nuclear, radiological, and occupational safety and health violations.

Departmental Policy, Technical Support, and Regulatory Issues. EH has the lead for establishing Departmental ES&H policy and standards and coordinating resolution of associated issues. For ES&H matters, EH confers with Federal agencies and other external stakeholders and, in consultation with line management, provides the Department with expert resources and programs.

In many respects, the Department is a self-regulated organization. Specific authority for self-regulation in the area of special nuclear materials, source and by-product materials is provided in Section 161, "General Provisions," of the Atomic Energy Act; for workplace safety, this authority is specified in Section 4.b of the Occupational Safety and Health Act. Section 161.p of the Atomic Energy Act gives the Department broad authority to "make, promulgate, issue, rescind, and amend such rules and regulations as may be necessary to carry out the purposes of this Act." Because the responsibilities of production and regulation may be viewed as conflicting, EH is responsible for establishing safety requirements and standards, assisting line management in properly interpreting safety standards, and performing independent oversight of line management activities; that is, reporting to DOE management on the status of safety as seen by those not

associated with mission accomplishment. For nuclear activities, EH is responsible for the enforcement of nuclear safety requirements. The Office of General Counsel (GC) promulgates rules and interprets regulatory requirements.

Many Department activities, such as environmental protection, waste management, and privatized activities, receive external regulation. For such activities, the responsibilities and authorities of the external organizations are defined in laws, regulations, and memoranda of understanding, which consequently supersede responsibilities and authorities identified in this Manual. However, external regulation of those activities does not relieve DOE line management of its responsibilities.

If a directive, memorandum, or written delegation of authority conflicts in any way with the requirements of this or a lower-tier FRA document, it is the responsibility of the organization maintaining that FRA document to resolve the conflict by either document or directive revision.

6. DIRECTION FROM MULTIPLE PROGRAM OFFICES

CSOs must coordinate their directions to multi-program sites to ensure consistency in requirements, compatibility of programs and activities, and efficiency in the use of resources to satisfy programmatic expectations. Coordination of direction includes identifying conflicts in direction and the resolution of those conflicts. Program offices are responsible for coordinating with other affected program offices prior to issuing direction to the field. In the event that program office coordination is not conducted, the field element shall determine an appropriate course of action. The field element will notify the affected program offices of its chosen course of action and establish a reasonable response time to allow dissenting program offices to elevate resolution to the Under Secretary.

7. DELEGATION OF AUTHORITY

The Secretary receives responsibilities and authorities from statutes and Congress and may delegate that authority throughout the Department and establish further responsibilities. Although the authority for executing specific functions can be delegated down the line to the individual who actually performs the function, the responsibility for that function cannot be delegated, but designees are to be held accountable for impropriety or dereliction in the use of delegated authority. In particular, contractors operating DOE facilities are accountable for performing their activities in a safe manner, while DOE line management is responsible for direction to and monitoring of the performance of those contractors to ensure the safety of the facilities. Because the delegation of authority for specific functions often differs among individual DOE organizations, that delegation shall be specified in the lower-tier FRA documents.

Section 9 below assigns responsibilities and authorities for specific corporate-level safety functions to DOE officials. These authorities may be delegated unless delegation is prohibited by regulation or other obligation, or this Manual specifically prohibits delegating this function. Authority may be delegated by means of DOE directives, mission statements, position descriptions, or memoranda, and, within an organization, by that organization's FRA document. Records of delegation shall be kept current; that is, they shall be revised to reflect changes in personnel, changes in directives, including the applicable FRAMs, and changes in policy. Such delegation of authority does not relieve the delegating officer of responsibility for the outcomes of

the exercise of that authority. Delegation of approval authority does not preclude program offices from issuing requirements, expectations, and guidance affecting that authority, or from participating in field element interactions with the operating contractor. Program offices must coordinate any interactions with an operating contractor through the cognizant field element.

The following restrictions apply to the delegation of authority.

- All delegations of authority must be in writing, which must be provided to the designee. This document shall establish a clear understanding between the delegating authority and the designee of the specific function delegated and all circumstances under which the authority may be exercised, including any restrictions or prohibitions related to further delegation.
- The delegation may be rescinded by the delegating authority in writing at any time.
- In some cases, existing informal agreements between CSOs and FEMs have the effect of delegating to the field the authority for approving broad categories of contractor documents. Such agreements shall be documented in the CSO and FEM FRA documents.
- Verbal delegations shall not be used unless covered by a written delegation (e.g., that the Deputy Manager assumes authority whenever the Manager is on travel).
- Permanent delegations are in effect until rescinded in writing by the delegating official. Temporary delegations specify when authority is to be terminated.
- Any time a DOE signature is required, the signing official shall have written authority.

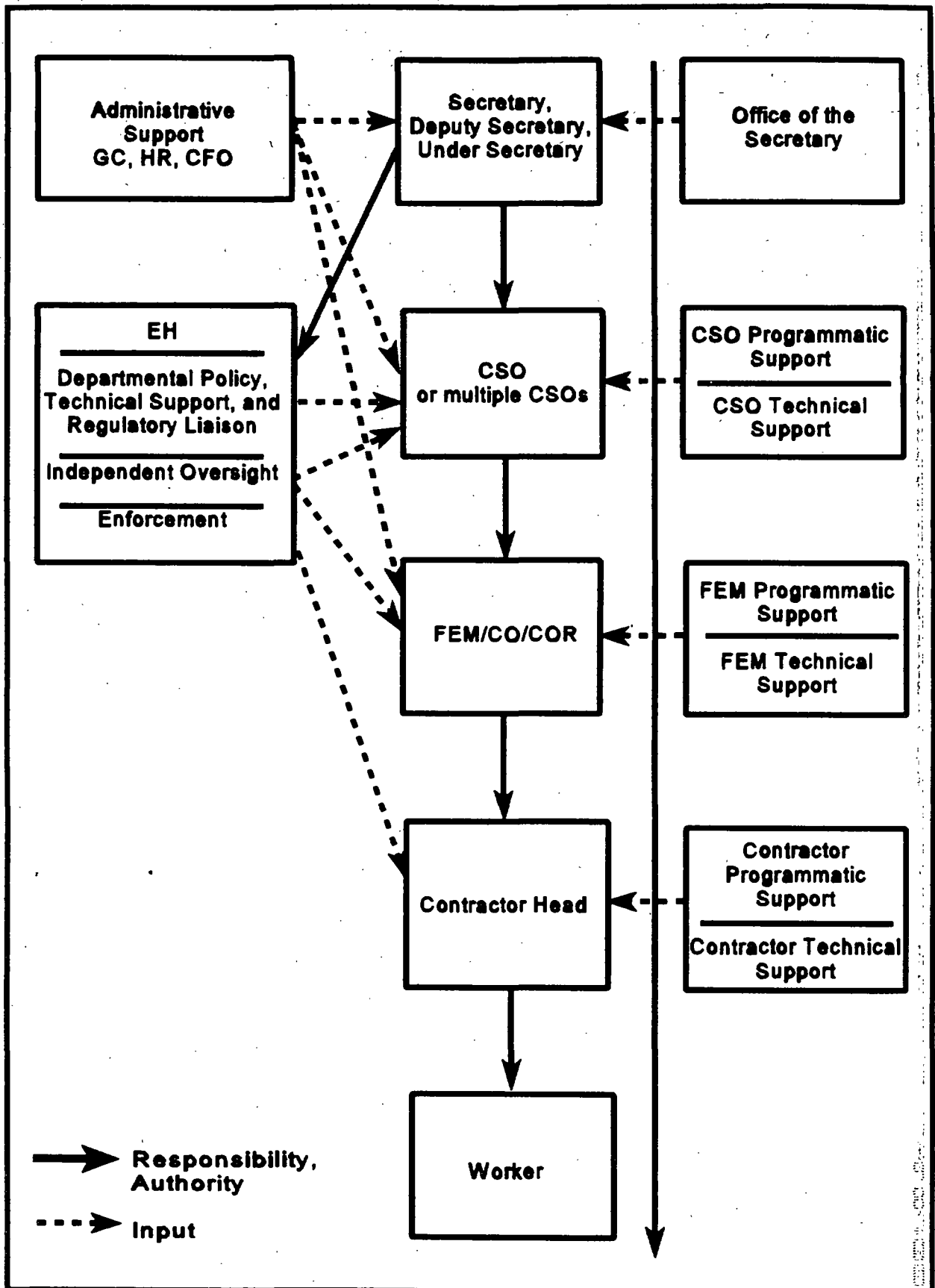


Figure 2. Generic Flow of Responsibility, Authority, and Input within DOE.

