

# DIRECTIVES CONTROL FORM - ORO FINAL DIRECTIVE

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## PART A (To be completed by the Division of Primary Interest (DPI))

1. NUMBER AND TITLE OF DIRECTIVE: **ORO O 450, Chapter V, ORO INTEGRATED SAFETY MANAGEMENT PROGRAM**

2. PURPOSE OF TRANSMITTAL:  New Directive  Revised Directive

3. THIS DOCUMENT MAY AFFECT THE WORK PERFORMED BY THE FOLLOWING CONTRACTORS: (Check appropriate boxes)

No (all contractors)

Yes If yes, whom?  Bechtel Jacobs Co.  BWXT Y-12  ORAU  UT-Battelle

Other contractors (list by type) All other ORO contractors and subcontractors

*Many ORO contractors have approved S/RIDs or WSS sets that may affect applicability of contractor requirements from this directive. Applicability of contractor requirements must take into account the approved standards set for each particular contract.*

4. SIGNIFICANT PROVISIONS: Are there any significant changes or impact?

No  Yes If yes, describe:

This is a new chapter in the 450 series. This chapter, along with ORO O 450, Chapter VI, ORO ASSESSMENT PROGRAM, dated 12/31/2002, cancels and replaces ORO O 450, Chapter IV, Change 1, ENVIRONMENT, SAFETY, AND HEALTH (ES&H) SELF-ASSESSMENT AND CONTRACTOR ASSESSMENT PROGRAM, dated 01/02/2002.

5. CONTACT POINT: Harold Monroe Operations Division, SE-31 576-9439  
Name Organization Telephone

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## PART B (To be completed by the Directives Management Group (DMG)):

6. FILING INSTRUCTIONS:

<u>Remove</u>	<u>Dated</u>	<u>Insert</u>	<u>Dated</u>
ORO Control Form	01/02/2002	ORO Control Form	12/31/2002
ORO O 450, Chapter IV, Chg. 1, Pages IV-1 thru IV-12	01/02/2002	ORO O 450, Chapter V, Pages V-1 thru V-26	12/31/2002

*ORO Directives are available on the ORO Directives Management Home Page at [http://www.ornl.gov/doe\\_oro\\_dmg/oro\\_dir.htm](http://www.ornl.gov/doe_oro_dmg/oro_dir.htm). The ORO Directives will no longer be mailed in printed copy unless you do not have Internet capabilities.*

7. APPROVED FOR DISTRIBUTION IN ACCORDANCE WITH THE OFFICIAL DIRECTIVES DISTRIBUTION LIST:

*Original Signed By*  
Wayne H. Albaugh 12/31/2002  
Signature: DMG Team Leader, AD-440 Date

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**INSTRUCTIONS TO ADDRESSEES: THIS FORM IS TO BE FILED WITH THE DIRECTIVE AND RETAINED**

Rev. 12/23/2002

# U.S. Department of Energy

Oak Ridge Operations

ORO O 450  
Chapter V

**DATE: 12/31/2002**

## **SUBJECT: ORO INTEGRATED SAFETY MANAGEMENT PROGRAM**

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1. PURPOSE. This directive establishes the elements of the Oak Ridge Operations (ORO) Integrated Safety Management (ISM) Program. This chapter correlates to DOE P 450.4, SAFETY MANAGEMENT SYSTEM POLICY, dated October 15, 1996. Nothing in this issuance changes any requirements contained in any Department of Energy (DOE) directive.
2. CANCELLATION. The chapter, along with ORO O 450, Chapter VI, ORO ASSESSMENT PROGRAM, dated December 31, 2002, cancels and replaces ORO O 450, Chapter IV, Change 1, ENVIRONMENT, SAFETY, AND HEALTH (ES&H) SELF-ASSESSMENT AND CONTRACTOR ASSESSMENT PROGRAM, dated January 2, 2002.
3. APPLICABILITY. The provisions of this chapter apply to ORO Principal Staff and to ORO contractors as provided by contract.
4. RESPONSIBILITIES.
  - a. Manager.
    - (1) Establishes ISM policy. The Manager has added an eighth principle to ORO's ISM policy. (See Attachment 2.)
    - (2) Approves initial ISM System (ISMS) descriptions for ORO (see Attachment 3) and its contractors. Approves annual updates of the ORO ISMS program description and major changes of contractors' descriptions.
    - (3) Appoints ISMS verification and accident investigation team leaders.
    - (4) Approves ISMS verification plans.
  - b. Assistant Manager for Environment, Safety, Health, and Emergency Management (AMESH).
    - (1) Coordinates ISMS verifications of ORO's contractors as requested by the Contracting Officer's Representative (COR).
    - (2) As requested by the COR(s), conducts closure or verification of corrective actions from ISMS verifications.
    - (3) Assists ORO line management in conducting periodic assessments of its implementation of the ISM roles and responsibilities assigned in the approved ORO M 411.1-1D, MANUAL OF SAFETY MANAGEMENT FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES, LEVEL II, FOR OAK RIDGE OPERATIONS (ORO FRAM).

- (4) Supports ISMS verifications, as requested, by providing personnel and other resources.
  - c. Assistant Managers and Office Directors.
    - (1) Provide support for ISMS verifications.
    - (2) Ensure implementation of the Federal Employee Occupational Safety and Health Program in their organization.
  - d. Contracting Officer's Representatives.
    - (1) Ensure inclusion of ISMS verifications in the Annual Assessment Plan. (See ORO O 450, Chapter VI, ORO ASSESSMENT PROGRAM, for details on the Annual Assessment Plan.)
    - (2) Ensure that the results of ISMS verifications are entered into the ORION2 System for use by the Issues and Corrective Action Management Team. (See ORO O 450, Chapter VI, for details on handling assessment findings.)
    - (3) Coordinate with the Manager and the AMESH on the scope of contractor ISMS verification reviews, concur in team leader selection, and review verification plans and subsequent Corrective Action Plans (CAPs) in accordance with DOE-HDBK-3027-99 and Under Secretary Grumbly's memorandum "Protocol for Review and Approval of Documented SMS Descriptions Associated With Defense Nuclear Facilities," dated February 21, 1997.
    - (4) Ensure that the contractor is tracking ISMS opportunities for improvement to closure, trending issues, and setting performance measures to support continuous improvement.
    - (5) Analyze contractor ISM performance information and self-assessment data. Evaluate trends of identified issues and identify opportunities for improvement in accordance with DOE O 414.1A, Criterion 9.
    - (6) Implement the ISM roles and responsibilities listed in DOE M 411.1-1B, SAFETY MANAGEMENT FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES, dated May 22, 2001, and the ORO FRAM in accordance with DOE P 411.1, SAFETY MANAGEMENT FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES.
    - (7) Approve annual updates of contractors' ISMS descriptions (except major changes).
  - e. Program/Project Managers.
    - (1) Address ISM early in the project's lifecycle and integrate it into all project activities.
    - (2) Address ISM as described in DOE M 413.3-X, PROGRAM AND PROJECT MANAGEMENT MANUAL, when it is published.
5. REQUIREMENTS AND PROCEDURES.
- a. Procedures. None.

