



Department of Energy
Germantown, MD 20874-1290

June 30, 2000

MEMORANDUM FOR SC ASSOCIATE DIRECTORS AND OFFICE DIRECTORS
MANAGER, CHICAGO OPERATIONS OFFICE
MANAGER, OAKLAND OPERATIONS OFFICE
MANAGER, OAK RIDGE OPERATIONS OFFICE
MANAGER, RICHLAND OPERATIONS OFFICE

FROM:

JAMES F. DECKER
ACTING DIRECTOR
OFFICE OF SCIENCE

A handwritten signature in black ink, appearing to read "JF Decker", written over the printed name and title.

SUBJECT:

Office of Science Stewardship Functions, Responsibilities,
and Authorities Document

I have signed and approved the attached Office of Science Stewardship Functions, Responsibilities and Authorities (FRA) Document. The FRA will assist the Office of Science (SC) in implementing the intent of the Deputy Secretary's August 19, 1999, Roles and Responsibilities Guiding Principles Memorandum, as well as the Office of Science's December 17, 1999, Multiprogram Laboratory Stewardship Initiative Memorandum. I commend the SC Associate Directors, the Office Directors and the Operations Office Managers for their collaborative teamwork in developing this document as a tool to guide SC in our operational and infrastructure stewardship responsibilities.

I expect the FRA will be a "living document" that will be revisited and revised on a regular basis as SC gains experience with our stewardship responsibilities and as Headquarters partners with the field in achieving SC's corporate goals for science. Implementation guidance will be forthcoming to further define the stewardship functions and responsibilities.

Thank you again for your efforts to develop this FRA on behalf of SC.

Attachment



Office of Science





Stewardship Functions, Responsibilities, and Authorities Document


June 2000

Office of Science
Functions, Responsibilities, and Authorities Document


Approval:

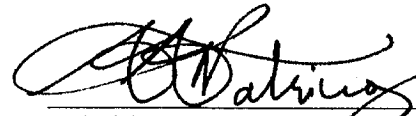

James F. Decker, Director (Acting)
Office of Science



Patricia M. Dehmer, Principal Deputy
Director (Acting), Office of Science



Milton Johnson, Deputy Director
for Operations, Office of Science

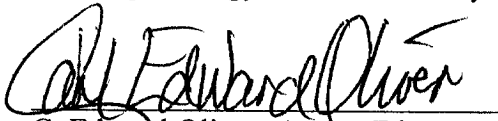
Concurrence:

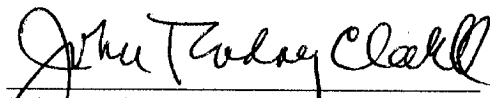

Iran L. Thomas, Assoc. Director (Acting)
for Basic Energy Sciences

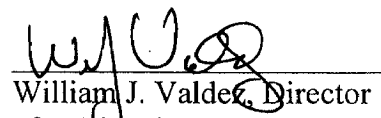

Aristides Patrinos, Assoc. Director
for Biological and Environmental
Research


S. Peter Rosen, Assoc. Director
for High Energy and Nuclear Physics

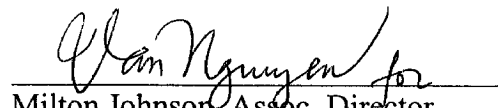

N. Anne Davies, Assoc. Director
for Fusion Energy Sciences


C. Edward Oliver, Assoc. Director
for Advanced Scientific Computing Research


John Rodney Clark, Assoc. Director
for Resource Management


William J. Valdez, Director
for Planning and Analysis


Antonette Joseph, Director
for Laboratory Policy


Milton Johnson, Assoc. Director
(Acting), for Laboratory Operations
and ES&H

**Office of Science
Functions, Responsibilities, and Authorities Document**

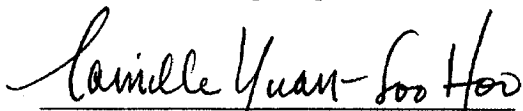
Concurrence:



Robert L. San Martin
Manager, Chicago Operations Office



G. Leah Dever
Manager, Oak Ridge Operations Office



Camille Yuan-Soo Hoo
Manager, Oakland Operations Office



Keith A. Klein
Manager, Richland Operations Office

Office of Science

Functions, Responsibilities, and Authorities Document

1.0 INTRODUCTION

In response to DOE Policy 411.1 “Safety Management Functions, Responsibilities, and Authorities,” this document describes the Office of Science (SC) functions, responsibilities, and authorities. The Director of Science (SC-1) approved this document and will approve future revisions. The Office of Laboratory Operations and Environment, Safety and Health (SC-80) manages the change control process at the direction of SC-1.

The roles and responsibilities outlined in this document are based on:

1. The management framework provided in the Deputy Secretary’s August 19th, 1999, memorandum. This memorandum describes the roles and responsibilities for DOE management that implement the April 1999 realignment of the Department’s management structure.^a
2. The Office of Science Multiprogram Laboratory Stewardship Initiative. This initiative strengthens senior program management awareness of operational and infrastructure support needs and issues at SC multiprogram laboratories to enable the science and technology mission.^b
3. Safety Management Functions, Responsibilities, and Authorities Manual (The DOE FRAM). This manual provides the DOE-wide mechanism for implementing the safety management functions outlined in DOE P 411.1.^c

While DOE Policy 411.1 focuses on *safety*¹ management, this document first describes responsibilities in general terms followed by more specific responsibilities related to safety.

2.0 ORGANIZATION

The Office of Science (SC) supports DOE’s missions and contributes to the welfare of the Nation by advancing science and technology. SC’s research mission is:

To advance basic research and the instruments of science that are the foundations for DOE’s applied missions, a base for U.S. technology innovation, and a source of remarkable insights into our physical and biological world and the nature of matter and energy.^d

This is accomplished by funding and managing research programs at a broad variety of facilities and laboratories. The research programs make use of sophisticated scientific research tools such

¹ As in DOE Policy 411.1, the term safety is used synonymously with the term environment, safety and health to encompass protection of the public, the workers, and the environment.

as large accelerators, experimental detectors, fusion devices, reactors, high-precision instruments, synchrotrons, massively parallel computers, high-capacity networks, and high-resolution microscopes. SC consists of the Office of the Director, five program offices, four support offices, and three operations offices. Figure 1 provides SC's organization chart.