8. SECRETARIAL OFFICE AND FIELD ELEMENT FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES DOCUMENTS

Each Headquarters and Field Office organization with a mission that affects the safety of work performed at DOE facilities is required to develop and implement a lower-tier FRA document. This lower-tier FRA document shall capture the safety management functions and responsibilities necessary to accomplish the intent of DOE directives, other agencies' regulations, and safety management mechanisms. The format of these FRA documents is not prescribed, so that each organization can develop a format most suitable and effective for its specific needs. However, these FRA documents shall provide a breakdown of applicable functions contained in this Manual, and shall clearly identify any authority that has been delegated to or from another organization. The CSO FRA documents shall capture all CSO authorities within this Manual and all pertinent directives, and FEM FRA documents shall capture all FEM authorities within this Manual, all pertinent directives, and all authorities delegated by the applicable CSOs, consistent with Figure 2.

The process for coordinating directions from multiple CSOs to the FEM is described in Section 6 of this Manual. These coordination functions and responsibilities should be specified in the FRA documents for FEMs and affected CSOs. Each FRA document shall be approved by the senior official of that organization, who is also responsible for necessary revisions. To ensure that interfaces with other organizations and delegations of authority are correctly included, FRA documents shall be reviewed by other organizations identified as having an interface.

Each FRA document shall be managed by a change control process to sustain it as a living document, and shall identify an organizational element or position with that responsibility.

9. DEPARTMENT SAFETY MANAGEMENT FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES

9.1 Provide Direction

DOE organizations responsible for functions relating to safety management include Headquarters and field line management and support organizations. Each Department element is responsible for planning its activities, budgeting and allocating available resources to meet its objectives, contributing to the development and implementation of requirements, and meeting Department-wide objectives. In general, CSOs are responsible for defining and communicating to the FEMs the program's mission, objectives, high-level parameters (performance measures), and expectations. FEMs are responsible for executing contracts consistent with DOE policy and requirements, and for monitoring and assessing day-to-day performance under the contracts.

The responsibilities and authorities for providing direction relating to ensuring safety are delineated below.

9.1.1 DOE Strategic Plans, Including Mission Statements

Secretary of Energy Responsibilities:

- Prepare and approve the Department's Strategic Plan and Mission Statement.

Secretarial Officers' (SOs) Responsibilities:

- Provide input to and implement the provisions of the Secretary's Strategic Plan, including the Department's Mission Statement.

9.1.2 Secretarial Office Strategic Plans, Including Missions Statements

Under Secretary Responsibilities:

- Approve Secretarial Office Strategic Plans, including Mission Statements.

SO Responsibilities:

- Prepare Secretarial Office Mission Statements and submit them to the Under Secretary for approval.
- Effectuate DOE and Secretarial Office Mission Statements.

9.1.3 Cognizant Secretarial Office Mission Assignment to Field Element

CSO Responsibilities:

- Prepare and approve mission assignments to FEMs in the form of program guidance.

FEM Responsibilities:

- Review and provide input to program guidance developed by the CSO.
- Implement program guidance.

9.1.4 Budget for Program

CSO Responsibilities:

- Prepare the proposed budget for the program office and coordinate with the Headquarters Chief Financial Officer.

FEM Responsibilities:

- Participate in preparation of the proposed budget and provide input to CSOs on the adequacy of the proposal to support missions and safety initiatives.

Chief Financial Officer Responsibilities:

- Approve the final budget for each CSO consistent with legislative mandates and Department budget.

9.1.5 Resource Allocations to FEM*CSO Responsibilities:*

- Allocate resources consistent with final approved budget such that missions and safety initiatives can be accomplished.

FEM Responsibilities:

- Review and provide input to CSO regarding the adequacy of the proposed allocations to meet mission and safety initiatives. If the proposed budget is insufficient, propose an alternate plan to CSO that can be accomplished within budget and/or identify needed additional funds.

9.1.6 Technical Qualification and Competency

Each DOE element is responsible for ensuring that its employees are qualified to perform their assigned functions. The Assistant Secretary for Human Resources and Administration (HR-1) is responsible for managing the DOE program to develop and maintain personnel qualification standards. The efficient use of those standards in a training and qualification program for Departmental technical personnel is an integral part of safety management.⁽⁴⁾

EM and DP Responsibilities:

- Recruit, maintain and support the DOE Core Technical Group of subject matter experts.

9.2 Define Scope of Work

After DOE has established its missions and resources, DOE determines the specific work which needs to be done at its sites in order to meet those missions. Department expectations, site and contractor capabilities, safety priorities, and available resources are considered in defining the scope of work to be performed. Activities must be prioritized in order to ensure that DOE resources are most effectively applied. The Department's expectations are defined in contracts and regulations for GOCOs and internal documents for GOGOs. DOE and the contractor can execute contract modifications for changes in the negotiated scope of work based on actual work planning and performance.

⁴ Guiding Principle #3 of DOE P 450.4 is: "Competence Commensurate with Responsibilities. Personnel possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities."

9.2.1 Translate Mission Into Work

Each field element is expected to develop appropriate documents delineating its plan of work, including scope, schedule, and funding allocations for each fiscal year. These plans may be documented in various formats, but at a minimum should reflect the CSO mission assignments to the field and the mission in terms of work by facilities, projects, and programs.

9.2.2 Set Expectations

Expectations for DOE organizations and employees are set through DOE directives (Policies, Orders, Manuals, etc.) and regulatory requirements. Contracts and regulations set expectations for contractors. Expectations for FEMs are contained in instructions, specific goals, and required levels of performance received from CSOs. (See DOE G 120.1-5, GUIDELINES FOR PERFORMANCE MEASUREMENT.)

The following subsections describe the various directives used within the Department to issue safety direction to Department employees and contractors. Rules are the equivalent of law and are enforceable regardless of contract language. Policies, Orders, Manuals, and Notices are mandatory for Department staff. Guides and Technical Standards are considered guidance and consequently are not mandatory unless specifically referenced as requirements in a contract. For further information on Department directives, see DOE O 251.1 and DOE M 251.1-1.

9.2.2.1 Policies, Orders, Notices, Manuals, and Guides

Secretary of Energy Responsibilities:

- Approve Department Policies, Orders, Notices, Manuals and Guides. Authority to approve and issue directives is delegated as outlined in DOE O 251.1 and DOE M 251.1-1.

Office of Primary Interest (OPI) Responsibilities:

- Prepare draft directives (i.e., Policies, Orders, Notices, Manuals, and Guides) using Department resources as appropriate to ensure development of a quality product consistent with Department missions.
- Revise directives as necessary and provide technical interpretation of directive requirements.
- Submit final draft Policies, Orders, Notices, Manuals, and Guides to HR-1 for issuance.
- Designate a Directive Development Manager to coordinate review of directives. (See DOE M 251.1-1)

CSO (and EH, when not the OPI) Responsibilities:

- Review and comment on proposed directives.

- Recommend technical and cost-saving improvements where appropriate.
- Provide staff to participate on focus groups or technical development teams to ensure a quality product is developed.
- Alert the OPI to any inconsistencies between the proposed directive and Department and SO missions.

Directives Management Board Responsibilities:

- Resolve issues that cannot be resolved by either the Office of Primary Interest or the Directive Systems Manager (HR), or refer issues to the Secretary, Under Secretary, or the Deputy Secretary. (See DOE M 251.1-1)

FEM Responsibilities:

- Review and comment on proposed Policies, Orders, Notices, Manuals, and Guides.
- Recommend technical and economical improvements where appropriate.
- Provide staff to participate on focus groups or technical development teams.
- Provide comments to OPI if directives are inconsistent with field element missions.

Contracting Officer Responsibilities:

- Negotiate with each contractor, in consultation with FEM and CSO, to establish which directives or provisions of directives, if any, are to be included in the contract.