- b. Requirements. See Attachments 2 and 3.

6. REFERENCES.

- a. DOE P 411.1, SAFETY MANAGEMENT FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES, dated January 28, 1997.
- b. DOE O 414.1A, through Change 1, QUALITY ASSURANCE, dated July 12, 2001.
- c. DOE O 425.1B, STARTUP AND RESTART OF NUCLEAR FACILITIES, dated December 21, 2000.
- d. DOE P 450.4, SAFETY MANAGEMENT SYSTEM POLICY, dated October 15, 1996.
- e. DOE P 450.5, LINE ENVIRONMENT, SAFETY AND HEALTH OVERSIGHT, dated June 26, 1997.
- f. DOE M 411.1-1B, SAFETY MANAGEMENT FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES, dated May 22, 2001.
- g. ORO M 411.1-1D, MANUAL OF SAFETY MANAGEMENT FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES, LEVEL II, FOR OAK RIDGE OPERATIONS (ORO FRAM), dated October 31, 2000.
- h. DOE-HDBK-3027-99, ISMS Verification Team Leaders Handbook, dated June 1999.
- i. ORO O 450, Chapter VI, ORO ASSESSMENT PROGRAM, dated December 31, 2002.
- j. Under Secretary Grumbly's memorandum, "Protocol for Review and Approval of Documented SMS Descriptions Associated With Defense Nuclear Facilities," dated February 21, 1997.
- k. ORO Manager's memorandum to the Assistant Managers, "Guidance for Integrated Safety Management," dated September 9, 1999.

7. DEFINITIONS.

- a. **Assessment** – The act of reviewing, evaluating, inspecting, testing, checking, performing surveillance, auditing, or otherwise determining and documenting whether items, processes, or systems meet specified requirements and are performing effectively.
- b. **Concern** – Use of this term when reporting assessment results is strongly discouraged. It has been routinely used to mean both more and less than a finding, with resulting confusion in almost all cases. Instead, use the term Finding or Observation.
- c. **Deficiency** – See Finding.
- d. **Findings** – Noncompliances with contractual or regulatory requirements identified during an assessment. Other terms that mean essentially the same thing and can be used interchangeably

are Issues, Deficiencies, and Opportunities for Improvement. Findings are categorized into Priority I or Priority II, which are explained below.

**Priority I** – These are findings of major significance that generally result in work cessation or work limitation. Such findings may include imminent threats to worker protection, public safety, and/or environmental quality. Such findings can also include a systematic breakdown in, or a failure to implement, a major work control element necessary for safety and quality.

**Priority II** – These findings represent nonconformances, deviations, and/or deficiencies in the implementation of requirements, procedures, standards, and/or regulatory requirements.

- e. **For-Cause Reviews** – Unplanned assessments in response to any condition that has caused or poses an imminent danger to people, property, the environment, or the operational integrity of a facility within the ORO complex or as requested by the Manager or the COR. For-cause reviews may be chartered by the Manager, an Assistant Manager, a COR, or a line manager and are conducted when analysis of information from the contractor, the line organization, or occurrence report indicates a situation of sufficient concern to the chartering official to warrant a special assessment. Such reviews may also be chartered based on assessments from other organizations and/or based on events occurring elsewhere that might have implications for ORO's operations. The chartering official will appoint the leader and members of the team.
- f. **Independent Assessments** – Independent must be planned and conducted to measure item and service quality, to measure the adequacy of work performance, and to promote improvement. Persons performing independent assessments must have sufficient authority and freedom from the line to carry out their responsibilities. Persons conducting independent assessments must be technically qualified and knowledgeable in the areas assessed. "Freedom from the line" means that the reviewers are not directly associated with the cost/budget or scheduling of the activity/facility being assessed. (Reference Criterion 10 of DOE O 414.1A.)
- g. **Integrated Assessment Schedule** – This schedule is a compilation of the ES&H assessment and management/self-assessment schedules for AMESH, the Offices of Assistant Manager for Laboratories, Environmental Management, and Assets Utilization; and the Director of the Office of Nuclear Fuel Security and Uranium Technology. This schedule is used by ORO management and line personnel to gain an overview of assessment activity and assist in compliance with Criterion 9 of DOE O 414.1A.
- h. **Issue** – See Finding.
- i. **Management Assessment/Self-Assessment** – Corporate-level ORO self-assessments of line management's programs and implementation thereof to ensure that the line is organizations are effectively performing ES&H assessments of ORO's contractors and self-assessments of their own performance. These ORO self-assessments are independent of the line and may be performed in conjunction with periodic assessments or other assessments to minimize disruption of line activities. These assessments are customarily led by a member of the Assessment Team and are performed at the request of the appropriate Assistant Manager, Site Manager, or COR.
- j. **Noteworthy Practice** – See Proficiency.

- k. **Observation** – Observations are negative. An observation can be used to describe a noncompliance with a procedure that is not also a contractual or regulatory noncompliance (which would be a finding). An observation can also be used to point out needed (but not required) program improvements. Observations are also deviations from best management practices or minor deviations from procedural requirements that are isolated and considered to be a “quick fix.”
  - l. **Operational Awareness Assessments** may include any of a variety of activities (such as walkthroughs, inspections, surveillances, and walkdowns) to analyze and evaluate operations through observations, interviews, or documented reviews. Walkthroughs, as well as any follow-up, should be documented, even if only with a checklist.
  - m. **Opportunity for Improvement** – See Finding.
  - n. **Periodic Assessments** are assessments involving multiple assessment team members with diverse scopes. These assessments are carefully planned and may require significant contractor and DOE preparation. These assessments are coordinated across DOE organizations/programs. Periodic assessments require more formality in the conduct of the assessment, including entrance meetings, daily or weekly briefings, and exit meetings. “Periodic” is determined by the COR or DOE directive (such as annually, every three years, every six months, etc.).
  - o. **Plan** – The high-level scoping document that identifies the assessment commitments for the upcoming fiscal year.
  - p. **Proficiency** – A Proficiency is a positive observation that highlights good practices, well-written procedures, or other positive aspects of a program that could be used as a model for other similar programs across the DOE complex. Another term that means essentially the same thing as a Proficiency and which can be used interchangeably for it is Noteworthy Practice.
  - q. **Readiness Review** – See DOE O 425.1B.
  - r. **Schedule** – A schedule is the detailed plan of upcoming assessments, which provides more precise dates, team leaders, review areas, etc.
8. **CONTRACTOR REQUIREMENTS DOCUMENT**. See Contractor Requirements Document, Attachment 1 of this chapter.
9. **ATTACHMENTS**.
- a. Attachment 1 – Contractor Requirements Document.
  - b. Attachment 2 – Guiding Principles of ISM for ORO.
  - c. Attachment 3 – ORO ISMS Program Description.

