

No: Y12-047

Title: Integrated Safety Management/Integrated Safeguards and Security Management (ISM/ISSM)

Rev. Date: 06/24/03

The Y-12 National Security Complex (Y-12) organizations (BWXT Y-12, Wackenhut Services Inc.- Oak Ridge and NNSA YSO) are committed to conducting work safely and securely in an efficient manner.

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**BWXT Y-12, L.L.C.  
Management Requirements**

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BWXT Y-12  
Policy

Subject: Integrated Safety Management/Integrated Safeguards and Security Management  
(ISM/ISSM)

**Approvals:**

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Executive Manager/Signature/Printed Name

7/7/03  
Date

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7/10/03  
Date

7/28/03  
Effective Date

This document has been reviewed by a Y-12 ADC/UCNI RO and has been determined to be UNCLASSIFIED and contains no UCNI. This review does not constitute clearance for Public Release.

Arlene B. Tapp /s/  
Name  
7/2/03  
Date

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## **1 POLICY**

The Y-12 National Security Complex (Y-12) organizations (BWXT Y-12, Wackenhut Services Inc.- Oak Ridge and NNSA YSO) are committed to conducting work safely and securely in an efficient manner. It is BWXT Y-12 policy that the Integrated Safety Management (ISM)/Integrated Safeguards and Security Management (ISSM) framework is used to systematically integrate safety and safeguards and security into management and work practices at all levels so that missions are accomplished safely and securely. Direct involvement of all personnel during the development and implementation of an ISM/ISSM framework is essential for success.

## **2 PURPOSE**

The purpose of this Policy is to formalize an Integrated Safety and Safeguards and Security Management (ISM/ISSM) framework.

## **3 SCOPE**

The ISM/ISSM system framework encompasses all levels of activities and documentation related to Safety and Safeguards and Security Management throughout BWXT Y-12.

Throughout this Policy statement, the term ISM/ISSM includes all topical areas of safety and safeguards and security. Safety is used synonymously with environment, safety and health to encompass protection of the public, the workers and the environment. Safeguards and security is used to cover all areas of integrated safeguards and security management to ensure the adequate protection of Department of Energy (DOE) assets. Topical areas of safeguards and security are personnel security, physical security, information security, nuclear material safeguards, operations security, cyber security and related cross-cutting areas (e.g., export control, classification, foreign visits and assignments, and foreign travel). Examples of DOE assets are Special Nuclear Material, classified matter, unclassified sensitive matter, and Government property.

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#### **4 ISM/ISSM FRAMEWORK**

The ISM/ISSM system framework encompasses all levels of activities and documentation related to Safety and Safeguards and Security Management throughout BWXT Y-12. The ISM/ISSM framework is implemented through programmatic procedures.

The ISM/ISSM framework establishes a hierarchy of components. To facilitate the orderly development and implementation of safety and safeguards and security management throughout BWXT Y-12, the ISM/ISSM framework consists of six components:

1. The objective,
2. Guiding principles,
3. Core functions,
4. Mechanisms,
5. Responsibilities, and
6. Implementation.

The objective, guiding principles, core functions, mechanisms, responsibilities, and implementation components are established for all work performed by BWXT Y-12 employees and by subcontractors to the extent that such requirements are incorporated into subcontractor documents.

##### **COMPONENT 1: *Objective of ISM/ISSM***

Perform Work Safely and Securely. The ISM/ISSM framework systematically integrates safety and safeguards and security into management and work practices at all levels so that missions are accomplished safely and securely while protecting the public, the worker, the environment and DOE assets. This is accomplished through effective integration of safety and safeguards and security management into all facets of work planning and execution. In other words, the overall management of safety and safeguard and security functions and activities becomes an integral part of mission accomplishment. The result is the mission is accomplished safely and securely.

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#### 4 ISM/ISSM FRAMEWORK (cont.)

##### **COMPONENT 2: *Guiding Principles for ISM/ISSM***

The guiding principles are the fundamental policies that guide BWXT Y-12 actions, from development of safety and safeguards and security management requirements to performance of work.

*Individual Responsibility and Participation.* Each individual is directly responsible for safety and safeguards and security and contributing to safe and secure missions and workplaces.