2.1 Office of the Director

The Office of the Director of Science consists of the Director (SC-1), the Principal Deputy Director (SC-2), and the Deputy Director for Operations (SC-3). The Director has responsibility and authority for the mission-related work being conducted at numerous DOE laboratories, facilities, and universities. The Director of Science position is equivalent to an Assistant Secretary position and is filled by Presidential Appointment (Senate confirmed).

The Principal Deputy Director provides day-to-day management oversight of the technical programs and their operations and has the same responsibility and authority as the Director. The Deputy Director for Operations provides leadership in the strategic planning, management, oversight, and coordination of the SC operations offices and their associated laboratories, facilities, and activities.

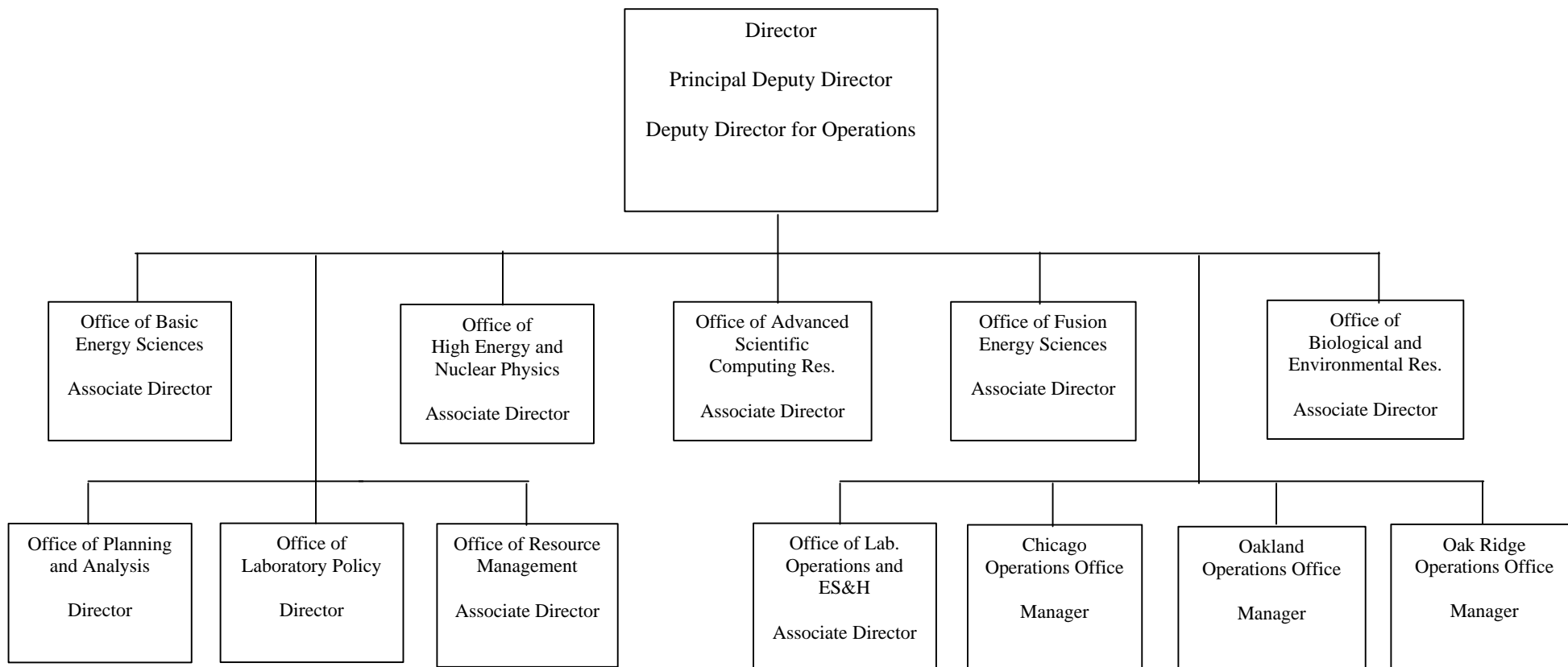
2.2 Program Offices

SC has five program offices that provide line management of the research programs. Each program office is managed by a Program Associate Director (PAD). Associate Directors are equivalent to Deputy Assistant Secretaries.

Office of Basic Energy Sciences (SC-10): The mission of the Basic Energy Sciences program is to foster and support fundamental research in the natural sciences and engineering to provide a basis for new and improved energy technologies and for understanding and mitigating the environmental impacts of energy use. As part of its mission, Basic Energy Sciences plans, constructs, and operates major scientific user facilities to serve researchers at universities, national laboratories, and industry. The program supports more than 2,400 scientists at 200 U.S. research institutions.

Office of High Energy and Nuclear Physics (SC-20): Programs directed by the Office of High Energy and Nuclear Physics provide new insights into the nature of energy and matter at the most fundamental level and explore the evolution and fate of the universe through fundamental interactions of energy, matter, time, and space. Most high energy and nuclear physics research is conducted using accelerators that produce beams of subatomic particles or nuclei moving at essentially the speed of light. Over \$1 billion per year is provided for high energy and nuclear physics research, involving about 3,000 researchers and about 1,000 graduate students from over 100 universities and the DOE national laboratories.

Figure 1. Office of Science Organization Chart



NOTE: Director of Science equivalent to Assistant Secretary position and filled by Presidential Appointment (Senate confirmed); Principal Deputy Director equivalent to Principal Deputy Assistant Secretary; Associate Directors equivalent to Deputy Assistant Secretaries.

Office of Computational and Technology Research (SC-30): This Office provides a focal point in SC for long-term computational and technology research. It manages research in forefront and diverse applied mathematical sciences, high performance computing, communications, and information infrastructure which spans the spectrum of activities from strategic, longer-term, fundamental research to technology research, development, and demonstration. It links SC's science programs and laboratories to national economic competitiveness by conducting long-term, high-risk industry relevant research and development projects in critical technology areas.

Office of Fusion Energy Sciences (SC-50): The mission of the Fusion Energy Sciences Program is to advance the knowledge base needed for an economically and environmentally attractive fusion energy source. The policy goals that support this mission are to advance plasma science in pursuit of national science and technology goals, to develop fusion science, technology, and plasma confinement innovation as the central theme of the domestic program, and to pursue fusion energy science and technology as a partner in the international effort.

Office of Biological and Environmental Research (SC-70): The mission of the Office is to develop the knowledge needed to identify, understand, and anticipate the long-term health and environmental consequences of energy production, development, and use. This mission is carried out at DOE national laboratories, universities, and private institutions. The Office vision is to bring revolutionary solutions to energy-related biomedical and environmental challenges.