## **CONTRACTOR REQUIREMENTS DOCUMENT**

Contractors identified in paragraph 3 of this chapter will accomplish the following, to the extent set forth in their contract:

1. In projects, ensure that ISM is given adequate consideration in the following:
  - a. Development of requirements and the technical scope of work.
  - b. Analysis of potential hazards.
  - c. Development and implementation of hazards control in the project design and field implementation (construction, testing, and operation).
2. Provide an ISMS description and annual updates to the COR and Site Manager for approval.
3. Cooperate fully with ISMS verification teams and make relevant facilities and materials available.
4. Prepare CAPs addressing opportunities for improvement from ISMS verifications within 30 days of being provided the final report.
5. Complete ISMS corrective actions in a timely manner and verify the effectiveness of those actions.
6. Evaluate ISMS trends and use trend data to make additional improvements.

## GUIDING PRINCIPLES OF ISM FOR ORO

NOTE: The first seven principles are excerpted directly from DOE P 450.4:

1. Line management responsibility for safety. Line management is directly responsible for the protection of the public, the workers, and the environment. As a complement to line management, the Department's HQ Office of Environment, Safety, and Health provides safety policy, enforcement, and independent oversight functions.
2. Clear roles and responsibilities. Clear and unambiguous lines of authority and responsibility for ensuring safety will be established at all organizational levels within the Department and its contractors.
3. Competence commensurate with responsibilities. Personnel must possess the experience, knowledge, skills, and abilities that are necessary to discharge their responsibilities.
4. Balanced priorities. Resources will be effectively allocated to address safety, programmatic and operational considerations. Protecting the public, the workers, and the environment must be a priority whenever activities are planned and performed.
5. Identification of safety standards and requirements. Before work is performed, the associated hazards will be evaluated and an agreed-upon set of safety standards and requirements must be established which, if properly implemented, will provide adequate assurance that the public, the workers, and the environment are protected from adverse consequences.
6. Hazard controls tailored to the work being performed. Administrative and engineering controls to prevent and mitigate hazards will be tailored to the work being performed and associated hazards.
7. Operations authorization. The conditions and requirements to be satisfied for operations to be initiated and conducted must be clearly established and agreed-upon.
8. Worker involvement. Woven through the seven principles of ISM is the need for worker involvement in all of the five core functions. Many have felt that worker involvement should be an eighth principle in order to emphasize the critical importance of the worker to the safe accomplishment of our missions. That is also the ORO Manager's position. While the Manager agrees that there is nothing new added by creating an eighth principle, there is great value to reinforcing the important role of the worker in safely carrying out ORO's mission activities. It is the Manager's stated expectation that the line will work with its contractors to specifically reinforce the importance of the workers' participative role in all five core functions of ISM, treating worker involvement as an eighth principle. (Reference: Manager's memorandum to the Assistant Managers, subject: "Guidance for Integrated Safety Management," dated September 9, 1999.)

NOTE:: DOE P 450.4 defines the five core functions of ISM.

# **U.S. Department of Energy Oak Ridge Operations Office**



## **Integrated Safety Management Program Description**

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## **Acronym List**

AMESH	Assistant Manager for Environment, Safety, Health, and Emergency Management
CFR	Code of Federal Regulations
COR	Contracting Officer's Representative
DARTS	DOE Audit Report Tracking System
DEAR	DOE Acquisition Regulation
DOCS	Document Online Coordination System
DOE	Department of Energy
EH CATS	Headquarters Corrective Action Tracking System
EM	Environmental Management
ES&H	Environment, Safety, and Health
FEOSH	Federal Employee Occupational Safety and Health
FRAM	Functions, Responsibilities, and Authorities Manual
IDP	Individual Development Plan
ISM	Integrated Safety Management
ISMS	Integrated Safety Management System
NNSA	National Nuclear Security Administration
ORION2	Oak Ridge Issues, Open Items, Nonconformances, and Noncompliances System
ORO	Oak Ridge Operations Office
QAP	Quality Assurance Program
S/RID	Standards/Requirements Identification Document
TDG	Training and Development Group
TQP	Technical Qualification Program
WSS	Work Smart Standards

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## Executive Summary

This document describes the Department of Energy Oak Ridge Operations Office (ORO) Integrated Safety Management (ISM) Program. The ORO ISM Program conforms to the safety management systems described in DOE P 450.4, *Safety Management System Policy*, and DOE P 450.6, *Secretarial Policy Statement on Environment, Safety, and Health*.

The ISM Program defined in this document has two major components. The first component applies to the safety and health of all ORO Federal employees, and the second component applies to the work by ORO staff related to oversight of contractor programs (e.g., the management and operating contractor for the Oak Ridge National Laboratory, the technical services contractor for the Oak Ridge Institute for Science and Education, the management and integrating contractor for Environmental Management work, and the fixed price contracts for decontamination and decommissioning work at the East Tennessee Technology Park and the transuranic/alpha waste treatment plant).

Safety is a part of every ORO employee's work activity, beginning with project and program planning, through the budget formulation process, authorizing work, performing field oversight of the work, and ending with the feedback that is so important to the continuous improvement of the process. The fundamental premise of the ORO and contractor safety management systems is to **Do Work Safely**, and the ORO ISM Program complements the activities of its contractors' Integrated Safety Management Systems to ensure that work is indeed performed safely. ORO has added an eighth guiding principle, "Worker Involvement," to the seven ISM guiding principles in order to emphasize the necessary involvement of workers at all levels to achieve safety excellence.

The ORO ISM Program integrates all the elements of quality assurance, environment, safety, and health into one system. This system promotes the full inclusion and integration of environmental, safety, health, and quality assurance into the totality of work, such that it is an integral part of the whole—not a standalone program. This ISM Program Description is consistent with the "ORO Quality Assurance Program Description" (ORO O 410, Chapter III, Attachment 2). The ORO Directives System and the Quality Assurance Program establish the framework for rigor and discipline in ORO's operations.

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## **1.0 ISM PROGRAM OVERVIEW**

### **1.1 Introduction**

This document describes the overall integrated environment, safety, health, and quality assurance management system that the Department of Energy (DOE) Oak Ridge Operations Office (ORO) implements in accordance with DOE P 450.4, *Safety Management System Policy*, and DOE P 450.6, *Secretarial Policy Statement on Environment, Safety, and Health*. Important companion documents to this program description are ORO M 411.1-1D, Manual of Safety Management Functions, Responsibilities, and Authorities, Level II, for Oak Ridge Operations (ORO FRAM), and ORO O 110, Organization and Structure, ORO M 110, Oak Ridge Operations Organization Manual, and ORO O 410, Chapter III, Attachment 2, "Quality Assurance Program Description for ORO."