EH Responsibilities:

- Ensure proposed Policies, Orders, Notices, Manuals, and Guides are consistent with Environment, Safety and Health missions.

GC Responsibilities:

- When requested or directed by the Office of Primary Interest (OPI) or EH-1, review and comment on proposed Orders, Notices, Manuals, and Guides for legal sufficiency.

HR Responsibilities:

- Issue Department Policies, Orders, Notices, Manuals, and Guides in accordance with DOE O 251.1 and DOE M 251.1-1.

9.2.2.2 Technical Standards for Use Within DOE

Public Law 104-113, the National Technology Transfer and Advancement Act of 1995, requires Federal agencies to use established consensus standards whenever possible. DOE Technical Standards are to be developed or used only if no applicable non-DOE standard exists.

OPI Responsibilities:

- Identify established consensus standards for use by DOE, or document need for a DOE Technical Standard. Approve final DOE Technical Standards and send to DOE Technical Standards Manager for issuance.
- Prepare draft DOE Technical Standards when these are consistent with Department mission and consistent with PL 104-113.
- Coordinate draft DOE Technical Standards in accordance with directions from the DOE Technical Standards Program.

CSO Responsibilities:

- Review and comment on proposed DOE Technical Standards.
- Recommend technical and cost-saving improvements where appropriate.
- Provide staff to participate on focus groups or technical development teams.
- Ensure proposed DOE Technical Standards are consistent with program office missions.

FEM Responsibilities:

- Review and comment on proposed DOE Technical Standards.
- Recommend technical and cost-saving improvements where appropriate.
- Provide staff to participate on focus groups or technical development teams.

EH Responsibilities:

- Manage the DOE Technical Standards Program.
- Appoint the DOE Standards Executive to represent DOE's interests on consensus standards-setting organizations and the Interagency Committee on Standards Policy.
- Perform DOE reporting requirements under OMB A-119.
- When not the OPI, review and comment on proposed DOE Technical Standards and recommend technical and cost-saving improvements where appropriate.

- Provide staff to participate on focus groups or technical development teams to ensure a quality product is developed.
- Ensure proposed DOE Technical Standards are consistent with Environment, Safety and Health missions.

9.2.2.3 Rules

DOE elements are responsible for compliance with all federal rules, and not just those promulgated by the DOE. Many DOE organizations maintain an expertise in and awareness of the rule-making activities of other government agencies. For example, EH provides assistance in understanding and implementing environmental rules and coordinates comments to proposed changes to environmental and Occupational Safety and Health Administration regulations. EM has similar responsibilities for Department of Transportation and Nuclear Regulatory Commission packaging requirements for transporting radioactive materials.

Secretary of Energy Responsibilities:

- Approve Department Nuclear Safety Rules.

CSO Responsibilities:

- Review and comment on proposed rules.
- Recommend technical and cost-saving improvements where appropriate.
- Provide staff to participate on focus groups or technical development teams.

FEM Responsibilities:

- Review and comment on proposed rules.
- Recommend technical and cost-saving improvements where appropriate.
- Provide staff to participate on focus groups or technical development teams.

EH Responsibilities:

- Prepare draft nuclear safety rules or other safety rules of general applicability in accordance with the provisions of the Administrative Procedures Act. Develop associated guidance documents. Department resources used in implementing rules shall be appropriate to provide reasonable assurance of adequate protection in the operation of nuclear facilities.
- Ensure safety rules are consistent with P.L. 104-113 and OMB A-119.
- Submit final draft rules to GC-1 for coordination with the Secretary of Energy, the Office of Management and Budget (OMB), and the Federal Register.

- **Revise rules when necessary and interpret their technical requirements.**
- **Interact with other Federal agencies to ensure rules are consistent with (1) statutory and legal requirements, and (2) Federal safety and health policy.**

GC Responsibilities:

- **Ensure rules and Notices placed in the Federal Register are developed and issued in accordance with the Administrative Procedures Act and other applicable statutory requirements.**
- **Coordinate review of rules by the Office of Management and Budget (OMB).**
- **Ensure that the final rule package is legally correct and properly addresses all applicable statutes, Executive Orders, and regulatory requirements.**
- **Ensure that all notices and the final rule are in correct format for publication in the Federal Register and coordinate transmittal of the package to the Federal Register for publication.**
- **Provide regulatory interpretations as requested using the appropriate technical resources for support when the interpretation may involve technical considerations.**

9.2.2.4 **Contract Performance Expectations.**

CSO Responsibilities:

- **Provide guidance to FEMs on expected performance and set goals and priorities, and allocate resources.**
- **Concur on proposed Department of Energy Acquisition Regulations (DEARs) that affect safety.**

FEM Responsibilities:

- **In accordance with contract regulations, prepare contracts that establish clear expectations and performance measures for work performance.**
- **Ensure contracts define the actions necessary to meet site mission and safety expectations.**
- **Review and comment on proposed DEARs that affect safety.**

Contracting Officer Responsibilities:

- **Approve and issue contracts that meet contract regulations and provide clear expectations and performance measures to contractors regarding work to be performed and the mission and safety requirements.**

- Ensure contracts clearly delineate contractor responsibilities regarding subcontractors and suppliers.
- Implement funding allocations consistent with the program office's allocations of resources, and revise allocations as delegated.
- Act as a liaison between the contractor and Department staff regarding contract issues and performance expectations.

EH Responsibilities:

- Review and comment on proposed DEARs affecting safety.

GC Responsibilities:

- Develop and issue DEARs that establish contractor safety expectations and requirements.

9.2.2.5 Organization Functions, Responsibilities, and Authorities Manuals

Section 7 above addresses the need for lower-tier Manuals to delineate the functions, responsibilities, and authorities within specific organizations and to ensure that the responsibilities and authorities defined in this Manual flow down to the individuals who do the work. The responsibilities for preparation of lower-tier Manuals are defined below.

CSO, EH, and FEM Responsibilities:

Prepare, approve, and implement Functions, Responsibilities, and Authorities Manuals for each organization to delineate how the applicable responsibilities and authorities in this Manual are performed.

9.2.2.6 Approval of Safety Management System Documentation

The design of an effective Safety Management System requires technically competent people with appropriate experience, knowledge, and training to develop, review and approve Safety Management System descriptions. Effective implementation of such a System requires management and personal discipline in the use of a well-designed System by competent personnel.

Under Secretary Responsibilities:

- Approve initial list of senior technical safety managers who will lead safety management system description reviews.

CSO, EH, and FEM Responsibilities:

- Provide input to the Under Secretary in developing and approving list of senior technical safety managers for use in forming review teams.

Head of the Contracting Activity Responsibilities:

- Decide upon the need for team review, and, if a team is needed, select members of the review team for specific applications and select the team leader from the approved list.
- Approve safety management system descriptions and revisions.

9.2.3 Allocate Resources to Contractor

For contractors to perform work at DOE sites, DOE must allocate resources for that work.

CSO and FEM Responsibilities:

- Prepare budget execution documents in accordance with DEAR, DOE O 135.1, and DOE M 135.1-1 to allocate resources to contractors.
- Ensure funds and resources are appropriately used.

9.2.4 Prioritize Tasks

Work must be prioritized to ensure that DOE resources are most effectively used and that mission and safety expectations are met.

CSO Responsibilities:

- Review and provide guidance to the FEM regarding the safety management system and its ability to ensure that mission and safety expectations can be met within budget constraints. (See DOE P 450.4, SAFETY MANAGEMENT SYSTEM POLICY, Guiding Principle 4, "Balanced Priorities.")

FEM Responsibilities:

- Ensure that the safety management system adequately prioritizes work to ensure that, when implemented, mission and safety expectations for the site are met within available budget and resources.
- Review and support development of expected performance objectives and related CSO goals and priorities

9.3 Analyze Hazards

The hazards involved in any work activity must be identified, analyzed, and categorized so that appropriate safety standards can be selected commensurate with the work to be performed. The system to identify, analyze, and categorize the hazards should also be tailored to the expected hazards for the facility/activity.

Hazards analyses are a very important component of Safety Analysis Reports (SAR), see 7.4.3 for the review and approval function of these documents.