*Line Management Responsibility for Safety and Safeguards and Security.* Line management is directly responsible for the protection of the public, the workers, the environment and DOE assets. Line Management must seek and consider competent advice from safety and safeguards and security specialists, before making decisions that require acceptance of residual risk in these areas. Appropriate analysis must be performed PRIOR to work being authorized to accurately characterize the residual risk. When residual risk must be accepted by Line Management, adequate controls must be in place and verified prior to authorization of operations.

*Clear Roles and Responsibilities.* Clear roles and unambiguous lines of authority and responsibility for ensuring safety and safeguards and security must be established and maintained at all organizational levels within BWXT Y-12. If the assigned safety, safeguards and/or security specialist does not concur with a Line Management decision, the Division Manager of the line organization performing the work must be informed by specialist before work is started.

*Competence Commensurate with Responsibilities.* Individuals must possess the experience, knowledge, skills, and abilities necessary to fulfill their responsibilities.

*Balanced Priorities.* Resources must be effectively allocated to address safety, safeguards, security, programmatic, and operational considerations. Protecting the worker, the public, the environment, and DOE assets must be our top priority whenever activities are planned and performed. It is of paramount importance that work only be conducted when we can demonstrate it is adequately safe and secure and matches the scope of work, and it is also imperative to maximize operational flexibility and performance.

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#### **4 ISM/ISSM FRAMEWORK (cont.)**

##### **COMPONENT 2: *Guiding Principles for ISM/ISSM (cont.)***

###### *Identification of Safety and Safeguards and Security Standards and Requirements.*

Before work is performed, the associated hazard and risk must be evaluated, and an agreed-upon set of safety, safeguards and security standards and requirements are established that, if properly implemented, will provide appropriate assurance that the worker, the public, the environment, and DOE assets are protected from adverse consequences.

###### *Hazard Controls & Protection Strategies Tailored to Work Being Performed.*

Administrative and engineering controls to prevent and mitigate hazards and risk must be tailored to the work being performed.

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

##### **COMPONENT 3: *Core Functions for Integrated Safety and Safeguards and Security Management***

These five core ISM/ISSM functions provide the necessary structure for any work activity. The functions are applied as a continuous cycle with the degree of rigor appropriate to address the type of work activity, hazards, and the risk involved.

*Define the Scope of Work.* Missions are translated into work, requirements identified, expectations set, tasks identified and scheduled, related assets identified, and resources allocated.

*Analyze the Hazards and Risk.* Hazards and risks associated with the work are analyzed to determine applicable impacts and requirements.

*Develop and Implement Safety and Safeguards and Security Measures and Controls.* Applicable standards and requirements are identified and agreed-upon. Measures and controls to mitigate hazards and risk are identified. Measures and controls are tailored and implemented to mitigate hazards and risk. Residual risk is accepted by Line Management.

*Perform Work within Measures and Controls.* Authorized safety and safeguards and security measures and controls are in place and work is performed accordingly.

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#### **4 ISM/ISSM FRAMEWORK (cont.)**

##### **COMPONENT 3: *Core Functions for Integrated Safety and Safeguards and Security Management (cont.)***

*Provide Feedback and Continuous Improvement.* Feedback information on the adequacy of measures and controls is gathered. Opportunities for improving the definition and planning of work are identified and implemented. Best practices and lessons learned are shared.

##### **COMPONENT 4: *Mechanisms for Integrated Safety and Safeguards and Security Management***

ISM/ISSM mechanisms are the information and tools used to implement the guiding principles and core functions. The mechanisms may vary between facilities and activities based on the hazards, risk, and the work being performed.

##### **COMPONENT 5: *Responsibilities for Integrated Safety and Safeguards and Security 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. Review and approval levels may vary, commensurate with the type of work, hazards and risk involved.

##### **COMPONENT 6: *Implementation of Integrated Safety and Safeguards and Security Management***

Implementation involves integrating specific instances of defining and planning work, formally identifying and analyzing hazards and risk, developing and implementing measures and controls, performing work, and monitoring and assessing performance for feedback and improvement.

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## **5 REFERENCES**

- DOE P 205.1, *Departmental Cyber Security Management Policy*
- DOE P 450.4, *Safety Management System Policy*
- DOE P 470.1, *Integrated Safeguards and Security Management (ISSM) Policy*

## **6 ADMINISTRATION**

The BWXT Y-12 Engineering and Technology Division Manager is responsible for the implementation and interpretation of this policy. The Functional Area Manager for ISM/ISSM is responsible for maintaining this policy.