2.3 Support Offices

SC includes four support offices that assist the Office of the Director and the PADs in the accomplishment of their responsibilities.

Office of Planning and Analysis (SC-5): Provides information on programs within the purview of SC to SC-1, and maintains the preparedness of SC-1 to advise the Secretary of Energy on matters regarding linkages of programs or gaps in program needs, and in matters concerning the basic and applied research activities of the Department. Maintains awareness of issues facing the research and development programs of the Department to assist SC-1 in providing recommendations on basic research, technology development, and planning strategies. Performs independent cost/benefit analyses and provide SC-1 with impartial and independent scientific and technical evaluations and recommendations on the basic research policies of the Department. Facilitates and prepares strategic plans for research programs within the SC and integrates research and technology, and plans and strategies of technology programs. Performs analyses on the quality of selected research and technology programs. Supports SC-1 in preparing and presenting the Department's research programs to the public and other governmental organizations, reviewing international science and technology research and development agreements, and advising on external institutional relations.

Office of Laboratory Policy (SC-7): Advises SC-1 on laboratory operations and activities that address the overall well being and management of the Department's laboratories. Manages and develops the Department's laboratory institutional planning process. Provides management and oversight of institutional program activities, such as Work For Others and Laboratory Directed Research and Development, that strengthen and sustain the core mission areas of the laboratories. Develops and implements performance management processes for SC, operations offices, and laboratories.

Office of Resource Management (SC-60): Supports SC-wide budget formulation, financial management, contracts and grants management, information resources management, personnel and administrative services, corporate information management, business management practices, and staffing and management analyses.

Office of Laboratory Operations and Environment, Safety and Health (SC-80): Provides a central corporate focal point for coordination of construction management, environment, safety and health (ES&H) including Integrated Safety Management, security management, and infrastructure activities of SC. Provides advice to SC-1 for those activities essential to constructing and operating major research facilities and provides management and staff support regarding these functions to SC program offices. Provides advice to SC-1 on SC-wide policies and guidance on ES&H, emergency management, and security. Provides management and staff support to program offices and the field on technical operational issues. The office also funds and manages the Multiprogram Energy Laboratory-Facilities Support program, which provides for: 1) line-item construction related to general-purpose facilities at SC's multiprogram laboratories, 2) payment-in-lieu-of taxes at Argonne National Laboratory and Brookhaven National Laboratory, and 3) landlord needs for the Oak Ridge Operations Office.

2.4 Operations Offices

Operations Office Managers have line accountability for all site operations/project execution and contract management and are responsible for day-to-day oversight of contractor activities. Listed on the following page are the four operations offices that oversee the work at the eleven SC laboratories. The first three operations offices are referred to as SC operations offices because these offices report directly to SC-1 (see Figure 1). The fourth operations office (Richland) oversees the work at an SC laboratory (Pacific Northwest National Laboratory) but reports to the Assistant Secretary for Environmental Management (EM-1).

SC Operations Offices

Chicago

Oakland

Oak Ridge

EM Operations Office

Richland

SC Laboratory

Ames Laboratory

Argonne National Laboratory-East

Brookhaven National Laboratory

Fermi National Accelerator Laboratory

Princeton Plasma Physics Laboratory

Lawrence Berkeley National Laboratory

Stanford Linear Accelerator Center

Oak Ridge Institute for Science Education²

Oak Ridge National Laboratory

Thomas Jefferson National Accelerator Facility

Pacific Northwest National Laboratory

In order to clarify roles and responsibilities between SC and EM in the case of Pacific Northwest National Laboratory (PNNL), a management agreement has been developed.^e The management agreement states that SC is responsible for all policy and guidance applicable to PNNL. Therefore, all authorities delegated to SC Operations Office Managers are also delegated to the Richland Operations Office Manager with respect to operations at PNNL.

Each DOE operations office, including the four listed above, develops and maintains a functions, responsibilities, and authorities document. The operations office documents describe how they fulfill the responsibilities assigned to them in the DOE FRAM and by appropriate headquarters program offices.

3.0 MULTIPROGRAM LABORATORY STEWARDSHIP INITIATIVE

In December 1999, the Office of Science (SC) launched a stewardship initiative to address the need for SC programs to improve multiprogram laboratory investment in infrastructure and operations support activities. *Stewardship* is defined as championing the integration of the science and technology mission with operational and infrastructure requirements. The funding Headquarters program designated to oversee implementation of laboratory-wide operational and infrastructure requirements and programs is the *landlord*. Under this initiative, the Program Associate Director (PAD), whose program has the landlord responsibility for a multiprogram laboratory, will co-chair a Laboratory Stewardship Committee with the appropriate Operations Office Manager. In this capacity, the PADs enter into an expanded leadership role in resolving issues facing a laboratory including research and operational activities (e.g., Integrated Safety Management, security, infrastructure, business operations, stakeholder relations, emergency management, etc.). The PADs will maintain *executive-level awareness* of the laboratories, which is the knowledge of the major laboratory-wide stewardship issues. It is the intent of SC to apply the principles and functions of Integrated Safety Management broadly beyond safety to facilitate integrated management of all operational activities.

² ORISE is not a laboratory but is referred to as one throughout this document for simplicity.

The distribution of stewardship responsibilities by PAD is shown in Table 1. PADs who are already landlords for single program-dedicated laboratories will act as stewards of those laboratories. In addition to the Laboratory Stewardship Committee, SC-3 will chair a Stewardship Council composed of the PADs, Operations Office Managers, SC-7, SC-80 and other SC office directors to resolve corporate issues that might impact all or some of the multiprogram laboratories.

Table 1. Laboratory Stewardship

Program Steward	SC Laboratory	Operations Office
Basic Energy Sciences (SC-10)	Ames Laboratory <i>Argonne National Laboratory – East</i> <i>Oak Ridge National Laboratory</i>	Chicago Chicago Oak Ridge
High Energy and Nuclear Physics (SC-20) ³	<i>Brookhaven National Laboratory</i> Fermi National Accelerator Facility <i>Lawrence Berkeley National Laboratory</i> Stanford Linear Accelerator Center Thomas Jefferson National Accelerator Facility	Chicago Chicago Oakland Oakland Oak Ridge
Fusion Energy Sciences (SC-50)	Princeton Plasma Physics Laboratory	Chicago
Biological and Environmental Research (SC-70)	Oak Ridge Institute for Science & Education <i>Pacific Northwest National Laboratory</i>	Oak Ridge Richland

Multiprogram laboratories are noted in bold italics.