9.3.1 Identify and Analyze Hazards

FEM Responsibilities:

- Ensure that the analysis provided by the contractor properly covers the hazards associated with the work and provides sufficient information for the selection of safety standards.

EH Responsibilities:

- Monitor and provide technical support when requested or directed by the CSO on hazard identification and analysis activities to ensure they are sufficient to facilitate selection of the appropriate safety standards.
- Provide guidance and interpretation of requirements for all DOE elements on hazard analyses.

9.3.2 Categorize Facility/Activity Based on the Hazards

CSO Responsibilities:

- Monitor FEM program.
- Approve final facility categorization for nuclear facilities, where this authority has not been delegated.

FEM Responsibilities:

- Concur on facility/activity classification level based on input from contractors regarding the type and amounts of hazards.

9.4 **Develop and Implement Controls**

Based on an analysis of the work and the associated hazards of that work and the workplace, controls to prevent or mitigate the hazards must be developed and implemented to ensure adequate protection of workers, the public, and the environment. Additionally, controls must be implemented and followed to ensure compliance with Federal, State, and local regulations and laws and those DOE directives included in contractual terms and conditions unless a specific exemption to these requirements is obtained. These controls are based on Federal, State, and local regulations and contractual requirements, and are implemented by contractors through processes, programs, and procedures. DOE must review and approve nuclear safety rule implementation plans and other safety management plans that identify the controls, processes, programs, and procedures needed for safety.

9.4.1 Identify Standards and Requirements

See DOE P 450.2A, IDENTIFICATION, IMPLEMENTATION AND COMPLIANCE WITH ENVIRONMENT, SAFETY AND HEALTH REQUIREMENTS. The processes described in this Policy are to be used to establish contractor requirements, as well as DOE responsibilities. Three methods of identifying standards and requirements in contracts are included: Standards and Requirements Identification Documents, references to DOE Orders, and the Necessary and Sufficient process. It is the general responsibility of each DOE element to ensure that DOE responsibilities established by these processes are consistent with those in the applicable lower-tier FRA documents. (See also DOE P 450.3, AUTHORIZING USE OF THE NECESSARY AND SUFFICIENT PROCESS FOR STANDARDS-BASED ENVIRONMENT, SAFETY AND HEALTH MANAGEMENT, and DOE M 450.3-1, THE DEPARTMENT OF ENERGY CLOSURE PROCESS FOR NECESSARY AND SUFFICIENT SETS OF STANDARDS.)

9.4.1.1 ES&H site/facility specific requirements for incorporation into contracts and authorization agreements for Category 1 hazard nuclear facilities are to be clearly defined.

CSO Responsibilities:

- Approve (1) the specific requirements to be included in contracts and authorization agreements, (2) safety documentation, and (3) authorization bases.

FEM Responsibilities:

- Direct the contractor to propose site- or facility-specific standards tailored to the work and the hazards.
- Provide the above standards to CSO for approval.
- Ensure that appropriate safety requirements in necessary functional areas are included in the contracts.

Contracting Officer:

- Incorporate approved standards into contract requirements.

9.4.1.2 ES&H site/facility-specific requirements for incorporation into contracts and authorization agreements for Category 2 hazard and below nuclear facilities and non-nuclear facilities are to be clearly defined.

CSO Responsibilities:

- The CSO may retain approval authority for this responsibility, or he/she may delegate it. Wherever authority is not delegated, review and approve (1) the proposed specific requirements to be included in the contracts and authorization agreements, (2) safety

documentation, and (3) the authorization bases for nuclear facilities categorized as Category 2 hazard or below and non-nuclear facilities.

- Ensure that the requirements are consistent with budget and policy for each facility.

FEM Responsibilities:

- Direct the contractor to propose site- and facility-specific standards tailored to the work and the hazards.
- Provide the above documentation to the CSO and Headquarters program office for information or approval, as appropriate.
- Approve (1) the specific requirements to be included in contracts and authorization agreements, (2) safety documentation, and (3) authorization bases, where this authority has been delegated.

Contracting Officer:

- Incorporate approved standards into contract requirements.

9.4.1.3 Exemptions from DOE Directive Requirements (Other Than Rules)

See DOE O 251.1 and DOE M 251.1-1.

9.4.1.4 Exemptions from Requirements in 10 CFR Parts 830, 834, and 835

Exemptions from the requirements of the nuclear safety management rules of 10 CFR Parts 830, 834, and 835 are specifically authorized in 10 CFR Part 820, Subpart E. Individuals requesting and processing exemptions to these regulations should refer to the criteria and authorities in that regulation. In addition, DOE-STD-1083-95 provides guidance on requesting, reviewing, and granting exemptions to DOE nuclear safety rules.

Secretary of Energy Responsibilities:

- Review appeals of decisions on exemption requests as requested or as appropriate in accordance with the provisions of 10 CFR Part 820.

CSO Responsibilities:

- Approve requests for exemptions from the requirements of 10 CFR Part 830 as authorized by the provisions of 10 CFR Part 820, Subpart E. This authority may not be delegated.
- Review 10 CFR Part 834 or 835 exemption requests and provide recommendations on approval to EH.

FEM Responsibilities:

- Review and provide recommendations to CSOs or EH on requests for exemptions to 10 CFR Parts 830, 834, and 835.

EH Responsibilities:

- Review and comment on 10 CFR Part 830 exemption submittals.
- Approve requests for exemptions from the requirements of 10 CFR Parts 834 and 835 as authorized by the provisions of 10 CFR Part 820, Subpart E. This authority may not be delegated.

GC Responsibilities:

- Provide guidance or assistance on the legal sufficiency of the DOE basis for granting or denying an exemption when requested by a CSO or EH.

9.4.1.5 Exemptions from external requirements

FEMs in coordination with the appropriate CSOs may find it necessary to pursue exemptions from local, State, or other Federal agencies (e.g., 40 CFR, 29 CFR, etc.). Responsibilities and authorities for this function are to be included in the appropriate organization-specific FRA documents.

9.4.1.6 Nuclear Safety Rule Implementation Plans, Programs, and Procedures

Most DOE nuclear safety rules require contractors to develop implementation plans to be approved by DOE. Guidance for the preparation, review, and approval of nuclear safety rule implementation plans is provided in DOE-STD-1082-94, PREPARATION, REVIEW, AND APPROVAL OF IMPLEMENTATION PLANS FOR NUCLEAR SAFETY REQUIREMENTS. This guide describes normal practice, but is not a requirement, and other procedures may be documented in lower-tier FRA documents.

CSO Responsibilities:

- Approve nuclear safety rule implementation plans, programs, and procedures where approval of DOE is required.
- Respond to FEM or EH comments.

FEM Responsibilities:

- Review the nuclear safety implementation plans prepared by the contractor for compliance with the requirements of 10 CFR Parts 830, 834, and 835.

- If not delegated approval authority, send recommendation for approval to the CSO with concurrence or comments. Respond to CSO or EH comments.
- Transmit approvals of implementation plans from CSOs (or designee) to contractor.
- Provide line management oversight and ensure contractor execution of nuclear safety rule implementation plans.

EH Responsibilities:

- Review and comment on implementation plans as requested.

9.4.2 Identify Controls to Prevent and Mitigate Hazards

Controls identified shall appropriately address hazards to the worker, public, and the environment from either nuclear or non-nuclear materials and operations. This effort would include both DOE and external controls (e.g., permits).

EH Responsibilities:

- Review and comment on the adequacy of controls as requested or directed.

9.4.2.1 Category 1 Hazard Nuclear Facilities

CSO Responsibilities:

- Ensure the adequacy of controls for the prevention and mitigation of hazards, and ensure sufficient funding for their implementation.
- Provide line management oversight of the FEM program.

FEM Responsibilities:

- Direct the contractor to prepare documentation for controls for the prevention and mitigation of hazards. Review the adequacy of the controls and their documentation.
- Provide line management oversight and ensure the implementation of hazards mitigation programs and controls.

9.4.2.2 Category 2 and 3 Hazard Nuclear Facilities and Non-nuclear Facilities

CSO Responsibilities:

- Review documentation for controls for selected facilities (e.g., accelerators and other major systems).