It is important to understand that the term "safety," when used in the Integrated Safety Management (ISM) context and in this document, encompasses quality assurance, public and worker safety and health, and the environment, including pollution prevention and waste minimization. The ORO ISM Program and each contractor's ISM System (ISMS) fully incorporate environmental management considerations, including pollution prevention, into all work planning and execution.

### **1.2 Guiding Principles**

DOE P 450.4, *Safety Management System Policy*, establishes seven guiding principles to provide overall direction and guidance for instituting ISM. ORO embraces these principles and applies them continuously in the conduct of daily business and operations. ORO and its contractors added an eighth principle, "Worker Involvement," to the seven guiding principles, all of which are presented below.

1. *Line Management Responsibility for Safety*. ORO management is responsible and accountable for the protection of employees, the public, and the environment. Everyone is responsible and accountable for the safe conduct of his or her own activities. In addition, management is responsible for ensuring that operations are conducted in an environmentally responsible and compliant manner.
2. *Clear Roles and Responsibilities*. There are clear roles and lines of responsibility, authority, and accountability at all levels of the ORO organization to ensure protection of employees, the public, and the environment.
3. *Competence Commensurate with Responsibilities*. All ORO employees have the experience, knowledge, skills, and abilities needed to perform their work safely and competently.
4. *Balanced Priorities*. ORO management allocates resources (as part of the budget process) to address Environment, Safety, and Health (ES&H) programs and activities and participates in and conducts oversight of contractors' work prioritization processes. No work is performed unless it can be performed safely and the environmental considerations have been addressed.
5. *Identification of ES&H Standards and Requirements*. ORO and its contractors work together to develop a list of laws, regulations, and DOE directives that are considered for application

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during the hazard identification/evaluation step for all new work. ORO then imposes the set contractually. These standards and requirements and appropriate implementation controls are reviewed before work is performed to ensure that adequate protection to employees, the public, and the environment will be provided.

6. Hazard Controls Tailored to Work Being Performed. ORO oversees the tailoring of planning and work management functions to accomplish work within established contract and project agreements. ORO promotes processes that identify and control hazards through the use of industry standards and requirements, with appropriate oversight to ensure that the work is accomplished safely.
7. Operations Authorization. Nuclear facility operations are enveloped by authorization agreements reviewed and signed by ORO. No new operations begin unless the appropriate operational readiness review/readiness assessment/line management assessment indicates readiness.
8. Worker Involvement. ORO's Federal workforce is involved at all levels to establish a quality culture that supports worker health and safety and environmental protection.

All ORO Federal and contractor employees have authority to stop work when conditions are judged to be an imminent threat to health, safety, or the environment in accordance with DOE O 440.1A, *Worker Protection Management for DOE Federal and Contractor Employees*, and the *Oak Ridge Operations and National Nuclear Security Administration "Stop Work/Suspend Work" Responsibility* declaration of October 2000.

### 1.3 Core Functions

The five core ISM functions provide the necessary structure for work that could potentially affect the public, the workers, and/or the environment. Within ORO, the functions are applied as a continuous cycle with the degree of rigor appropriate to address the activity and hazards involved. Continuous improvement is sought by the regular and disciplined application of the core functions to all ORO work. Figure 1 on the following page shows the relationship of the ISM core functions.

1. Define the Scope of Work. ORO systematically translates missions into work, sets expectations, issues written program execution guidance, identifies and prioritizes tasks, and allocates resources within the context of the ISM Program.
2. Analyze the Hazards. ORO guides and oversees the hazard identification, analysis, and categorization process in accordance with DOE requirements.
3. Develop and Implement Hazard Controls. Applicable standards and requirements are identified and contractually imposed on ORO's contractors. Hazards controls and implementation efficacy are assessed via ORO oversight.
4. Perform Work within Controls. ORO confirms work readiness by implementing DOE readiness review requirements, and work and safety performance within controls is assessed by oversight.

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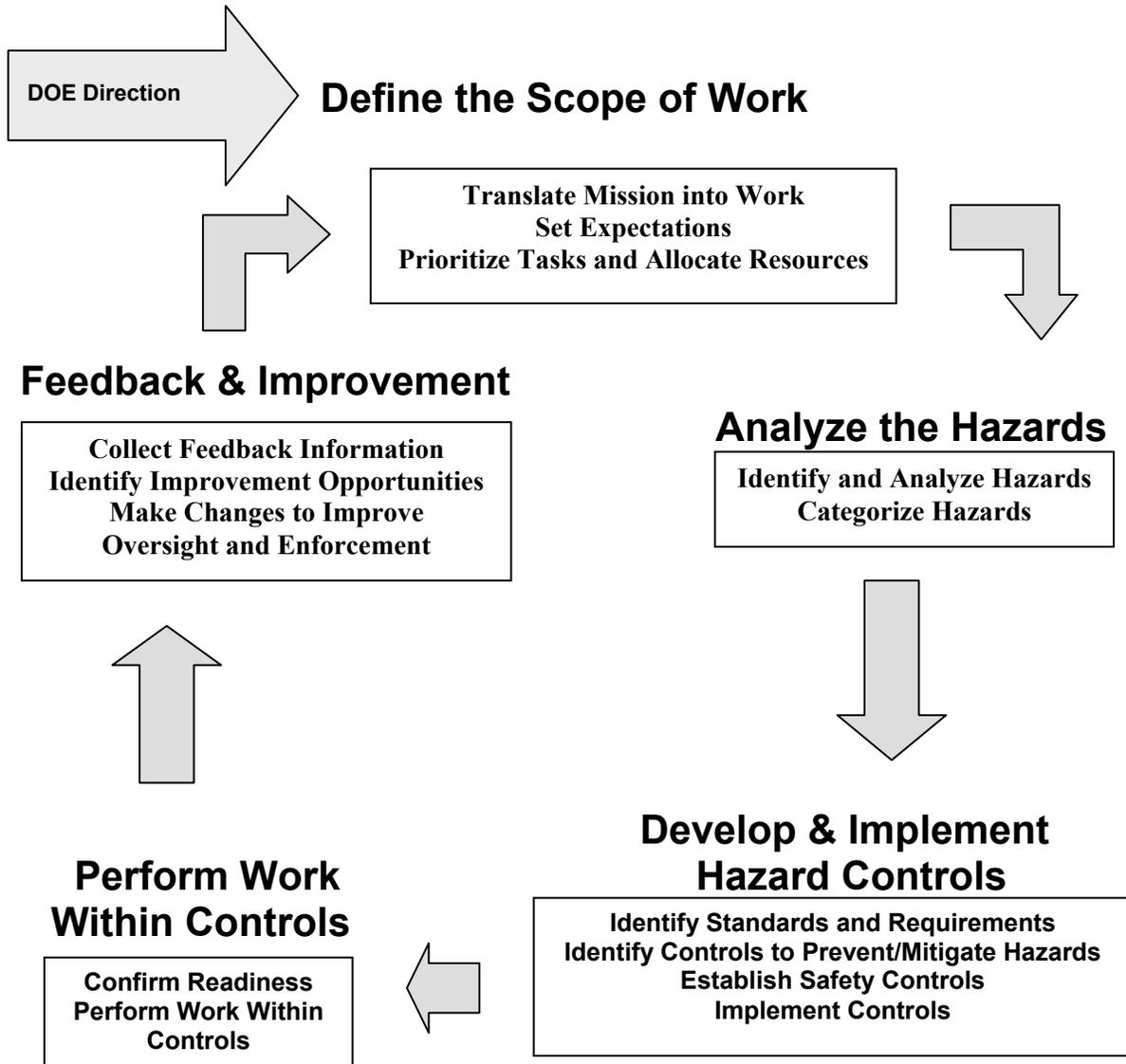


