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Department of Energy

United States Government

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memorandum

July 12, 1996 REPLY TO ATTN OF: Office of Nuclear Safety Policy and Standards: R. Black: 903-3465

SUBJECT: Safety Management System Policy

^{TO:} Marcia Morris, HR-6

We are pleased to submit the attached Safety Management System policy statement to you for distribution. The policy was developed by the Department's Safety Management Implementation team in response to commitment 1.1 of the April 18, 1996 Implementation Plan for Board Recommendation 95.2. It represents the first milestone in the critical process of establishing an integrated systems approach to managing safety throughout the Department. A related directive (available, September 1996) is being developed to provide expanded guidance in accordance with Implementation Plan commitment 1.2.

During drafting of the policy, two meetings were held with the Board to assure their early involvement. At the last meeting, July 10, 1996, Implementation Team Leader Frank McCoy and my staff informed the Board of our intention to release the draft for a short comment period.

Please issue this policy to the Department and contractor organizations, Directives Points of Contact, and to the Defense Nuclear Facilities Safety Board for a two week review and comment period.

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Tara O'Toole, M.D., M.P.H. Assistant Secretary Environment, Safety and Health

Attachmen

cc: Mark Whitaker S 7.1.3 Frank McCoy, EH-3

U.S. Department of Energy Washington, D.C.

POLICY

DOE P 450.4

SUBJECT: SAFETY MANAGEMENT SYSTEM POLICY 7-11-96

PURPOSE AND SCOPE

Safety Management Systems provide a formal, organized process whereby people plan, perform, assess, and improve the safe conduct of work. The Safety Management System is institutionalized through Department of Energy (DOE) directives and contracts to establish the Department-wide safety management objective, guiding principles, and functions.

The system encompasses all levels of activities and documentation related to safety management throughout the DOE complex. The objective of this policy is achieved by other means for Naval Reactors (Naval Nuclear Propulsion Program).

Throughout this policy statement, the term safety is used synonymously with environment, safety and health (ES&H) to encompass protection of the public, the workers, and the environment.

POLICY

The Department is committed to conducting work efficiently and in a manner that ensures protection of workers, the public and the environment. It is Department 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. Direct involvement of workers during the development and implementation of safety management systems is essential for their success.

The DOE safety management system establishes a hierarchy of components (see figure 1) to facilitate the orderly development and implementation of safety management throughout the DOE complex. The safety management system consists of six components: 1) the objective, 2) guiding principles, 3) core functions, 4) mechanisms, 5) responsibilities, and 6) implementation. The objective, guiding principles, and core functions of srifety management identified below shall be used consistently in implementing safety management throughout the DOE complex. The mechanisms, responsibilities, and implementation components are established for all work and will vary based on the nature and hazard of the work being performed.

OMPONENT 1 Objective of Integrated Safety Management

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The Department and Contractors 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. In other words, the overall management of safety functions and activities becomes an integral part of mission accomplishment.

COMPONENT 2 Guiding Principles for Integrated Safety Management

The guiding principles are the fundamental policies that guide Department and contractor actions, from development of safety directives to performance of work.

<u>Linc Management Responsibility for Safety.</u> Line management is directly responsible for the protection of the public, the workers, and the environment. As a c mplement to line management, the Department's Office of Environment, Safety and Health provides safety policy, enforcement, and independent oversight functions.

<u>Clear Roles and Responsibilities</u>. Clear and unambiguous lines of authority and responsibility for ensuring safety shall be established and maintained at all organizational levels within the Department and its contractors.

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

<u>Balanced Priorities</u>. 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 performed.

<u>Identification of Safety Standards and Requirements</u>. 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.

<u>Hazard Controls Tailored to Work Being *reformed*. Administrative and engineering controls to prevent and mitigate hazards shall be tailored to the work and associated hazards being performed.</u>

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

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 are applied as a continuous cycle with the degree of rigor appropriate to address the type of work activity and the hazards involved.

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

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

<u>Develop and Implement Hazard Controls.</u> 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.

<u>Provide Feedback and Continuous Improvement</u>. Feedback information on the adequacy of 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.

COMPONENT 4 Integrated Safety Management - Mechanisms

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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.

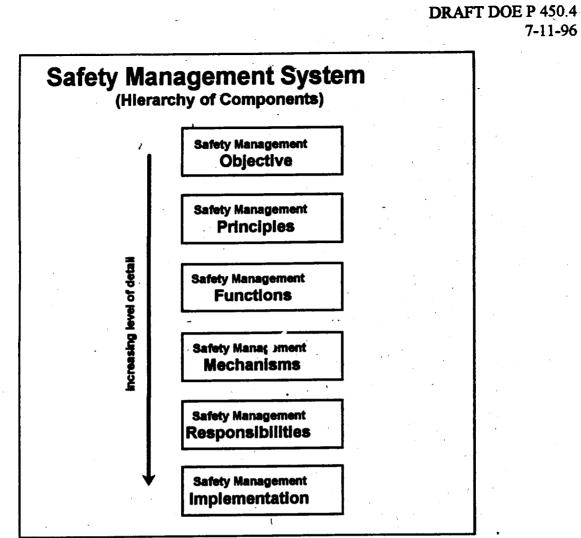
Contractor policies, procedures and documents (e.g., Health and Safety Plans, Safety Analysis Reports, Chemical Hygiene Plans, Process Hazard Analyses) established to implement safety management and fulfill commitments made to the Department.

COMPONENT 5 Responsibilities for Integrated Safety Management

Responsibilities must be clearly defined in documents appropriate to the activity. DOE responsibilities are defined in Department directives. 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.

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 of work, developing and implementing operating procedures, and monitoring and assessing performance for improvement.



7-11-96

Figure 1