4.0 FUNCTIONS, AUTHORITIES, AND RESPONSIBILITIES

The Director of Science (SC-1) functions in three roles as:

1. Lead Program Secretarial Officer (LPSO) responsible for providing a management overview of operational programs at the Chicago, Oakland, and Oak Ridge Operations Offices,
2. Cognizant Secretarial Officer (CSO) responsible for the operations of the eleven laboratories listed in Section 2.4, and
3. Program Secretarial Officer (PSO) responsible for the science mission work.

The Deputy Secretary’s August 19th, 1999, memorandum describes the responsibilities of SC-1 and the other applicable Department elements in their roles as LPSO, CSO, and PSO. Table 2 lists those responsibilities and identifies the designated leads within SC.

³ The stewardship responsibilities for Brookhaven National Laboratory and Thomas Jefferson National Accelerator Facility are assigned to the Director of the Nuclear Physics Division (SC-23).

The responsibilities as shown in Table 2 are general and apply to all aspects of management, not just safety management. Table 3 provides responsibilities specific to safety and organizes them by the functions of Integrated Safety Management: (1) provide direction, (2) define scope of work, (3) analyze hazards, (4) develop and implement controls, (5) perform work, and (6) provide feedback and pursue improvements. Like Integrated Safety Management, the primary focus of this table is on the contractor performing work at the laboratory. Therefore, the function “perform work” is illustrated as performed exclusively by the laboratory, even though all organizations perform their own type of work (e.g., HQ programs “work” in advocating for budgets during interactions with OMB and congressional staff). As shown in Table 3, SC headquarters is primarily involved in providing direction and defining the scope of work. The SC operations offices oversee the lab’s performance in analyzing hazards, developing and implementing controls, and providing feedback and pursuing improvements. The laboratories primary focus under Integrated Safety Management is to do work safely.

The DOE FRAM (Reference c) further delineates responsibilities for Department organizations and is organized by the functions of Integrated Safety Management. Appendix A identifies the responsible organizations within SC for each responsibility in the DOE FRAM that is applicable to SC.

Table 2. General Responsibilities
From the Deputy Secretary's August 19th, 1999, Memorandum

Roles	Responsibilities	Designated Lead	Support
SC-1 as LPSO	Provide a management overview of field office wide operational programs	SC-3	All SC
	Provide integrated policy guidance/direction to the field offices	SC-3	All SC
	Implement all staff policy	SC Operations Office Managers	All SC
	Reviewing contracting decisions, e.g., selections, performance management, etc.	SC-3	SC-7, PADs as stewards
	Resolving disputes among CSOs/PSOs and field offices	SC-3	All SC
	Championing institutional health, integration and long-term planning	SC-3	SC-7, PADs as stewards
	Promoting integration of operations and programs	SC-3	All SC
	Appraising Field Element Managers	SC-3	All SC
	Serving as landlord for all facilities not covered by another CSO	Retained by SC-1	SC-80
	Advocating adequate budget and resource needs for the field offices	SC-3	SC-60
SC-1 as CSO	Assuming line accountability for operational performance	SC Operations Office Managers	PADs as stewards, SC-80, SC-7
	Providing stewardship of the laboratories	PADs as stewards	SC-80, SC-7
	Supporting and implementing staff policy guidance/direction	SC Operations Office Managers	All SC
	Serving as landlord for laboratories	PADs as stewards	SC-80, SC-7
	Reviewing and recommending contract acquisition strategy and contractor selection	SC Operations Office Managers	SC-7, PADs as stewards
	Championing performance-based management and contracting	SC-7	All SC
SC-1 as PSO	Providing program policy, budget development, technical direction, and oversight	PADs as program sponsors	SC Operations Office Managers
	Implementing programs through the field elements	PADs as program sponsors	SC Operations Office Managers
	Providing program specific infrastructure funding	PADs as program sponsors	SC Operations Office Managers
	Funding and conforming to site/facility wide operational programs as agreed to by the PSO and CSO	PADs as program sponsors	SC Operations Office Managers

Table 3. Office of Science Responsibilities Related to Integrated Safety Management Functions at SC Laboratories

Person or Organization	Responsibilities⁴
1. Provide Direction	
<i>The SC organization provides direction to the laboratories with its strategic plans, mission statements, budgets, and institutional planning process.</i>	
SC-1	Contribute to, and then implement, DOE's strategic plan, mission statement, and budget. Develop and implement SC's strategic plan and mission statement. Provide SC corporate policies and guidance.
PADs as stewards	Provide lab-specific direction and guidance to the operations offices for implementation.
PADs as program sponsors	Provide mission assignments and program guidance.
SC Operations Office Managers	Manage operations offices consistent with Federal laws and regulations, applicable DOE directives, and SC guidance. Communicate DOE direction to the laboratories.
Laboratories	Operate laboratories consistent with Federal laws and regulations, applicable DOE directives, and SC guidance.
2. Define Scope of Work	
<i>The SC organization defines the scope of work for the laboratories by allocating funds from the budget, setting expectations and goals, and negotiating contracts.</i>	
SC-1	Set SC-wide expectations and goals.
PADs as stewards	Set lab-specific expectations and goals. Concur in contract performance measures.
PADs as program sponsors	Set programmatic expectations and goals. Allocate funds consistent with approved budget.
SC Operations Office Managers	Negotiate and administer contract with the laboratories. Ensure appropriate ES&H requirements are defined in contracts.
Laboratories	Ensure work is planned within ES&H requirements.

⁴ SC-1 and the PADs rely upon the support offices (SC-5, SC-7, SC-60, and SC-80), as necessary, in order to effectively exercise their responsibilities. For example, SC-7 plays a key role in institutional planning and contracting. SC-80 plays a key role in Integrated Safety Management, NEPA reviews, etc. Support office roles are described in Section 2.3.