Figure 1. Relationship of the ISM Core Functions

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5. *Provide Feedback and Continuous Improvement.* ORO conducts self-assessments and performs line and independent oversight of contractor work. Enforcement actions are taken if warranted. Issues are managed, trending and analysis are performed, and lessons learned are developed and disseminated. These Federal actions enhance safety and strengthen the ORO ISM Program by effecting a layered continual improvement cycle.

#### **1.4 Federal Occupational Safety and Health Program**

The ORO Federal Employee Occupational Safety and Health (FEOSH) Program is carried out in accordance with Title 29 Code of Federal Regulations (CFR) 1960, *Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters*. ORO has established a Safety and Health Committee as a forum for employees to be involved directly in the safety and health processes. The "Safety and Health Committee Charter" is included as an attachment to ORO O 440, Chapter I, Worker Protection.

The ORO ISM Program is applicable to general office work performed by ORO Federal employees within the Federal facilities under ORO's purview. These facilities are occupied by DOE Federal and contractor employees who work in an office environment. From July 23 to September 15, 2002, the Office of Assistant Manager for Environment, Safety, Health, and Emergency Management (AMESH) provided an on-line ISM questionnaire to ORO Federal personnel. This questionnaire enabled workers to identify and rank the hazards in their workplaces. The results of the questionnaire are posted on the Safety 1<sup>st</sup> web site [<http://www-internal.oro.doe.gov/esq/safetyfirst/index.aspx>]. Via the questionnaire and walkthroughs, ORO management has identified, analyzed, and categorized the hazards associated with work activities. The hazards analysis and office safety procedures are included in ORO Federal Worker Protection Program, which is posted on the Safety 1<sup>st</sup> web site.

ORO employees working in general office areas are informed of hazard controls and are expected to be knowledgeable of hazards, controls, safe work practices related to their work environment, and they are held accountable for performing their work within the controls. Management controls safety through various activities, and training in the area of safety management is encouraged.

Many DOE workers also perform work outside of an office environment. This work takes place in facilities and areas that are covered by the contractors' health and safety plans, programs, and procedures. DOE employees need to be familiar with the hazards and work practices identified by the contractors for these facilities and areas.

#### **1.5 Contracts**

ORO's contracts are one of the most significant components of the ORO ISM Program, since they apply to oversight of contractor programs. The contract delineates ES&H requirements and expectations that ORO personnel administer and oversee. A specific contract clause (DOE Acquisition Regulation [DEAR] 970.5223.1, *Integration of Environment, Safety, and Health into Work Planning and Execution*) mandates the institutionalization of an ISMS and states that management of ES&H functions and activities must be an integral and viable part of the contractor's work planning and execution processes.

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## 1.6 ORO Directives System

The ORO Directives System is the formal process used to establish ORO's ES&H authorities, responsibilities, local guidance, and direction. The ORO Directives System is formalized in ORO O 250, Chapter II, Oak Ridge Operations Directives System. The ORO Directives System includes the Contractor Requirements Document process. The ORO Contracting Officers' Representatives (CORs) add all directives that contain contractor requirements that are applicable to the contract in accordance with the processes identified in ORO O 250, Chapter IV, Impact Assessments, and ORO O 250, Chapter VIII, Requirements Change Notices.

The ORO Directives System includes both mandatory requirements and nonmandatory guidance. Five types of directives are utilized: (1) ORO Orders, (2) ORO Chapters, (3) ORO Notices, (4) ORO Manuals, and (5) ORO Implementation Guidance. Figure 2 on the following page is a graphical depiction of the ORO directives that support the ISM core function infrastructure.

## 1.7 ORO Planning Alignment Process

The purpose of planning alignment is to integrate management strategies so that missions are translated into work to be completed by the contractor within available budget and resources. Alignment of ORO's business, budget, and contract responsibilities is divided into four categories based on the sequence of activities (planning, work/budget authorization, information management, and results measurement/rewards).

DOE Headquarters provides overarching mission goals through the Department's Strategic Plan and key Headquarters Program Office guidance documents. The Oak Ridge Operations Office Mission Implementation Plan and the accompanying ORO Mission Implementation Plan Workbook, which can be accessed through the ORO Manager's web page, link ORO's core competencies and values to the Departmental documents. Execution year planning incorporates many other key documents, such as the Secretary's Performance Agreement, Headquarters Program Office goals and priorities, and the Oak Ridge Operations Office Mission Implementation Plan, to carry out these activities.

For work/budget authorization, ORO has several key business processes that work together to provide an integrated program. Formal flowdown of DOE work authorization requirements is found in ORO O 410, Chapter I, Work Authorization System. DOE O 413.3, Program and Project Management for the Acquisition of Capital Assets, provides DOE personnel with project management direction for the acquisition of capital assets. ORO organizations use DOE directives and/or ORO directives and/or line procedures, if needed, to carry out these activities.

ORO O 220, Chapter V, Appraisal of DOE Contractor Performance, implements a process of reviewing contractor activities. ES&H management information, which is requested each year in the Unified Field Budget Call, is designed to communicate answers to questions from Department senior management. The ES&H Management Plan should be considered synonymous with the annual budget update portion of the ISMS annual update required by DEAR 970.5223-1.

Contractor oversight encompasses independent reviews, for-cause reviews, internal assessments, and day-to-day surveillance of activities. ORO's assessment programs are described in ORO directives and line program procedures.

