NAVAL REACTORS DOE POLICY IMPLEMENTATION BULLETIN 450.4-123, REVISION 1

Consistent with the Naval Nuclear Propulsion Program (NNPP) overall concept of operations, the following provides specific implementation guidance for DOE Policy 450.4A (INTEGRATED SAFETY MANAGEMENT POLICY) for those activities under the Director's cognizance. This Implementation Bulletin (IB) replaces the guidance of DOE Policy 450.4A:

1. The expectations of this Policy have been tenets of the NNPP since its inception. The requirements established by the NNPP, specifically those specified in LAB-RC-0288 (Radiological Controls Manual), NAVSEA 389-0288 (Radiological Controls), NAVSEA S9213-33-MMA-000/(V) (Radiological Controls for Ships), NAVSEA S9213-55-MAN-000/(U) (Naval Reactors Safety Requirements Manual) and referenced in the Naval Reactors Health and Safety Standards Reference Document meet or exceed the expectations within this Policy. Furthermore, local environmental control manuals establish the process to implement and integrate federal, state, and local environmental requirements into work practices at each Program DOE site. Therefore, no additional actions or changes in program requirements are required to comply with this Policy.

2. Requests for waivers and exceptions to specific requirements of this IB will be submitted to NR Headquarters for review and approval.

3. Oversight and evaluation of DOE Integrated Safety Management Policy matters under the Director's cognizance will be conducted by the NR Laboratory Field Offices with additional oversight provided by NR Headquarters.

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

POLICY

DOE P 450.4A

Approved: 4-25-11

SUBJECT: INTEGRATED SAFETY MANAGEMENT POLICY

PURPOSE AND SCOPE

To establish the Department of Energy's (DOE) expectation for safety,[1] including integrated safety management that will enable the Department's mission goals to be accomplished efficiently while ensuring safe operations at all departmental facilities and activities. This Policy cancels and supersedes DOE Policy (P) 411.1, *Safety Management Functions, Responsibilities, and Authorities Policy*, dated 1-28-97; DOE P 441.1, *DOE Radiological Health and Safety Policy*, dated 4-26-96; DOE P 450.2A, *Identifying, Implementing and Complying with Environment, Safety and Health Requirements*, dated 5-15-96; DOE P 450.4, *Safety Management System Policy*, dated 10-15-96; and DOE P 450.7, *Environment, Safety and Health (ESH) Goals*, dated 8-2-04.

POLICY

It is the Department's policy that work be conducted safely and efficiently and in a manner that ensures protection of workers, the public, and the environment. To achieve this Policy, effective safety requirements and goals are established; applicable national and international consensus standards are adopted; and where necessary to address unique conditions, additional standards are developed and effectively implemented. Implementing Integrated Safety Management (ISM) requirements for Federal organizations are established through directives, and for contractor organizations through contract clauses.

The Department's ultimate safety goal is zero accidents, work-related injuries and illnesses, regulatory violations, and reportable environmental releases. The Department expects that for all activities and phases in the lifecycle of missions (design, construction, research and development, operations, and decommissioning and decontamination), appropriate mechanisms are in place to ensure that exposures to workers, the public, and the environment to radiological and nonradiological hazards are maintained below regulatory limits. Furthermore, DOE expects that deliberate efforts are taken to keep exposures to radiation as low as reasonably achievable.

The Department will implement integrated safety management systems to systematically integrate safety into management and work practices at all levels in the planning and execution of work. All organizations will develop, maintain, and implement ISM systems for their operations and work practices, based upon the ISM Guiding Principles and Core Functions, as outlined below. To improve effectiveness and efficiency, organizations are expected to tailor their safety management system to the hazards and risks associated with the work activities supporting the mission; including using established mechanisms to tailor requirements. Further, decisions impacting safety are made by technically qualified managers with knowledge of the

[1] "Safety" in this policy refers to environment, safety, and health to encompass protection of the workers, the public, and the environment.

operations and after consideration of hazards, risks, and performance history. To complement these systems and mechanisms, the Department expects all organizations to embrace a strong safety culture where safe performance of work and involvement of workers in all aspects of work performance are core values that are deeply, strongly, and consistently held by managers and workers. The Department encourages a questioning attitude by all employees and a work environment that fosters such attitude.

The ultimate responsibility and accountability for ensuring adequate protection of the workers, the public, and the environment from the operation of DOE facilities rests with DOE line management. The Department will meet this responsibility by:

- Establishing functions and clear lines of responsibilities, authorities, and appropriate accountabilities;
- Measuring safety management performance, with special emphasis on work related to high consequence activities[2]by evaluating incident reports; using environment, safety, and health performance measures; and assessing performance; and
- Holding itself and its contractors accountable at all organizational levels for safety performance through codified safety regulations, contract clauses, DOE directives, and the use of contractual and regulatory enforcement tools.

GUIDING PRINCIPLES OF INTEGRATED SAFETY MANAGEMENT

- LINE MANAGEMENT RESPONSIBILITY FOR SAFETY. *Line management is directly responsible for the protection of the workers, the public, and the environment.*

- CLEAR ROLES AND RESPONSIBILITIES. *Clear and unambiguous lines of authority and responsibility for ensuring safety are established and maintained at all organizational levels within the Department and its contractors.*

- COMPETENCE COMMENSURATE WITH RESPONSIBILITIES. *Personnel possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities.*

- BALANCED PRIORITIES. *Resources are effectively allocated to address safety, programmatic, and operational considerations. Protecting the workers, the public, and the environment is a priority whenever activities are planned and performed.*

- IDENTIFICATION OF SAFETY STANDARDS AND REQUIREMENTS. *Before work is performed, the associated hazards are evaluated and an agreed-upon set of safety standards and requirements is established which, if properly implemented, will provide adequate assurance that the workers, the public, and the environment are protected from adverse consequences.*

[2] These activities include, but are not limited to, Hazard Category 1 and 2 nuclear facilities and activities to protect strategic quantities of special nuclear material and highly sensitive information assets.

- HAZARD CONTROLS TAILORED TO WORK BEING PERFORMED. *Administrative and engineering controls to prevent and mitigate hazards are 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 are clearly established and agreed upon.*

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 workers, the public, 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.

- 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 the work are 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 controls is gathered; opportunities for improving the definition and planning of work are identified and implemented.*

BY ORDER OF THE SECRETARY OF ENERGY:

DANIEL B. PONEMAN
Deputy Secretary