FEM Responsibilities:

- Direct the contractor to prepare documentation for controls for the prevention and mitigation of hazards.
- Ensure the adequacy of the contractor's documentation and implementation controls for the prevention and mitigation of hazards.

9.4.3 Establish Safety Envelope

CSO Responsibilities:

The CSO approves the basis for authorizing operation and the associated safety documentation for Category 1 hazard nuclear facilities, but this authority may be delegated to the FEM for facilities of lesser hazard.

9.4.3.1 Safety Documentation/Authorization Basis for Category 1 hazard nuclear facilities.

CSO Responsibilities:

- Approve the authorization basis and associated safety documentation. The CSO may delegate this authority to a headquarters program line manager, or to the FEM.

FEM Responsibilities:

- Direct preparation of the authorization basis and associated safety documentation and oversee implementation by the contractor.

EH Responsibilities:

- Review and comment on the authorization basis and associated safety documentation for Category 1 hazard nuclear facilities, where requested or directed.

9.4.3.2 Safety Documentation/Authorization Basis for Category 2 and below hazard nuclear facilities and high and moderate hazard accelerators.

Details of safety documentation requirements are to be found in several directives. See DOE 5480.22, TECHNICAL SAFETY REQUIREMENTS, DOE 5481.1B, SAFETY ANALYSIS AND REVIEW SYSTEM (which is applicable only to non-nuclear facilities), and DOE 5480.23, NUCLEAR SAFETY ANALYSIS REPORTS (which replaces DOE 5481.1B for nuclear facilities).

CSO Responsibilities:

- Approve the safety documentation and authorization bases, or delegate this authority to the FEM.

FEM Responsibilities:

- Direct preparation of the authorization basis and associated safety documentation; approve these documents, except where the authority to do so has not been delegated, and oversee implementation by the contractor.

EH Responsibilities:

- Review and comment on the authorization basis and associated safety documentation as requested or directed.

9.4.3.3 Authorization Protocols

Authorization protocols encompass those processes that will be used to communicate acceptance of the contractor's integrated plans for hazardous work. Such protocols are expected to range from pre-performance review and approval of detailed safety-related terms and conditions for performing work (e.g., authorization agreement) to less rigorous oversight with post-performance assessment of the contractor's work.

Authorization agreements specify contractually binding commitments relating to design, operating, and administrative controls that govern the conduct of an activity or the operation of a facility. Although various mechanisms (e.g., Final Safety Analysis Reports) contain adequate information to authorize operation, some facility- or project-level activities may be of sufficiently high interest to DOE management to warrant a specific authorization agreement.

CSO Responsibilities:

- Ensure systems are in place for the development and implementation of appropriate authorization protocols, including a protocol for assessment support to the FEM.

Head of Contracting Activities Responsibilities:

- Determine appropriate protocol based on work and hazard.
- Approve authorization agreement and append to or modify the affected contract.

9.4.4 Implement Controls

In addition to the exercise of the controls established above, the safe operation of many DOE facilities involves special processes that require specific control mechanisms. These controls are often unique to each facility, and generally are sufficiently diverse among DOE sites that they are best addressed in detail in organizational FRA documents, rather than here.

DOE Directives and other requirements listed in Appendix A should be examined by each DOE element in developing its organizational FRA document, to ensure that any applicable detailed controls have been identified and the responsibilities and authorities for implementation have been included.

FEM Responsibilities:

- Monitor the proper implementation of controls, including contractor processes for Unreviewed Safety Questions (USQs) and configuration management.

9.5 Perform Work

The safety of those performing work is ultimately in the hands of the workers themselves. However, each and every aspect of the preparation and planning for that work must be performed in a manner that ensures the worker has all materials, training, equipment, supervision, and technical support necessary to complete the assigned task successfully, safely, and efficiently. No activity should begin, or any facility started, unless the consequences of operation to workers, public, and the environment are appreciated, and responses to contingencies planned, with sufficient means present of proceeding from any reasonably foreseeable state of operation towards safe shutdown.

Although at GOCO facilities Department personnel do not directly perform the work, the Department must be aware of, and contribute to, the conditions under which work is performed. The Department must be able to recognize and respond to significant enhancements or detriments in the work environment. Primary methods include appropriate levels of readiness review, direct observation of contractor operations, and monitoring for significant events, followed by analysis to understand impacts on agreed-to conditions of operation and performance measures. The Department reserves the right to approve operations for certain categories of hazardous activities prior to startup. Less hazardous operations are approved through contract terms and conditions and an assurance that the contractor has an appropriate infrastructure for safe operations.

The Department has a vital role in assessing the safe conduct of work, a role that stems from its unique responsibilities as owners of the facilities and trustees of the Federal and public interests. DOE has responsibility to conduct assessments of contract compliance. DOE, like the contractor, must feel confident that all agreements are being fulfilled, and retains—at all times—the authority to stop work should it identify violations of the agreement that significantly diminish the safety of workers, the public, or the environment. To ensure the safe conduct of work and continuous improvement, DOE must maintain the competence of those personnel who perform and assess the work.

9.5.1 Confirm Readiness

EH Responsibilities:

- Shut-down work if a clear and present safety danger exists.

FEM Responsibilities:

- Shut-down work if a clear and present safety danger exists and promptly notify the CSO and EH.

9.5.1.1 Operational Readiness Reviews

Approval of operational readiness reviews (ORRs) occurs with startup authorization.

FEM Responsibilities:

- Ensure that the Operational Readiness Review (ORR) is conducted by an ORR team in accordance with DOE O 425.1, **STARTUP AND RESTART OF NUCLEAR FACILITIES**.

9.5.1.2 Startup Authorization for Nuclear Facilities

Guidance on the delegation of startup and restart authority for nuclear facilities is outlined in Table 1 of DOE-STD-3006-95, **PLANNING and CONDUCT OF OPERATIONAL READINESS REVIEWS**. This table describes normal practice, but is not a requirement, and other delegation authority may be documented in lower-tier FRA documents.

9.5.1.3 Startup Authorization for Non-nuclear Facilities

Same as for Category 3 hazard nuclear facilities, except that a readiness assessment may be performed instead of an operational readiness review. A graded approach should be used for very low hazard facilities, such as office buildings.

FEM Responsibilities:

- Determine the appropriate level of readiness necessary for the startup of non-nuclear facilities.

9.5.2 Perform Work Safely

Although each DOE employee is responsible for ensuring that work he or she does or directs others to do is performed safely, the DOE safety management system must provide optimum conditions for DOE employees to accept and meet that responsibility. Therefore, the safety management system must be designed to ensure that equipment and facilities are in good repair and are properly functioning, that processes are in place for safely conducting operations, and that there is appropriate day-to-day operational oversight of contractor activities.

CSO Responsibilities:

- Ensure implementation of safety management systems, Facility Representative programs, and performance measures to ensure adequate protection of the worker, public, and the environment, and that adequate resources are allocated.

FM Responsibilities:

- Facilitate resolution of conflicts between Headquarters and field elements.

- Develop and maintain Facility Representative Program policy for DOE.

FEM Responsibilities:

- Ensure contracts are properly implemented.
- Ensure contractors implement worker, public, environment, and facility protection programs.
- Ensure that the safety management system is properly implemented.
- Implement site/field element strategic plans and for GOCOS, and ensure that statements of work are properly implemented.
- Perform line management oversight of contractors' worker, public, environment, and facility protection programs.
- Maintain day-to-day operational oversight of contractor activities at applicable facilities through DOE Facility Representatives.

EH Responsibilities:

- Provide guidance and assist in the identification of DOE requirements.

9.5.3 Quality Assurance

Quality control programs in the nuclear weapons program are distinct from DOE-wide quality assurance programs, and are not considered here.

The Assistant Secretary for Environment, Safety and Health has the responsibility for quality assurance policy and oversight. The SOs implement quality assurance programs and ensure that adequate resources are allocated. Field organizations execute quality assurance programs to ensure worker health and safety, product/service quality and protection of the public and the environment.

Under Secretary Responsibilities:

- Serve as Departmental focal point for quality assurance issues and provide leadership for quality assurance implementation.

SO Responsibilities:

- Ensure implementation of quality assurance programs, continuous improvement, and provision of adequate resources.