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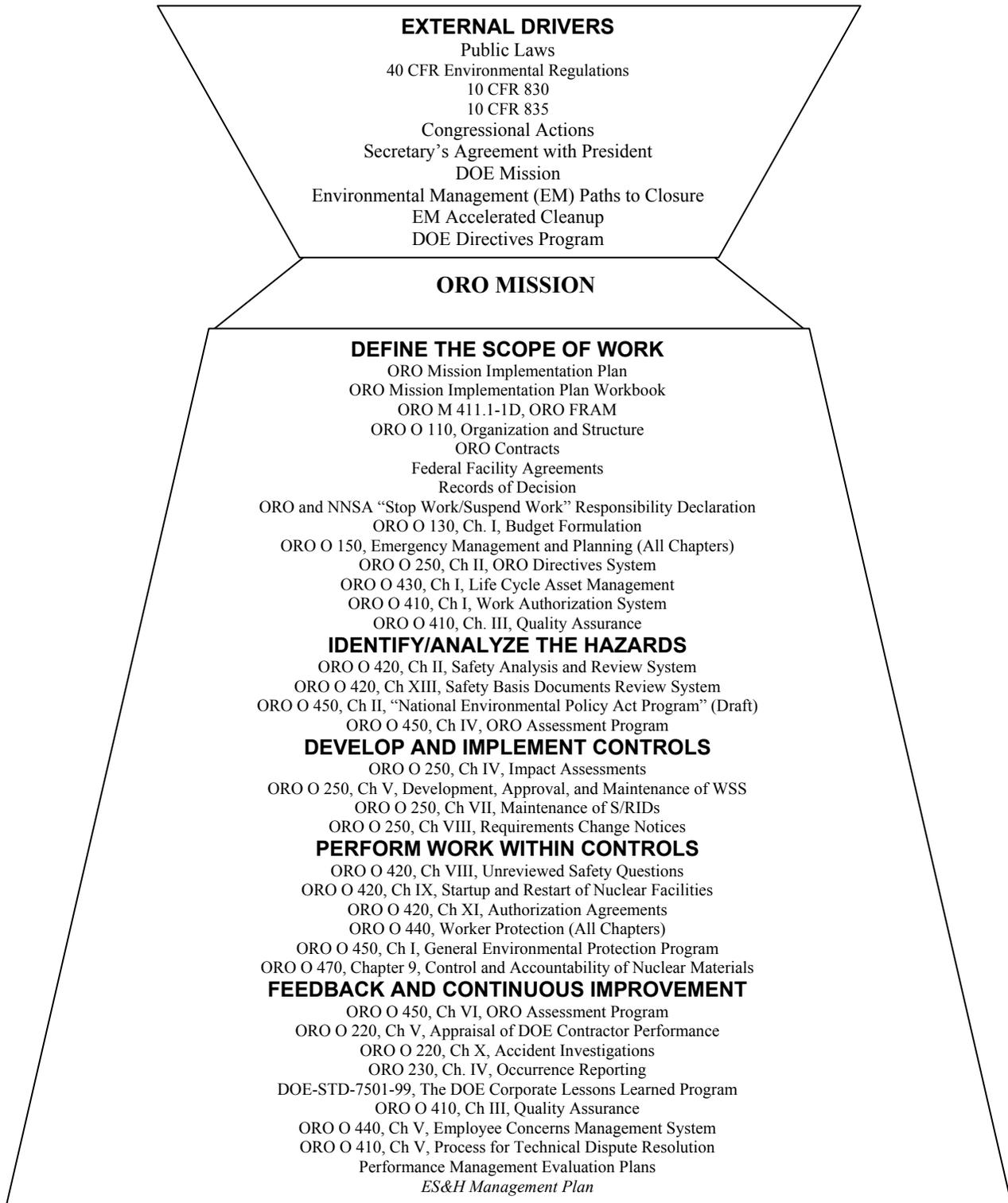


Figure 2. ORO Directives That Support the ISM Core Functions

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## **1.8 ORO Quality Assurance Program**

DOE O 414.1A, *Quality Assurance*, defines a Quality Assurance Program (QAP). The ORO QAP is a management system which ensures that ORO's missions, policies, and objectives are integrated into standard business practices and work processes for Federal operations and contractor oversight, and it is described in ORO O 410, Chapter III, *Quality Assurance Program*. "ORO Quality Assurance Program Description," which is an attachment to ORO O 410, Chapter III, reflects DOE O 414.1A. ORO organizations use DOE directives and/or ORO directives and/or line procedures, as needed, to carry out these activities.

## **1.9 ORO Emergency Management Program**

Emergency management is an important function of contractors at ORO's sites and of the Federal program at the office buildings occupied by ORO and contractor employees. For the contractors' operations, the ORO Emergency Management Program is maintained in accordance with DOE O 151.1A, *Comprehensive Emergency Management System*, and its associated guides. ORO O 150, *Comprehensive Emergency Management System*, assigns responsibilities within ORO for implementation of the Order requirements.

The Federal Building Complex Emergency Management Program addresses emergency planning and response for buildings occupied by the ORO workforce. It is maintained in accordance with 29 CFR 1910.38, *Federal Property Management Regulations*, and the General Services Administration *Occupant Emergency Program Guide*. Responsibility for the program is assigned to the Emergency Management Team in ORO O 440, Chapter I, *Worker Protection*. ORO employees and contractor employees who are collocated in the buildings serve on the Occupant Emergency Organization.

## **2.0 IMPLEMENTATION OF ISM CORE FUNCTIONS AND GUIDING PRINCIPLES**

This section presents the mechanisms for how ISM is implemented within ORO for contractor activities and the Federal workforce.

### **2.1 Guiding Principles**

#### **2.1.1 Guiding Principle 1 – Line Management Responsibility**

ORO management is responsible and accountable for the protection of employees, the public, and the environment. To ensure operations are conducted in a safe, environmentally responsible, and compliant manner, ORO uses its Directive System for the Federal workforce and contracts for its contractors.

The ORO FRAM (ORO M 411.1-1D) and its companion documents (ORO O 110, *Organization and Structure*, and ORO M 110, *Oak Ridge Operations Organization Manual*) define the safety-related organization structure, mission, and functions. The Contracting Officer is the Federal agent who has the capacity to formally direct the contractor's actions in work scope and budget. Responsibility for technical direction is usually delegated to the COR. The COR is the primary point of interaction with the contractor. ORO organizations use DOE directives and/or ORO directives and/or line procedures, if needed, to carry out these activities.

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### **2.1.2 Guiding Principle 2 – Clear Roles and Responsibilities**

The ORO FRAM (ORO M 411.1-1D) and its companion documents (ORO O 110, *Organization and Structure*, and ORO M 110, *Oak Ridge Operations Organization Manual*) contain details on all internal (Federal) safety-related functions, responsibilities, and authorities at ORO. ORO utilizes various tools to ensure that ES&H are included in Federal employees' roles and responsibilities. These include position descriptions and performance appraisal plans. ORO organizations use DOE directives and/or ORO directives and/or line procedures, if needed, to carry out these activities.

### **2.1.3 Guiding Principle 3 – Competence Commensurate with Responsibility**

The ORO process used to fill a position is covered by Federal regulations, DOE directives, ORO directives, and Human Resources Division procedures. See Figure 3 on the following page for an overview of the ORO process for competence commensurate with responsibility. ORO organizations use DOE directives and/or ORO directives and/or line procedures, if needed, to carry out these activities.