Table 3, continued

3. Analyze Hazards	
<i>The laboratories analyze hazards. The SC organization approves certain hazard analyses, oversees the lab's performance, and prepares NEPA documents.</i>	
SC-1	Approve hazard categorization, safety analyses and NEPA documents.
PADs as stewards	Maintain an executive-level awareness of lab-wide hazards.
PADs as program sponsors	Maintain awareness of program-related work hazards.
SC Operations Office Managers	Ensure laboratories have a credible process to identify and analyze hazards. Approve certain hazard categorizations and safety analyses. Prepare certain NEPA documents.
Laboratories	Categorize hazards and prepare hazards analyses. Provide input to NEPA documents.
4. Develop and Implement Controls	
<i>The laboratories develop and implement controls. The SC organization oversees the lab's performance and approves exemptions from ES&H requirements.</i>	
SC-1	Approves exemptions from orders and rules.
PADs as stewards	Maintain an executive-level awareness of lab-wide hazard controls.
PADs as program sponsors	Maintain awareness of program hazard controls.
SC Operations Office Managers	Ensure laboratories have a credible process to develop and implement controls. Ensure appropriate controls are specified in contracts.
Laboratories	Develop and implement the necessary controls for safe performance of work.
5. Perform Work	
<i>For the purpose of this table, the function "perform work" is done exclusively by the laboratory, even though all organizations do their own type of work.</i>	
Laboratories	Do work safely.
6. Provide Feedback and Pursue Improvements	
<i>All organizations provide feedback and pursue improvements as they relate to the lab's safe performance of its work.</i>	
SC-1	Appraise performance of PADs and Operations Office Managers.
PADs as stewards	Maintain executive-level awareness of lab-wide operational performance.
PADs as program sponsors	Evaluate program performance.
SC Operations Office Managers	Conduct operational oversight of the laboratories and assess performance.
Laboratories	Conduct self-assessments for continuous improvement. Measure performance consistent with contract agreements.

5.0 INTERFACES

The Office of Science (SC) interfaces with other DOE headquarters program offices, support offices, and with other external organizations. Programmatic interfaces are necessitated by the work performed for multiple PSOs at most DOE laboratories and sites.

5.1 DOE Headquarters Interfaces

SC interfaces with Defense Programs (DP)⁵ and Environmental Management (EM) in its Lead Program Secretarial Office role via the Field Management Council. The Council provides the opportunity for integration of staff and support activities with line programs, and is responsible to review staff policy and requirements affecting the field. Programmatic interfaces occur between DP; EM; Energy Efficiency and Renewable Energy; Nuclear Energy, Science and Technology (NE); and Nonproliferation and National Security as these programs conduct work at SC laboratories; and vice versa, where SC has programmatic interests at laboratories managed by these programs. Programmatic interfaces also occur, primarily with DP and EM, regarding the institutional planning process and the Work For Others and Laboratory Directed Research and Development programs.

One important interface, described in the Deputy Secretary's August 19th, 1999, memorandum, occurs when the LPSO for an operations office is different than the CSO for one of the operations office's laboratories or sites. In these cases, management agreements are developed to clarify roles and responsibilities. A management agreement between SC, DP, and Oakland Operations Office was developed for Lawrence Livermore National Laboratory.^f As noted in Section 2.4, a management agreement was developed between SC, DP, and Richland Operations Office for Pacific Northwest National Laboratory (Reference e). Other management agreements under development include: Y-12 (SC, DP, and Oak Ridge Operations Office); East Tennessee Technology Park (SC, EM, and Oak Ridge Operations Office); and Paducah/Portsmouth (SC, NE, and Oak Ridge Operations Office).

SC also interfaces with the numerous DOE staff offices (e.g., Environment, Safety, and Health; Management and Administration; General Counsel; etc.) in areas such as administration, legal, technical, independent oversight, policy and standards. These interfaces are conducted by various organizations in SC on a case-by-case basis. SC also participates in various organizations that are dedicated to improve the operations of the DOE National laboratories such as the Laboratory Operations Board, the Research and Development Council, the National Laboratories Improvement Council, etc.

5.2 External Interfaces

The Office of Science participates in initiatives involving external organizations including those ES&H initiatives associated with the Nuclear Regulatory Commission, the Occupational Safety and Health Administration, the Federal Emergency Management Agency, the Environmental Protection Agency; and to a limited extent, the Defense Nuclear Facilities Safety Board. In

⁵ Defense Programs operates within the National Nuclear Security Administration. The Deputy Administrator for Defense Programs serves as a Lead Program Secretarial Officer.

addition, SC provides information to external organizations including Office of Management and Budget and the General Accounting Office, upon request. Finally, SC participates, supports, and may direct interactions with agencies and committees of stakeholders, and the media to address issues involving activities at the SC laboratories. These interfaces are conducted by various organizations in SC on a case-by-case basis.

Appendix A. Department Safety Management Functions, Responsibilities, and Authorities

The following table describes how the Office of Science exercises the functions, responsibilities, and authorities in Chapter 9 of DOE M 411.1-1A, *Safety Management Functions, Responsibilities, and Authorities Manual*, approved October 18, 1999 (commonly referred to as the DOE FRAM). The table is organized in accordance with the six sections of Chapter 9 of the DOE FRAM. These sections are the five functions of Integrated Safety Management plus “provide direction” as a sixth function.

The first column, “Responsibility,” lists the function, responsibility, or authority exactly as described in the DOE FRAM. “FEM” in the DOE FRAM, and the first column of the table, refers to Field Element Manager. This is the DOE employee having overall responsibility for a non-headquarters DOE organization that is geographically distinct. For SC, FEM is equivalent to the operations office managers. Each responsibility in the table is followed in parentheses by the SC role for which the responsibility is designated in the DOE FRAM (i.e., CSO, LPSO, OPI, PSO, or SO):

- Cognizant Secretarial Officer (CSO). The Assistant Secretary or Director responsible for a bounded set of facilities or a laboratory.
- Lead Program Secretarial Officer (LPSO). The Assistant Secretary or Director to whom assigned field offices directly report and who has overall ownership responsibility for those field offices.
- Office of Primary Interest (OPI). 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.
- Program Secretarial Officer (PSO). 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.
- Secretarial Officer (SO). The head of a first-tier organization; a DOE headquarters employee reporting directly to the Secretary, the Under Secretary, or the Deputy Secretary. This title is used to include support, staff and program officers.

The second column, “Lead,” identifies the organization in SC to which the authority for the responsibility has been delegated. (When the authority is delegated to an individual, that person shares the responsibility with SC-1 and is accountable to SC-1 for the exercise of that authority. SC-1, while not exercising the authority directly, still retains the responsibility.) The third column, “Support,” identifies organizations that provide input to the Lead. For the most part, SC-80 is the primary coordination lead on all ES&H issues on behalf of SC-1. The table does not identify the numerous organizations within Science that routinely support and provide input to the Lead for most of the responsibilities.

