

Sanford Underground Research Facility



ENVIRONMENT, HEALTH, AND SAFETY

INTEGRATED SAFETY MANAGEMENT SYSTEM (ISMS)

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1.0 POLICY

The Sanford Underground Laboratory at Homestake (hereafter called Sanford Laboratory) is committed to conducting work efficiently and in a manner that ensures protection of the workers, the public and the environment. It is the Laboratory's policy that safety management systems described herein shall be used to systematically integrate safety into management and work practices at all levels so that missions are accomplished while protecting the public, the worker and the environment.

The Laboratory's safety management system establishes a hierarchy of components to facilitate the orderly development and implementation of safety management. The safety management system consists of six components: 1) the objective, 2) guiding principles, 3) core functions, 4) mechanisms, 5) responsibilities, and 6) implementation.

1.1. COMPONENT 1: Objective of Integrated Safety Management

Sanford Laboratory, its contractors and experimental users must systematically integrate safety into management and work practices at all levels so that missions are accomplished while protecting the public, the worker and the environment. This is to be accomplished through effective integration of safety management into all facets of work planning and execution so that the overall management of safety functions and activities becomes an integral part of mission accomplishment.

1.2. COMPONENT 2: Guiding Principles for Integrated Safety Management

The guiding principles are the fundamental policies that guide Laboratory employees, contractors and experimental users' actions, from development of safety directives to performance of work.

Line Management Responsibility for Safety. Line Management is directly responsible for the protection of the public, the workers, and the environment. As a resource to line management, the Environment, Health and Safety Department advises, consults, audits, and provides independent feedback to the Executive Director of the South Dakota Science and Technology Authority.

Clear Roles and Responsibilities. Clear and unambiguous lines of authority and responsibility for ensuring safety shall be established and maintained at all organizational levels of Sanford Laboratory, its contractors, and experimental users.

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

Balanced Priorities. Resources shall be effectively allocated to address safety, programmatic and operational considerations. Protecting the public, the workers, and the environment shall be a priority whenever activities are planned and preformed.

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

Hazard Controls Tailored to Work Being Performed. Administrative and engineering controls prevent and mitigate hazards shall be tailored to the work being performed and associated hazards.

Operations Authorization. The conditions and requirements to be satisfied for operations to be initiated and conducted shall be clearly established and agreed-upon.

1.3. COMPONENT 3: Core Functions for Integrated Safety Management

These five core safety management functions provide the necessary structure for any work activity that could potentially affect the public, the workers, and the environment. The functions applied as a continuous cycle with the degree of rigor appropriate to address the type of work activity and the hazards involved.

Define the Scope of Work. Missions are translated into work, expectations are set, tasks are identified and prioritized, and resources are allocated.

Analyze the Hazards. Hazards associated with work identified, analyzed and categorized.

Develop and Implement Hazard Controls. Applicable standards and requirements are identified and agreed-upon, controls to prevent/mitigate hazards are identified, the safety envelope is established, and controls are implemented.

Perform Work within Controls. Readiness is confirmed and work is performed safely.

Provide Feedback and Continuous Improvement. Feedback information on the adequacy of the controls is gathered, opportunities for improving the definition and planning of work are identified and implemented, line and independent oversight is conducted, and if necessary, regulatory enforcement actions occur.

1.4. COMPONENT 4: Integrated Safety Management Mechanisms

Safety Mechanisms define how the core safety management functions are performed. The mechanisms may vary from facility to facility and from activity to activity based on the hazards and the work being performed and may include:

Departmental expectations expressed through directives (policy, rules, orders, notices, standards and guidance) and contract clauses.

Directives on identifying and analyzing hazards and performing safety analyses.

Directives which establish processes to be used in setting safety standards.

Contractor policies, procedures and documents (e.g., Health and Safety Plans, Safety Analysis Reports, Chemical Hygiene Plans, Process Hazard Analyses) established to implement safety management and fulfill commitments made to the department.

1.5. COMPONENT 5: Responsibilities for Integrated Safety Management

Responsibilities must be clearly defined in documents appropriate to the activity. Contractor responsibilities are detailed in contracts, regulations and contractor-specific procedures. For each management mechanism employed to satisfy a safety management principle or function, the associated approval authority needs to be established. The review and approval levels may vary commensurate with the type of work and the hazards involved.

1.6. COMPONENT 6: Implementation of Integrated Safety Management


Implementation involves specific instances of work definition and planning, hazards identifications and analysis, definition and implementation of hazard controls, performance work, developing and implementing operating procedures, and monitoring and assessing performance for improvement.

2.0 SIGNATURE/APPROVAL PAGE

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