### **2.1.4 Guiding Principle 4 – Balanced Priorities**

The *Oak Ridge Operations Office Mission Implementation Plan* flows from the DOE Headquarters strategic goals and contract objectives, with the *Oak Ridge Operations Office Mission Implementation Plan* and associated *ORO Mission Implementation Plan Workbook* being used to reconcile the short-term goals and the long-term goal to continue to serve the broader national mission.

Contractors with DEAR 970.5223-1 in their contracts annually submit ES&H performance objectives, performance measures, and commitments to ORO for review and approval as required by the DEAR clause. The purpose of this yearly requirement is to mutually establish ES&H performance objectives, performance measures, and commitments in response to ORO's program and budget execution guidance. Some of the ORO work scope is defined in formal Agreements and Consent Orders negotiated with external regulators. ORO organizations use DOE directives and/or ORO directives and/or line procedures, if needed, to carry out these activities.

### **2.1.5 Guiding Principle 5 – Identification of Safety Standards and Requirements**

ORO, in collaboration with each contractor, has established a comprehensive list of safety standards (i.e., Work Smart Standards [WSS] set, Standards/Requirements Identification Document [S/RID], or List of Directives) that apply to the contractor's operations. ORO O 250, Chapter V, *Development, Approval, and Maintenance of Work Smart Standards*, discusses the ORO WSS process. ORO O 250, Chapter VII, *Maintenance of Standards/Requirements Identification Documents*, discusses the S/RID maintenance process. ORO O 250, Chapter IV, *Impact Assessments*, discusses the process for reviewing new or revised DOE directives for applicability to the contract, and ORO O 250, Chapter VIII, *Requirements Change Notices*, covers the process used to actually modify the contractual ES&H standards/requirements (directives appendix). ORO organizations use DOE directives and/or ORO directives and/or line procedures, if needed, to carry out these activities.

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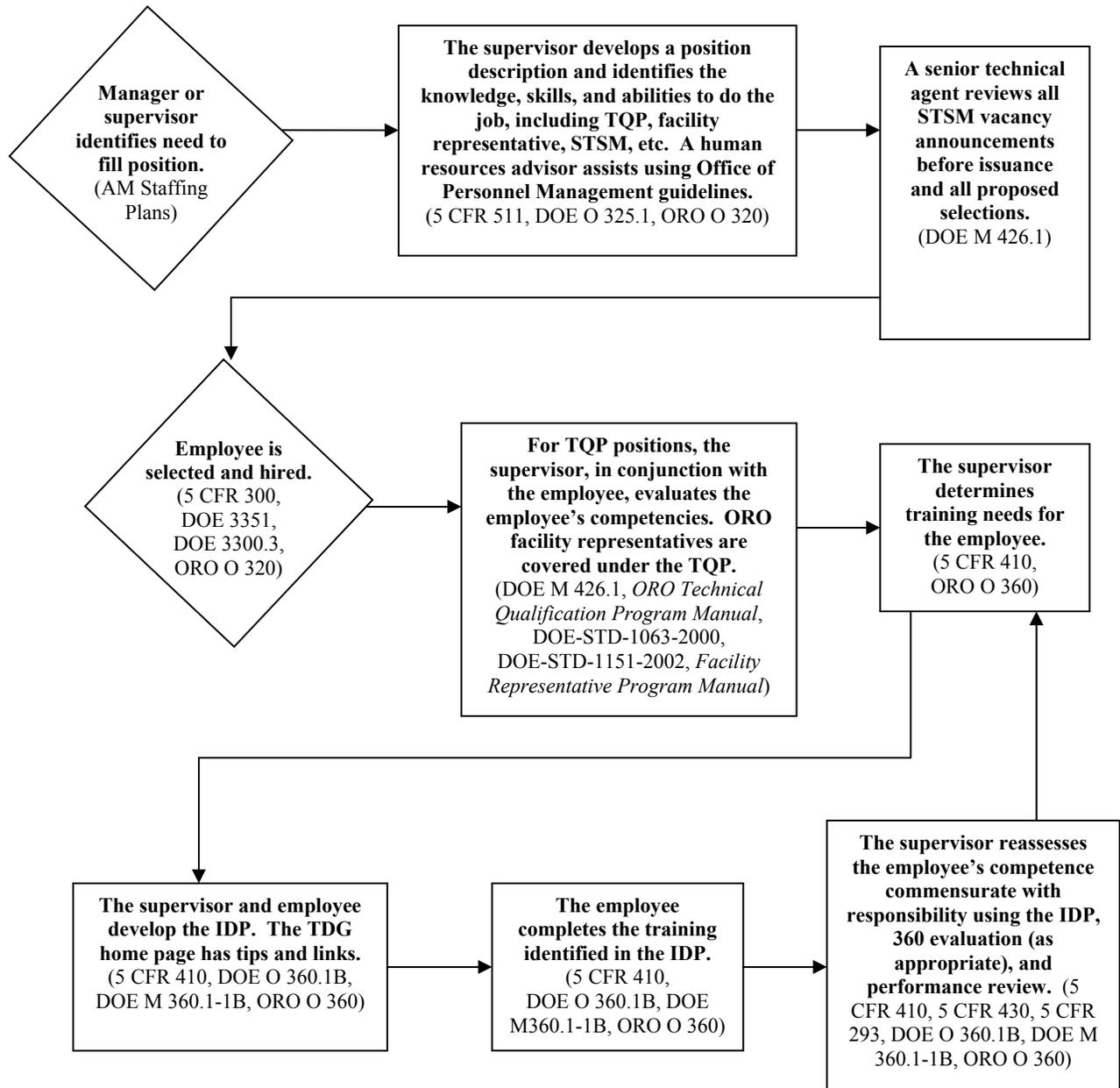


Figure 3. ORO Competence Commensurate with Responsibility Process

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### **2.1.6 Guiding Principle 6 – Tailor Hazard Controls to Work**

Tailoring hazard controls to the work you perform as a Federal employee may not be as necessary as it is to the type of work our contractors perform. The types and number of hazards connected with the ORO workforce are not as high risk as those that our contractors are exposed to. However, this does not mean that cutting corners on tasks is a form of tailoring. Improper lifting, improper use of extension cords, cabinets and files not secured properly, and wet areas or items on hard floors that may cause a fall are examples of conditions and activities that may be interpreted as tailoring but are actually unsafe conditions. Contact your supervisor or a safety point of contact if you have a question.

### **2.1.7 Guiding Principle 7 – Operations Authorization**

ORO authorizes continued operation of hazardous facilities (Hazard Category 1 and 2 nuclear facilities) by approving authorization agreements in accordance with ORO O 420, Chapter XI, Authorization Agreements. The ORO review process is formalized in ORO O 420, Chapter XIII, Safety Basis Documents Review System, and ORO O 420, Chapter II, Safety Analysis and Review System.

