Performance Requirement: Integrated Safety Management

Mandatory Document

Standard Statement:

The Laboratory must establish and maintain an effective integrated safety management system to ensure that safety is integrated into management and work practices at all levels so that missions are accomplished while protecting employees, the public, the environment, and property. Here, the term *safety* comprises environment, safety, and health, including pollution prevention and waste minimization; and *employees* include subcontractor employees. Meeting this LPR is critical to achieving a major goal of the Laboratory, which is to accomplish its mission cost effectively while striving for an injury-free workplace, minimizing waste streams, and avoiding adverse impacts to the environment from its operations. Together, these ISM expectations are essential to quality management, including continuous quality improvement at the Laboratory.

Performance Criteria:

0.1 The Laboratory's integrated safety management system must encompass all Laboratory work and must consist of ***six components: the objective, eight guiding principles, five core functions, mechanisms, responsibilities, and implementation***. The first four components are generic and must be used to manage safety throughout the Laboratory. The remaining components are not generic and must directly involve employees in establishing institutional, facility- and activity-specific expectations for performing work safely, consistent with the type of work and hazards involved. The performance criteria for these six components are given below.

1.0 Objective

The Laboratory must systematically integrate safety into management and work practices at all levels so that missions are accomplished while protecting employees, the public, the environment, and property. This must be accomplished through effective integration of safety management into all facets of work planning and execution.

2.0 Eight Guiding Principles

2.1 Management Commitment and Worker Involvement—ISM is an employee-based safety and environmental management system. Managers must be visibly committed to the implementation and sustained execution of all elements of the system, and workers must exhibit continual involvement in the system by understanding and using ISM elements in their work.

2.2 Line Management Responsibility for Safety—Line management must be directly responsible for the protection of employees, the public, the environment, and property. Line management includes those Laboratory and subcontractor employees managing or supervising employees performing work.

2.3 Clear Roles and Responsibilities—Clear and unambiguous lines of authority and responsibility for ensuring safety must be established and maintained at all organizational levels within the Laboratory.

2.4 Competence Commensurate with Responsibilities—Personnel must possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities.

2.5 Balanced Priorities—Resources must be effectively allocated to address safety, programmatic, and operational considerations. Protecting employees, the public, the environment, and property is a priority whenever activities are planned and performed.

2.6 Identification of Safety Standards and Requirements—Before work is performed, the associated hazards must be evaluated and an agreed-upon set of safety standards and requirements must be established which, if properly implemented, provide adequate assurance that the employees, the public, the environment, and property are protected from adverse consequences.

2.7 Hazard Controls Tailored to Work Being Performed—Administrative and engineering controls to prevent and mitigate hazards must be tailored to the work being performed and associated hazards. Emphasis must be on designing the work and/or controls to reduce or eliminate the hazards and to prevent accidents and unplanned releases and exposures.

2.8 Work Authorization—The conditions and requirements to be satisfied for work to be initiated and conducted must be clearly established and agreed-upon by DOE and the Laboratory. The extent of documentation and level of authority for agreement must be tailored to the complexity and hazards associated with the work and must be established in a safety management system.

3.0 Five Core Functions

3.1 Define the Scope of Work—Missions must be translated into work; expectations (e.g., goals and objectives) must be set; tasks must be identified and prioritize; and resources must be allocated.

3.2 Analyze the Hazards—Hazards associated with the work must be identified, analyzed, and categorized.

3.3 Develop and Implement Hazard Controls—Appropriate standards and requirements must be identified and agreed-upon; controls to prevent and mitigate hazards must be identified; the safety envelope (i.e., the bounding conditions within which work must be performed) must be established, and controls must be effectively implemented.

3.4 Perform Work within Controls—Readiness must be confirmed and work must be performed safely.

3.5 Ensure Performance— Feedback information on the adequacy of controls must be gathered; opportunities for improving the definition, planning, and execution of work must be identified and implemented; line self-assessment, functional assessment, and independent assessment must be conducted; expected behaviors must be reinforced; and the Laboratory's overall integrated safety management system must be periodically reviewed and, as appropriate, refined to ensure its effectiveness for performing work safely.

4.0 Mechanisms

Safety mechanisms must be established at the institutional, facility-, and activity-specific levels to address each guiding principle and to define how the core functions must be performed.

5.0 Responsibilities

For each safety mechanism, the appropriate approval authority must be established and the responsibilities must be clearly defined, communicated, and documented commensurate with the type of work and hazards involved.

6.0 Implementation

Implementation must involve defining and planning specific work; identifying and analyzing associated hazards; developing and implementing hazard controls; performing work within controls; and ensuring performance, including continuous quality improvement, consistent with the preceding performance criteria.

Contractual Work Smart Standards (WSS) and Other Requirements

Quality Assurance (WSS)—DOE Order 414.1 (non-nuclear), 10 CFR 830.120 (nuclear)
Training (WSS)—DOE Order 5480.20A (nuclear)
Occurrence Reporting—DOE Order 232.1, Chg2
Employee Concerns—DOE Order 5480.29
ES&H Appraisal Program—DOE Order 5482.1B
ES&H Information Reporting—DOE Order 5484.1
LA-UR-98-328, "Integrated Safety Management"