Responsibility	Lead	Support
9.1 Provide Direction		
9.1.1 DOE Strategic Plans, Including Mission Statements		
1. Provide input to and implement the provisions of the Secretary's strategic plan, including the DOE mission statement. (SO)	SC-1	SC-5
9.1.2 Secretarial Office Strategic Plans, Including Mission Statements		
2. Prepare Secretarial Office strategic plans and mission statements and submit them to the Deputy Secretary for approval. (SO)	SC-1	SC-5
3. Implement DOE and Secretarial Office strategic plans and mission statements. (SO)	SC-1	
9.1.3 Program Secretarial Office Mission Assignment to Field Element		
4. Provide mission assignments and program guidance to FEMs. (PSO)	PADs as program sponsors	SC-60
9.1.4 Budget		
9.1.4.1 Budget for program		
5. Prepare the proposed budget for the program office and coordinate with the Headquarters Chief Financial Officer. (PSO)	SC-60	PADs as program sponsors
9.1.4.2 Budget for environment, health and safety infrastructure		
6. The CSO is responsible for long-term planning, landlord activities, and facility-wide safety. (CSO)	PADs as stewards SC-80 ⁶	SC Ops Office Managers
7. Assist the LPSO in managing operational functions and activities. (LPSO Deputy for Operations)	SC-3	SC-80 SC Ops Office Managers
8. Provide broad program policy and direction to the field, budget to support program work, and an appropriate share of the landlord costs. (PSO)	PADs as program sponsors	
9.1.5 Resource Allocation to FEM		
9. Allocate resources consistent with the final approved budget to accomplish missions and safety initiatives. (PSO)	PADs as program sponsors	
9.1.6 Technical Qualification and Competency		
9.1.6.1 Technical qualification and competency at defense nuclear facilities⁷		

⁶ SC-80 funds and manages the Multiprogram Energy Laboratory-Facilities Support program for certain line-item construction projects.

⁷ The Office of Science does not operate a defense nuclear facility.

Responsibility	Lead	Support
9.2 Define Scope of Work		
9.2.2 Set Expectations		
9.2.2.1 Policies, Orders, Notices, Manuals, Guides, and Page Changes		
10. Prepare draft directives (i.e., Policies, Orders, Notices, Manuals, Guides, and Page Changes) using DOE resources as appropriate to ensure development of a quality product consistent with DOE missions. (OPI) ⁸	SC-7 SC-70 SC-80	SC Ops Office Managers
11. Revise directives as necessary and provide technical interpretation of directive requirements. (OPI) ⁸	SC-7 SC-70 SC-80	
12. Submit final draft Policies, Orders, Notices, Manuals, Guides, and Page Changes to MA-1 for issuance. (OPI) ⁸	SC-1	SC-7 SC-70 SC-80
13. Designate a Directive Development Manager to coordinate review of directives (see DOE M 251.1-1A) (OPI) ⁸	SC-1	SC-7 SC-70 SC-80
14. Identify the program offices that could be affected and coordinate with the PSO for that program office for review and comment; coordinate with program counsel in the Office of General Counsel for review and comment. (OPI) ⁸	SC-7 SC-70 SC-80	PADs as program sponsors
15. Provide staff to participate on focus groups or technical development teams. (OPI) ⁸	SC-7 SC-70 SC-80	SC Ops Office Managers
16. Review and comment on proposed directives. (PSO) ⁹	SC-60	SC-7 SC-80 PADs as program sponsors
17. Recommend technical and cost-saving improvements where appropriate. (PSO) ⁹	SC-60	SC-7 SC-80 PADs as program sponsors
18. Provide staff to participate on focus groups or technical development teams to ensure a quality product is developed. (PSO)	SC-7 SC-80	PADs as program sponsors

⁸ Science is the office of primary interest for DOE O 413.2, LABORATORY DIRECTED RESEARCH AND DEVELOPMENT (SC-7); DOE O 1300.3, POLICY ON THE PROTECTION OF HUMAN SUBJECTS (SC-70); and DOE O 420.2, SAFETY OF ACCELERATOR FACILITIES (SC-80). Each organization has the lead for its respective order.

⁹ SC-60 provides administrative and management support for the collection and dissemination of comments within SC. SC-80 is the primary source for technical review of the policies, orders, notices, manuals, and guides. SC-7 and PADs also review these documents.

Responsibility	Lead	Support
19. Alert the OPI to any inconsistencies between the proposed directive and DOE and EH missions. (PSO)	SC-7 SC-80	PADs as program sponsors
20. Review and approve, or deny with reason, applications for exemptions (see DOE M 251.1-1A). (PSO)	SC-1	SC-7 SC-60 SC-80 PADs as program sponsors
9.2.2.2 Technical Standards for Use within DOE		
21. Identify established consensus standards for use by DOE or document the need for a DOE Technical Standard. Approve final DOE Technical Standards and send them to the DOE Technical Standards Manager for issuance. (OPI)	SC-80	PADs as program sponsors
22. Prepare draft DOE Technical Standards that are consistent with both Department mission and P.L. 104-113. (OPI)	SC-80	PADs as program sponsors
23. Coordinate draft DOE Technical Standards in accordance with directions from the DOE Technical Standards Program. (OPI)	SC-80	PADs as program sponsors
24. Review and comment on proposed DOE Technical Standards. (PSO)	SC-80	PADs as program sponsors
25. Recommend technical and cost-saving improvements where appropriate. (PSO)	SC-80	PADs as program sponsors
26. Provide staff to participate on focus groups or technical development teams. (PSO)	SC-80	PADs as program sponsors
27. Ensure proposed DOE Technical Standards are consistent with program office missions. (PSO)	SC-80	PADs as program sponsors
9.2.2.3 Rules		
28. Review and comment on proposed rules. (PSO) ¹⁰	SC-80	SC-60 PADs as program sponsors
29. Recommend technical and cost-saving improvements where appropriate. (PSO) ¹⁰	SC-80	SC-60 PADs as program sponsors

¹⁰ SC-60 provides administrative and management support for the collection and dissemination of comments within SC. SC-80 is the primary source for technical review of rules. The PADs review rules for programmatic impact.