After an authorization agreement is in place, ORO becomes involved in the Unreviewed Safety Questions review process (which is covered by 10 CFR 830, Subpart B, and ORO O 420, Chapter VIII, Unreviewed Safety Questions). In addition, ORO governs startup and restart of nuclear facilities by conducting line management assessments, operational readiness reviews, and readiness assessments in accordance with DOE O 425.1B and ORO O 420, Chapter IX, Startup and Restart of Nuclear Facilities. ORO organizations use DOE directives and/or ORO directives and/or line procedures, if needed, to carry out these activities.

### **2.1.8 Guiding Principle 8 – Worker Involvement**

The contractors' activities are governed by contractor programs that are overseen by the ORO line. Contractors participate with ORO through the ES&H Managers Forum, as participants in the Partnership Council with the unions and ORO, and in the employee concerns programs. For the Federal workforce, there is a Safety and Health Committee and the Employee Concerns Program, as well as the Safety 1<sup>st</sup> web site.

## **2.2 Core Functions**

Whereas principles are factors that need to be accomplished, functions define a process to follow. The ISM core functions are as follows:

### **2.2.1 Core Function 1 – Define the Scope of Work**

By defining the scope of work, the mission is translated into work activities with expectations and tasks that will ensure the performance of the work in a safe and environmentally sound manner. In other words, "What are you going to do or what are you trying to accomplish?" For the Federal workforce, this

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is covered in organizational charts, goals, and tasks. These are contained in ORO O 110, Organization and Structure and in ORO M 110, Oak Ridge Operations Organization Manual. For work involving contractor activities, the scope of work is covered in contracts, annual performance objectives, performance measures, and commitments

### 2.2.2 Core Function 2 – Identify and Analyze Hazards

For contractor activities, ORO O 420, Chapter II, Safety Analysis and Review System, and ORO O 420, Chapter XIII, Safety Basis Documents Review System, formalize the hazard review process executed by ORO. For contractor oversight, the ORO oversight program is described in ORO O 450, Chapter VI, ORO Assessment Program.

For Federal employees, the ORO program manager for the FEOSH Program ensures that activity-level hazard reviews are performed specific to ORO employees in accordance with DOE O 440.1A, *Worker Protection Management for DOE Federal and Contractor Employees*, and 29 CFR 1960. From July 23 to September 15, 2002, the AMESH provided an on-line ISM questionnaire to ORO Federal personnel. This questionnaire enabled workers to identify and rank the hazards in their workplaces. The results of the questionnaire are posted on the Safety 1<sup>st</sup> web site. Via the questionnaire and walkthroughs, ORO management has identified, analyzed, and categorized the hazards associated with work activities. The hazards analysis and office safety procedures are included in ORO Federal Worker Protection Program, which is posted on the Safety 1<sup>st</sup> web site.

For contractor activities related to the environment, ORO has various programs that ensure appropriate oversight. These include the National Environmental Policy Act Program, environmental protection, environmental regulations, and pollution prevention programs. These programs use existing DOE directives, such as DOE O 451.1B, *National Environmental Policy Act Compliance Program*; DOE 5400.1, *General Environmental Protection Program*; and DOE 5400.5, *Radiation Protection of the Public and the Environment*; as well as ORO directives such as ORO O 450, Chapter I, General Environmental Protection Program; ORO O 450, Chapter II, “National Environmental Policy Act Compliance Program” (in development); ORO O 110, Organization and Structure; and ORO M 110, Oak Ridge Operations Organization Manual. Line program managers use line procedures if needed.

### 2.2.3 Develop and Implement Controls

Now that the work or tasks to be done and the hazards connected to the work have been identified, the controls for these hazards need to be developed and implemented. This is accomplished by using laws, regulations, and existing industrial standards. For the Federal workforce, this means following the FEOSH Program when working in Federal office spaces. For activities in contractor workspaces, the Federal employee needs to be familiar with the contractor’s ES&H programs and controls.

### 2.2.4 Perform Work

This means **Do Work Safely**. For ORO employees, training and being knowledgeable in the ES&H aspects of the work is important. The Safety 1<sup>st</sup> web site has been developed to provide information and assistance to the employees.

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When in contractor space, ORO employees need to have General Employee Training for the site and other training as needed, such as radiological worker and hazardous waste operations. ORO employees also need to be familiar with the contractor's controls, such as safety work permits and radiological work permits, as well as following posted signs.

### 2.2.5 Feedback and Improvement

The ORO Federal information management system is composed of computing and communications networks used by Federal employees to facilitate work. Some examples of these are the Document Online Coordination System (DOCS), the "Employee New Update," *Inside Oak Ridge*, DOECAS, and the Employee Weather Hotline (865-576-9398).

For results measurement and reward, each contractor's performance is measured throughout the fiscal year utilizing various monitoring and reporting measures. ORO employee performance is measured and rewarded through use of individual performance appraisal plans and periodic performance discussions. ORO organizations use DOE directives and/or ORO directives and/or line procedures, if needed, to carry out these activities.

The safety programs functioning at ORO that support contractor activities include oversight, self-assessment programs, independent oversight programs, the Lessons Learned Program, the Occurrence Reporting and Processing System, and the ORO Issues and Corrective Action Management Program. These activities are discussed in ORO O 450, Chapter VI, ORO Assessment Program, and ORO O 410, Chapter III, Quality Assurance, and ORO O 220, Chapter X, Accident Investigations.

ORO O 410, Chapter IV, Management Control Program, requires an annual summary management review of all areas within ORO (including contractors) and the identification of any reportable problems for inclusion in the Manager's assurance memorandum. ORO O 220, Chapter V, Appraisal of DOE Contractor Performance, ensures that effective programs for evaluating contractor performance and implementing appropriate corrective action are established and maintained.

The ORO programs that ensure safe contractor activities include the issues management program that uses computer systems called Oak Ridge Issues, Open Items, Nonconformances and Noncompliances (ORION2) System, the Corrective Action Tracking System (EH CATS), and the DOE Audit Report Tracking System (DARTS); as well as the lessons learned programs; line oversight; the Nuclear Safety Rules; and Price-Anderson Amendments Act enforcement. The Department's electronic tracking system for the Office of Oversight and the Office of Independent Oversight and Performance Assurance safety issues, known as EH CATS, is available at the following internet address: <http://tis-nt.eh.doe.gov/ism/cats.html>. The ORO issues management system, ORION2, is available at the following internet address: <http://www-internal.oro.doe.gov/esq/orion2/index.htm>. ORION2 System users follow the *Oak Ridge Issues, Open Items, Noncompliances, and Nonconformances User Guide*. ORO organizations use DOE directives and/or ORO directives and/or line procedures, if needed, to carry out these activities.

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### **3.0 ISM PROGRAM MAINTENANCE PROCESS**

Annual and ongoing activities to assess, evaluate, update, and improve the way ORO's business is conducted are part of the Federal workforce scope of work. They include continuous oversight of the contractors and internal ORO activities. ORO organizations use DOE directives and/or ORO directives and/or line procedures, if needed, to carry out these activities.