EH Responsibilities:

- Ensure promulgation of quality assurance policy, program evaluation, and coordination internal and external to DOE.

FEM Responsibilities:

- Ensure proper implementation of quality assurance programs.
- Ensure that contractors implement quality assurance programs.

9.6 Collect Feedback and Pursue Improvement

It is preferable to detect and avoid problems before they appear than to deal with the consequences of those problems afterward, and if a source of error is discovered it is clearly necessary to discover the origin of the error and identify and select among the methods of avoiding future occurrences of that or similar errors. The effort to detect and study current and potential problems should not be an occasional activity of an organization, engaged in only when necessary to counter a problem, but should be an integral part of the management system. In brief, the management system should contain processes that continuously improve its operations' safety, quality of outcome, and efficiency.

9.6.1 Generation, Collection, and Dissemination of Information

9.6.1.1 Lessons Learned Program

CSO Responsibilities:

- Implement a lessons-learned program and remain cognizant of information likely to be useful in improving the performance of the programs under the office's direction.
- Collect information for use in this program from performance of assessments of contractor and field element operations.

FEM Responsibilities:

- Direct contractors to develop a lessons-learned program and monitor its implementation.

9.6.1.2 Occurrence Reporting and Processing System (ORPS)

CSO Responsibilities:

- Direct the reporting of emergencies and unusual and off-normal occurrences into the ORPS. Approve corrective actions proposed or delegate this authority.

Facility Representative Responsibilities:

- The CSO may delegate authority for approving off-normal reports to the Facility Representative.

Program Manager Responsibilities:

- Approve ORPS reports, where this authority has been delegated to the program manager.

FEM Responsibilities:

- Direct contractors to report occurrences on the ORPS. Review reports and approve proposed corrective actions, where authority is delegated, or recommend approval decision to CSO.

EH Responsibilities:

- Develop, maintain, and implement the ORPS. Prepare and disseminate information obtained from analysis of this information.
- Develop requirements and guidance for occurrence reporting. Actively seek feedback for continuous improvement of ORPS and upgrade requirements as appropriate.

9.6.1.3 ES&H Reporting Requirements (OSH, Environmental, Radiological)

CSO Responsibilities:

- Oversee implementation of ES&H reporting requirements.

FEM Responsibilities:

- Oversee implementation of ES&H reporting at the site.

EH Responsibilities:

- Develop, maintain, and implement system for ES&H reporting requirements. Prepare and disseminate information obtained from the analysis of this information.
- Perform oversight of ES&H performance and identify needed improvements to CSOs, FEMs, and contractors as appropriate.

9.6.1.4 Assessments

All DOE Element Responsibilities:

Perform assessments of their own organizations to identify areas in which continuous improvement in the safety of DOE operations can be realized.

9.6.2 Make Changes to Improve

All DOE Element Responsibilities:

Continuously improve the efficiency and quality of operations; and develop, implement, and track corrective actions in order to profit from prior experience and the lessons learned.

9.6.3 Oversight and Enforcement

The Office of the Deputy Assistant Secretary for Oversight (EH-2) evaluates and reports to DOE management and external stakeholders, such as Congress, on the status and implementation of Departmental safety management systems and their effectiveness in addressing nuclear, environmental, health, and safeguards and security matters. These evaluations include periodic monitoring in the form of safety evaluations; safeguards and security evaluations; special studies; reviews; and continuous monitoring through an onsite presence at key sites and facilities. In addition, EH-2 informs DOE management and stakeholders, as appropriate, of current or probable future ES&H or security issues that can impact public, worker, and environmental protection. These issues can range from policy decisions to onsite operations. The Office of Oversight in its capacity as the sole independent overseer is responsible for the development of evaluation methods and technologies.

The Office of Enforcement and Investigations (EH-10) carries out the Department's function under the Price-Anderson Amendments Act of 1988 for investigation and enforcement of potential nuclear, radiological, and occupational safety violations.

9.6.3.1 EH Oversight

FEM Responsibilities:

- Ensure that duly authorized independent oversight personnel have unfettered access to information and facilities, consistent with safety and security requirements.

EH Responsibilities (EH-2, Office of Oversight):

- Perform independent oversight of line management to assess success of the DOE safety management system and supporting programs for doing work safely.
- Report the results of independent oversight activities to the Secretary, Congress, CSOs, FEMs, and contractors.

9.6.3.2 Line Management Oversight

CSO Responsibilities:

- Monitor field element and contractor performance to assess the success of programs in fostering safe work activities.

FEM Responsibilities:

- Perform management assessment of contractors to evaluate their success in doing work safely.
- Review performance of the contractor against formally established ES&H performance measures and other ES&H performance indicators, and take appropriate action.

9.6.3.3 Price-Anderson Enforcement

Secretary Responsibilities:

- Receive appeals and grant or deny them.

CSO Responsibilities:

- Refer nuclear safety violations to the Office of Enforcement for review under the provisions of 10 CFR Part 820 where appropriate.
- Provide information and support investigations.
- Participate in enforcement conferences with the Office of Enforcement.

FEM Responsibilities:

- Monitor contractor reporting of nuclear safety violations to the Office of Enforcement for review under the provisions of 10 CFR Part 820. Provide information and support investigations. Participate in enforcement conferences with the Office of Enforcement.

Office of Enforcement (in the Office of Environment, Safety and Health):

- Investigate noncompliances with nuclear safety rules.
- Assess the level of violation of noncompliances and issue notices of violation where appropriate.
- Establish, maintain, and implement a noncompliance tracking system for self-reporting by contractors.
- Issue civil penalties where appropriate.

- Refer violations to the Justice Department for criminal review where appropriate.
- Recommend issuance of Compliance Orders by the Secretary in accordance with the provisions of 10 CFR Part 820, where appropriate.

9.6.3.4 Interface with Defense Nuclear Facilities Safety Board (DNFSB)

Under Secretary Responsibilities:

- Act as liaison between DOE and the DNFSB; ensure that feedback from the DNFSB is communicated to DOE management and staff, and to contractors as appropriate and useful.
- The Office of Departmental Representative to the DNFSB represents the Department for regular and continuing interaction with the DNFSB and has developed DOE M 140.1-1, **MANUAL FOR DOE INTERFACE WITH THE DNFSB**. This Manual describes the responsibilities and protocol for all DOE organizations for activities associated with the inquiries of and recommendations by the DNFSB.

All DOE Element Responsibilities:

- Provide responses to DNFSB recommendation.

**APPENDIX A
REFERENCES**

The list below includes directives that have been cancelled in whole or in part. While the requirements contained in cancelled directives are no longer mandatory, the responsibilities that were assigned are to be considered in developing FRA documents to ensure that the safety functions in that cancelled directive are continued to be performed. The most current edition of any reference should be used, including any page changes. For a current edition of any directive and archives of cancelled directives, see the Directives Home Page at <http://explorer.doe.gov/>.

Number	Title	Reference
Public Law 83-703	Atomic Energy Act of 1954	5
Public Law 91-596	Occupational Safety and Health Act of 1970	5
Public Law 104-113	National Technology Transfer and Advancement Act of 1995	9.2.2.2 9.2.2.3
DOE Policy Statements		
DOE P 251.1	Directives System	9.6.1.1
DOE P 410.1A	Promulgating Nuclear Safety Requirements	9.1.1
DOE P 411.1	Safety Management Functions, Responsibilities and Authorities	9., 9.1.1 9.2.2.5
DOE P 441.1	DOE Radiological Health and Safety Policy	9.1.1
DOE P 450.1	Environment, Safety and Health Policy for the Department of Energy Complex	9.1.1
DOE P 450.2A	Identifying, Implementing, and Complying with Environment, Safety and Health Requirements	9.1.1
DOE P 450.3	Authorizing Use of the Necessary and Sufficient Process for Standards-Based ES&H Purposes	9.4.1
DOE P 450.4	Safety Management System Policy	4
DOE P 450.5	Line Environment, Safety and Health Oversight	
Code of Federal Regulations		
10 CFR 820	Procedural Rules for DOE Nuclear Activities	9.4.1.4 9.4.1.5 9.6.3.3
10 CFR 830.120	Quality Assurance Requirements	9.5.3 9.6.2
10 CFR 830.340	Maintenance Management	9.4.1.5