Responsibility	Lead	Support
30. Provide staff to participate on focus groups or technical development teams. (PSO) ¹¹	SC-80	SC-60 PADs as program sponsors
31. Ensure that resources used in implementing rules are appropriate to provide reasonable assurance of adequate protection in the operation of nuclear facilities. (PSO)	SC Ops Office Managers	
9.2.2.4 Contract performance expectations		
32. Provide guidance to FEMs on expected performance, set goals and priorities, and allocate resources. (PSO)	PADs as program sponsors	SC-7
9.2.2.5 Organization FRA Documents		
33. Prepare, approve, and implement FRA documents for each organization to delineate how the applicable responsibilities and authorities in this Manual [DOE FRAM] are performed. (PSO)	SC-1	SC-80
9.2.2.6 Approval of safety management system documentation		
34. Jointly develop and submit a list of highly qualified senior technical safety managers to the Deputy Secretary for use in forming [ISM verification] review teams. (PSO)	SC-1	SC-80
9.2.3 Allocate Resources to Contractor		
35. Prepare budget execution documents in accordance with DEAR; DOE O 135.1, BUDGET EXECUTION FUNDS DISTRIBUTION AND CONTROL; and DOE M 135.1-1, BUDGET EXECUTION MANUAL, to allocate resources to contractors. (PSO)	PADs as program sponsors	SC-60 SC Ops Office Managers
36. Ensure funds and resources are used appropriately. (PSO)	PADs as program sponsors	SC-60 SC Ops Office Managers
9.2.4 Prioritize Tasks		
37. Review the safety management system and provide guidance to the FEM regarding 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). (CSO)	PADs as stewards	SC-80
9.3 Analyze Hazards		
9.3.1 Identify and Analyze Hazards		
38. Monitor and assess the effectiveness of FEM oversight of contractor analysis of hazards associated with work at their facilities. (LPSO)	SC-3	SC-80

¹¹ SC-60 provides administrative and management support for the collection and dissemination of comments within SC. SC-80 is the primary source for technical review of rules. The PADs review rules for programmatic impact.

Responsibility	Lead	Support
9.3.2 Categorize Facility/Activity Based on the Hazards		
39. Approve final facility hazard categorization for nuclear facilities, where this authority has not been delegated. Monitor the FEM's program for hazard categorization of facilities and activities. (CSO)	SC-1	SC-80 PADs as stewards
Develop and Implement Controls		
9.4.1 Identify Standards and Requirements		
9.4.1.1 ES&H site-/facility-specific requirements (Hazard Category 1)¹²		
9.4.1.2 ES&H site-/facility-specific requirements (Hazard Category 2 and below)		
40. Ensure that an authorization agreement is established between the contractor and DOE for Hazard Category 2 facilities. (CSO)	SC Ops Office Managers	SC-80
41. The CSO may retain approval authority for this responsibility or delegate it. Where authority is not delegated, review and approve (1) the proposed specific requirements to be included in the contracts, (2) authorization agreements, (3) safety documentation, and (4) authorization bases for nuclear facilities categorized as Hazard Category 2 or below, accelerators, and non-nuclear facilities. (CSO)	SC Ops Office Managers	
42. Ensure that the requirements are consistent with budget and policy for each facility. (CSO)	PADs as stewards	SC-80
9.4.1.3 Exemption from DOE Directive Requirements (Other Than Rules)		
43. Unless otherwise stated in a directive, approve exemptions from DOE Orders, Notices, and Manuals for activities and facilities under their direction except for environment, safety and health requirements for Category 1 Hazard Nuclear Facilities. (SO)	SC-1	SC-80 SC Ops Office Managers
44. Approve exemptions for environment, safety and health requirements for Category 1 Hazard Nuclear Facilities. This authority may be delegated to other heads of Departmental Elements. (CSO)	NA ¹²	
9.4.1.4 Exemptions from Requirements in 10 CFR Parts 830 and 835		
45. 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. (CSO)	SC-1	SC-80 SC Ops Office Managers
46. Review 10 CFR Part 835 exemption requests and provide recommendations on approval to EH. (CSO)	SC-1	SC-80 SC Ops Office Managers

¹² The Office of Science does not operate Category 1 hazard nuclear facilities.

Responsibility	Lead	Support
47. Coordinate reviews of proposed exemptions with EH and disposition of any comments received. (CSO)	SC-80	PADs as stewards SC Ops Office Managers
9.4.1.6 Nuclear safety rule implementation plans, programs, and procedures		
48. Approve nuclear safety rule implementation plans, programs, and procedures where DOE approval is required. (CSO)	SC Ops Office Managers	SC-80
49. Respond to FEM or EH comments. (CSO)	SC-80	SC Ops Office Managers
9.4.2 Identify Controls to Prevent and Mitigate Hazards		
9.4.2.1 Hazard Category 1 nuclear facilities¹³		
9.4.2.2 Hazard Category 2 and 3 and below nuclear facilities and non-nuclear facilities		
50. Review documentation for controls for selected facilities (e.g., accelerators and other major systems). (CSO)	SC Ops Office Managers	SC-80 PADs as stewards
9.4.3 Establish Safety Basis		
9.4.3.1 Safety documentation/authorization basis for Hazard Category 1 nuclear facilities¹³		
9.4.3.2 Safety documentation/authorization basis for Hazard Category 2 and below nuclear facilities and accelerators¹⁴		
51. Approve the safety documentation and authorization bases or delegate this authority to the FEM. (CSO)	SC Ops Office Managers	
9.4.3.3 Authorization protocols		
52. Ensure systems are in place for the development and implementation of appropriate authorization protocols, including a protocol for assessment support to the FEM. (CSO)	SC-3	SC-80
9.4.4 Implement Controls		
53. Monitor the FEM oversight of the contractor's controls processes. (CSO)	SC-3	SC-80
9.5 Perform Work		
9.5.2 Perform Work Safely		

¹³ The Office of Science does not operate Category 1 hazard nuclear facilities.

¹⁴ Accelerators not excluded under paragraph 3c of DOE O 420.2, SAFETY OF ACCELERATOR FACILITIES.

Responsibility	Lead	Support
54. Ensure implementation of safety management systems, Facility Representative programs, and performance measures to provide adequate protection of the worker, the public, and the environment and adequate allocation of resources. (See DOE P 450.5, LINE ENVIRONMENT, SAFETY AND HEALTH OVERSIGHT.) (LPSO/CSO)	SC-3	SC-80 SC Ops Office Managers
9.5.3 Quality Assurance		
55. Ensure implementation of quality assurance programs, continuous improvement, and provision of adequate resources to achieve quality. (SO)	SC-3	SC-80 SC Ops Office Managers
9.6 Collect Feedback and Pursue Improvement		
9.6.1 Generation, Collection, and Dissemination of Information		
9.6.1.1 Lessons Learned Program		
56. 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. (PSO)	SC-80	SC Ops Office Managers
57. Collect information for use in this program from assessments of contractor and field element operations. (PSO)	SC-80	SC Ops Office Managers
9.6.1.2 Occurrence Reporting and Processing System (ORPS)		
58. Delegate authority and assign responsibilities for implementing occurrence reporting; review and approve the facility/site implementation procedure; ensure that the ORPS requirements are included in appropriate contracts; establish agreements concerning corrective actions with FEMs; review occurrence reports for indications of deteriorating or poor performance; and approve proposed corrective actions or delegate this authority. (CSO)	PADs as stewards SC Ops Office Managers ¹⁵	SC-80
59. Approve ORPS reports, where this authority has been delegated to the Headquarters program manager. (See DOE M 232.1-1A, OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION, paragraph 4.5.) (Program Manager)	SC Ops Office Managers ¹⁶ PADs as stewards	SC-80
9.6.1.3 ES&H reporting requirements (occupational safety and health, environmental, radiological)		
60. Oversee implementation of ES&H reporting requirements. (LPSO/CSO)	SC-3	SC-80 SC Ops Office Managers

¹⁵ SC Operations Office Managers ensure that the ORPS requirements are included in appropriate contracts.

¹⁶ Program Manager approval for off-normal occurrences delegated to SC Operations Office Managers at LBNL, Fermi, SLAC, and TJNAF.

Responsibility	Lead	Support
9.6.1.4 Assessments		
61. Assess their own organizations to identify areas in which continuous improvement in the safety of DOE operations can be realized. Assign responsibility within the element for establishing criteria for such assessments and for conducting them. (SO)	SC-3	SC-80
62. Examine the findings of both internal and external assessments of their element to identify root causes and necessary corrective actions within the responsibility of their element. (SO)	SC-3	SC-80
63. Submit all assessment findings and their corrective actions to the process implementing paragraph 9.6.2, "Make Changes to Improve." (SO)	SC-1	SC-80
64. Ensure that all currently applicable safety requirements are captured in the organization's FRA document and are consistent with other FRA documents of other organizations with which there are interfaces. (SO)	SC-80	
65. As part of overall issue management, review the findings of assessments to evaluate their safety significance and ensure that appropriate priorities and resources are assigned to corrective actions. Where this review finds insufficient safety significance to justify corrective efforts, report the results of that review to the assessing organization. (CSO) ¹⁷	SC-80 PADs as stewards	
9.6.1.5 Accident Investigations		
66. In the event of a serious accident that results in life-threatening injuries or major environmental contamination, the appropriate PSOs are to meet with the Secretary, Deputy Secretary, and Under Secretary to thoroughly review the causes of the event, corrective action plans, and the effectiveness of the integrated safety management at the site at which the event occurred. (PSO)	SC-1	SC-80 PADs as program sponsors
9.6.2 Make Changes to Improve		
67. Continuously improve the efficiency and quality of operations; develop, implement, and track corrective actions to profit from prior experience and the lessons learned. (SO)	SC-3	SC-80
68. Develop and maintain a process to ensure that corrective actions are planned and pursued to completion and adequately correct the root causes of the conditions that prompted them. (SO)	SC-3	SC-80
9.6.3 Oversight and Enforcement		
9.6.3.1 Line management oversight		

¹⁷ SC-80 reviews the findings of assessments to evaluate their safety significance. PADs ensure that appropriate resources are assigned to corrective actions.

Responsibility	Lead	Support
69. Monitor field element and contractor performance by reviewing information provided by the field elements, EH, and external organizations. When appropriate, participate in field element appraisals. Conduct on-site reviews of field element performance, including verification of their appraisals of the contractor. (CSO)	SC-3	SC-80 PADs as stewards
9.6.3.2 EH oversight		
70. Approve corrective action plans within 60 days of issuance of the formal independent oversight assessment report. (CSO)	SC-1	PADs as stewards
71. Provide an opportunity for the DOE's Chief Operating Officer or designee to be briefed by the FEM, EH-2, and the Assistant Secretary for Environment, Safety and Health on the related issues, the corrective action plan, and any associated resource issues. (CSO)	SC-1	PADs as stewards
72. Resolve identified cross-organizational disputes, such as those related to the timeliness or adequacy of corrective action plans or their implementation. If unsatisfied with responsible line management's resolution, elevate the dispute to the Deputy Secretary. (CSO) ¹⁸	SC-3 SC-1	PADs as stewards
9.6.3.3 Price-Anderson Amendments Act enforcement		
73. Refer potential nuclear safety violations to the Office of Enforcement and Investigation for review under the provisions of 10 CFR Part 820, where appropriate. (CSO)	SC-1	SC-80 SC Ops Office Managers
74. Provide information and support investigations. (CSO)	SC-3	SC-80 SC Ops Office Managers
75. Participate in enforcement conferences with the Office of Enforcement and Investigation. (CSO)	SC-3	SC-80 SC Ops Office Managers
9.6.3.4 Interface with Defense Nuclear Facilities Safety Board (DNFSB)		

¹⁸ SC-3 will resolve cross-organizational disputes. SC-1 will elevate disputes to the Deputy Secretary, when necessary.

Responsibility	Lead	Support
76. Provide full cooperation with the Board, including ready access to Departmental facilities, personnel, and information; provide responses to DNFSB recommendations and requests as described in DOE M140.1-1A, INTERFACE WITH THE DEFENSE NUCLEAR FACILITIES SAFETY BOARD. (SO)	SC-3	SC-80 SC Ops Office Managers

References

^a Memorandum for Department Elements, From T.J. Glauthier, Roles and Responsibilities Guiding Principles, August 19, 1999.

^b Memorandum for Patricia Dehmer (SC-10), Peter Rosen (SC-20), and Ari Patrinos (SC-70), from Martha Krebs (SC-1), Office of Science Multiprogram Laboratory Stewardship Initiative, December 17, 1999.

^c DOE M 411.1-1A, Safety Management Functions, Responsibilities, and Authorities Manual, October 18, 1999.

^d Strategic Plan of the Office of Science, June 1999.

^e Management Agreement for PNNL Operations Between the Director, Office of Science, and the Assistant Secretary for Environmental Management, and the Manager, Richland Operations Office, July 12, 1999.

^f Management Agreement for LLNL Operations among the Assistant Secretary for Defense Programs, the Director, Office of Science, and the Manager, Oakland Operations Office, August 4, 1999.