Number	Title	Reference
10 CFR 834	Radiation Protection of the Public and the Environment (in draft)	9.4.1.5
10 CFR 835	Occupational Radiation Protection	9.4.1.5
48 CFR Chapter 9	DOE Acquisition Regulations	9.2.3
New DOE Orders		
DOE O 130.1	Budget Formulation Process	9.1.4
DOE O 135.1	Budget Execution - Funds Distribution and Control	9.1.5 9.2.3
DOE O 151.1	Comprehensive Emergency Management System	9.4.2 9.6.1.1
DOE O 210.1	Performance Indicators and Analysis of Operations Information	9.6.1.1 9.6.1.3
DOE O 225.1	Accident Investigations	9.4.2
DOE O 231.1	Environment, Safety and Health Reporting	9.6.1.4
DOE O 232.1	Occurrence Reporting and Processing of Operations Information	9.6.1.2
DOE O 251.1	Directives System	9.2.2.1 9.4.1.3
DOE O 360.1	Training	9.1.6
DOE O 413.1	Management Control Program	9.2.1
DOE O 420.1	Facility Safety	9.4.2 9.4.3.2
DOE O 425.1	Startup and Restart of Nuclear Facilities	9.5.1
DOE O 430.1	Life-Cycle Asset Management	9.2.2.4
DOE O 440.1	Worker Protection Management for DOE Federal and Contractor Employees	9.5
DOE N 450.3	Use of Necessary and Sufficient Process	9.4.1
DOE O 452.1A	Nuclear Explosive and Weapon Surety Program	9.3.1
DOE O 452.2A	Safety of Nuclear Explosive Operations	9.3.1
DOE O 460.1A	Packaging and Transportation Safety	9.4.3.2

Number	Title	Reference
<p>Old DOE Orders Some of the directives on the following list have been canceled. Cancellation of an Order does not, by itself, modify or otherwise affect any contractual obligation to comply with such an Order. Canceled Orders that are incorporated by reference in a contract shall remain in effect until the contract is modified to delete the reference to the requirements in the canceled Orders. Organization FRA documents should consider the responsibilities assigned in cancelled directives, as appropriate.</p>		
DOE O 1300.2A	Department of Energy Technical Standards Program	9.2.2.2, 9.2.2.3
DOE O 4320.2A	Capital Asset Management Process	9.2.4
DOE O 4330.4B	Maintenance Management Program	
DOE O 4700.1	Project Management System	
DOE O 5400.5	Radiation Protection of the Public and the Environment	9.2.2.1
DOE O 5480.1B	Environment, Safety and Health Program for Department of Energy Operations	9.5.1
DOE O 5480.3	Safety Requirements for the Packaging and Transportation of Hazardous Materials, Hazardous Substances, and Hazardous Wastes	9.4.3.2
DOE O 5480.7A	Fire Protection	9.4.3.2
DOE O 5480.18B	Nuclear Facility Training Accreditation Program	9.4.4.1
DOE O 5480.19	Conduct of Operations Requirements for DOE Facilities	
DOE O 5480.20A	Personnel Selection, Qualification, and Training Requirements for DOE Nuclear Facilities	9.4.4.1
DOE O 5480.21	Unreviewed Safety Questions	
DOE O 5480.22	Technical Safety Requirements	9.4.1 9.4.2 9.4.3.1
DOE O 5480.23	Nuclear Safety Analysis Reports	9.3.1 9.4.1 9.4.3.1
DOE O 5480.24	Criticality Safety	see DOE O 420.1
DOE O 5480.25	Safety of Accelerator Facilities	9.3.1 9.4.3.2

Number	Title	Reference
DOE O 5480.28	Natural Phenomena Hazards	see DOE O 420.1
DOE O 5480.29	Employee Concerns Management System	9.4.3.2
DOE O 5480.30	Nuclear Reactor Safety Design Criteria	9.3.1, 9.4.3.2
DOE O 5480.31	Startup and Restart of Nuclear Facilities	9.5.1.1, 9.5.1.2
DOE O 5530.1A	Accident Response Group	9.4.2
DOE O 5530.2	Nuclear Emergency Search Team	9.4.2
DOE O 5530.4	Aerial Measuring System	9.4.3.2
DOE O 5610.13	Joint DOE/DOD Nuclear Weapon Safety, Security, and Control Activities	9.4.3.2
DOE O 5700.6C	Quality Assurance	9.2.2.5, 9.5.3, 9.6.2
DOE O 5820.2A	Radioactive Waste Management	9.4.3.2
DOE Manuals		
DOE M 135.1-1	Budget Execution Manual	9.1.5, 9.2.2.1, 9.2.2.2, 9.2.3
DOE M 140.1-1	Manual for Department of Energy Interface with the Defense Nuclear Facilities Safety Board	9.6.3.4
DOE M 251.1-1	Directives System Manual (III)	9.2.2.1, 9.2.2.2, 9.4.1.3
DOE M 450.3-1	The Department of Energy Closure Process for Necessary and Sufficient Sets of Standards	9.4.1
DOE Standards		
STD-1021-93	Natural Phenomena Hazards Performance Categorization Guidelines for Structures, Systems, and Components	9.3.2
STD-1022-94	Natural Phenomena Hazards Site Characterization Criteria	9.3.2
STD-1023-95	Natural Phenomena Hazards Assessment Criteria	9.3.1
STD-1027-92	Hazard Characterization and Accident Analysis Techniques for Compliance with DOE Order 5480.23, Nuclear Safety Analysis Reports	9.3.2
STD-1032-92	Guide to Good Practices for Operations Organization and Administration	9.2.2.4

Number	Title	Reference
STD-1050-93	Guideline to Good Practices for Planning, Scheduling, and Coordination of Maintenance at Doe Nuclear Facilities	9.2.4
STD-1051-93	Guideline to Good Practices for Maintenance Organization and Administration at DOE Nuclear Facilities	
STD-1052-93	Guideline to Good Practices for Types of Maintenance Activities at DOE Nuclear Facilities	
STD-1055-93	Guideline to Good Practices for Maintenance Management Involvement at DOE Nuclear Facilities	
STD-1063-93	Establishing and Maintaining a Facility Representative Program at DOE Nuclear Facilities	9.5.2
STD-1070-94	Guidelines for Evaluation of Nuclear Facility Training Programs	
STD-1073-93	Guide for Operational Configuration Management Program	9.4.3
STD-1082-94	Preparation, Review, and Approval of Implementation Plans for Nuclear Safety Requirements	9.4.1.6
STD-1083-95	Requesting and Granting Exemptions to Nuclear Safety Rules	9.4.1.4
STD-1104-96	Review and Approval of Nonreactor Nuclear Facility Safety Analysis Reports	9.3.1
STD-3006-95	Planning and Conducting of Operational Readiness Reviews	9.5.1
STD-3009-94	Preparation Guide for U.S. DOE Nonreactor Nuclear Facility Safety Analysis Reports	9.3.1
STD-3011-94	Guidance for Preparation of DOE 5480.22 (TSR) and DOE 5480.23 (SAR) Implementation Plans	9.4.3

Number	Title	Reference
DOE Guides		
DOE G-120.1-5	Guidelines for Performance Measurement	9.6.1.3
DOE Handbooks		
HDBK-1085-95	DOE Enforcement Program Roles and Responsibilities	9.4.1.6 9.6.3.3
HDBK-1089-95	Guidance for Identifying, Reporting, and Tracking Nuclear Safety Noncompliances	9.4.1.6 9.6.3.3
HDBK-1100-96	Chemical Process Hazards Analysis	9.3.1
HDBK-1101-96	Process Safety Management for Highly Hazardous Chemicals	9.3.1

**APPENDIX B
ACRONYMS**

CFR	Code of Federal Regulations
CSO	Cognizant Secretarial Officer
DEAR	Department of Energy Acquisition Regulations
DNFSB	Defense Nuclear Facilities Safety Board
DOE	Department of Energy
DOT	Department of Transportation
EH	Office of the Assistant Secretary for Environment, Safety and Health
EM	Office of the Assistant Secretary for Environmental Management
ES&H	Environment, Safety and Health
FEM	Field element manager
FM	Office of the Associate Deputy Secretary for Field Management
FRA	Functions, Responsibilities and Authorities
GC	Office of the General Counsel
GOCO	Government-owned, contractor-operated
GOGO	Government-owned, government-operated
HCA	Head of the Contracting Activities
HDBK	Handbook
HR	Office of the Assistant Secretary for Human Resources and Administration
OMB	Office of Management and Budget
OPI	Office of Primary Interest
ORPS	Occurrence Reporting and Processing System
ORR	Operational Readiness Review
OSH	Occupational Safety and Health
PL	Public Law
SO	Secretarial Officer
SOW	Statement of work
STD	Standard
USQ	Unreviewed Safety Questions

APPENDIX C

DEFINITIONS

Accountability

The state of being liable for explanation to a superior DOE official for the exercise of authority. Ultimate accountability is to the Secretary who may delegate authority or share responsibility for specified actions. The designee of an authority is accountable to the delegating responsible authority for the proper and diligent exercise of that authority. Responsibility differs from accountability in that a responsible official "owns" the function for which he or she is responsible - it is an integral part of his or her duties to see that the function is properly executed, to establish criteria for the judgement of excellence in its execution, and to strive for continuous improvement in that execution. A responsible official is associated with the outcomes of the exercise of authority regardless of whether it was delegated or not, and regardless of whether or not the designee properly followed guidance. Accountability, on the other hand, involves the acceptance of the authority for execution or for further delegation of components of execution, by using guidance and criteria established by the responsible authority.

Authority

The basis under which a DOE employee is empowered to take an action. Such actions include approval of a proposal, stopping work, or directing a contractor to perform work. The basis for an authority may be a public law, a DOE directive, or the written delegation of the responsible authority empowered by such a basis.

Authorization Agreement

A documented agreement between DOE and the contractor for high-hazard facilities (Category 1 and 2), incorporating the results of DOE's review of the contractor's proposed authorization basis for a defined scope of work. The authorization agreement contains key terms and conditions (controls and commitments) under which the contractor is authorized to perform work. Any changes to these terms and conditions would require DOE approval. (DNFSB/TECH-16)

Authorization Basis

Safety documentation supporting the decision to allow a process or facility to operate. Included are corporate operational and environmental requirements as found in regulations and specific permits, and, for specific activities, work packages or job safety analyses.

Authorization Protocols

Those processes used to communicate acceptance of the contractor's integrated plans for hazardous work. Such protocols are expected to range from preperformance review and approval by DOE of detailed

safety-related terms and conditions for performing work (authorization agreement) to less rigorous oversight and postperformance assessment of the contract's work. [DNFSB/TECH-16]

Cognizant Secretarial Officer

That first-tier Headquarters office having responsibility and authority for the particular activity under consideration.

Contracting Officer

A DOE official holding the authority to make purchases or contract for goods and services in excess of \$25,000. Contracting officers are appointed using Standard Form 1402, following procedures in DOE O 542.1, APPOINTMENT OF CONTRACTING OFFICERS AND CONTRACTING OFFICER REPRESENTATIVES, which supersedes DOE 4200.4A. For Headquarters support contracts, the contracting officer is generally a member of the staff of the Assistant Secretary for Human Resources and Administration. [Federal Acquisition Regulation 1.6, Department of Energy Acquisition Regulation 901.6]

Delegation

Written permission sent by a responsible authority to another DOE employee transmitting the authority to perform a specific function on behalf of that responsible authority, usually containing guidance towards the manner in which the authority is to be used. By delegation, the responsible authority cannot diminish his or her responsibility for the consequences of the exercise of the authority.

Ensure

As used in this manual, "to ensure" means that normal supervision is to be employed to confirm to the ensuring organization's satisfaction that a condition is being met or a activity is being properly conducted. The degree of rigor to be employed by the ensuring organization should depend upon the history of supervision of the performing organization.

Field Element

A non-Headquarters DOE organization that is geographically distinct. Field elements can be area offices; support offices; operations offices; Field Offices; regional offices; or offices located at environmental restoration, construction, or termination sites.

Hazard

A source of danger (i.e., material, energy source, or operation) with the potential to cause illness, injury, or death to personnel or damage to an operation or to the environment (without regard for the likelihood or credibility of accident scenarios or consequence mitigation). [DOE 5480.23]

Hazard Analysis

The determination of material, system, process, and plant characteristics that can produce undesirable consequences, followed by the assessment of hazardous situations associated with a process or

activity. Largely qualitative techniques are used to pinpoint weaknesses in design or operation of the facility that could lead to accidents. The SAR hazard analysis examines the complete spectrum of potential accidents that could expose members of the public, onsite workers, facility workers, and the environment to hazardous materials. [DOE-STD-3009-94]

Hazard Classification

Evaluation of the consequences of unmitigated releases, performed to classify facilities or operations into the following hazard categories:

- Category 1: The hazard analysis shows the potential for significant offsite consequences.
- Category 2: The hazard analysis shows the potential for significant onsite consequences.
- Category 3: The hazard analysis show the potential for only significant localized consequences.

[DOE 5480.23]

DOE-STD-1027-92 provides guidance and radiological threshold values for determining the hazard category of a facility. DOE-STD-1027-92 interprets Category 1 hazard facilities as category A reactors and other facilities designated as such by the program secretarial officer. [DOE-STD-3009-94]

Hazards Controls

Design features; operating limits; administrative or safety practices, processes, or procedures to prevent, control, or mitigate hazards.

Head of the Contracting Activity

Head of a Departmental Element who has been delegated authority by the Deputy Assistant Secretary for Procurement and Assistance Management to award and administer contracts, sales contracts, and/or financial assistance instruments; appoint contracting officers; and exercise the overall responsibility for managing the contracting activity. [Doe Glossary]

Lead Program Office

At multiprogram sites, that Headquarters program office assuming responsibility for ensuring that safety management direction and funding are coordinated among all program offices involved.

Office of Primary Interest

The office most involved in the activity under consideration. Most DOE initiatives will affect many offices; that office being most affected and assuming a dominant role in the initiative is the Office of Primary Interest.

Oversight

The responsibility and authority assigned to the Assistant Secretary for Environment, Safety and Health to independently assess the adequacy

of DOE and contractor performance. Oversight is separate and distinct from line management activities, including self assessments. [DOE Glossary]

Program Office

A Headquarters organization responsible for executing program management functions, and for assisting and supporting field elements in safety and health, administrative, management, and technical areas. [DOE Glossary] As used in this Manual, a program office is a DOE first-tier organization having responsibility for one or more of the Department's congressionally established missions. These offices report to the Assistant Secretaries for Defense Programs; Energy Efficiency and Renewable Energy; Environmental Management; and Fossil Energy, and the Offices of Civilian Radioactive Waste Management; Energy Research; Fissile Materials Disposition; Nonproliferation and National Security; and Nuclear Energy, Science and Technology. Some secretarial offices commonly refer to their component organizations having responsibilities for specific program elements as being "program offices."

Responsibility

The state of being liable for the outcome of the exercise of an authority granted by law, regulation, or directive. Responsibility cannot be delegated although the associated authority may be.

Safety Basis

The combination of information relating to the control of hazards at a facility (including design, engineering analyses, and administrative control) upon which DOE depends for its conclusion that activities at the facility can be conducted safely. [DOE 5480.23]

Safety Documentation

Reports, memoranda, and other signed and dated documents identify the hazards of a process or facility, and describe the measures for their control. (See DOE O 5480.23.)

Safety Envelope

The range of conditions covered by the safety documentation of a process or facility under which safe operation is adequately controlled.

Safety Management Function

An activity that may affect the safety and health of workers or the public, or the protection of the environment.

Secretarial Officer

The head of a first-tier organization; a DOE Headquarters employee reporting directly to the Secretary, the Under Secretary, or the Deputy Secretary.

Support Office

A DOE organization that provides administrative, legal, technical, independent oversight, policy, and standards support to program offices for safety management functions. Examples of Headquarters support

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offices include those that report to the Assistant Secretaries for Environment, Safety and Health and for Human Resources and Administration; the Office of General Counsel; and the Office of the Associate Deputy Secretary for Field Management.