ORO CONTROL FORM - FINAL DIRECTIVE

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

1. **NUMBER AND TITLE OF DIRECTIVE**: **ORO O 450, Chapter V, Change 2, ORO INTEGRATED SAFETY MANAGEMENT PROGRAM**

2. **PURPOSE OF TRANSMITTAL**: _____ New Directive __X__ Revised Directive

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

   _X_ No (all contractors)

   ____ Yes If yes, whom? __ Bechtel Jacobs Co. __ ORAU __ UT-Battelle __ ISOTEK (Bldg. 3019, ORNL)

   ____ Other contractors (list by type)

   Many ORO contractors have approved Standards/Requirements Identification Documents (S/RIDs) or Work Smart Standards (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 impacts? ____ No __X__ Yes
   If yes, describe: This ORO Chapter is part of the ORO sunset review process. Changes to this Chapter include (1) revisions and updates to Paragraph 4, Responsibilities; Paragraph 6, References; Paragraph 7, Definitions; and Paragraph 9, Attachments; (2) delete Attachment 1; (3) revisions and updates to new Attachment 1; and (4) addition of Appendix A.

5. **CONTACT POINT**: Harold Monroe — Environment, Safety, and Health, SE-30 — 576-9439
   Name — Organization — Telephone

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

6. **FILING INSTRUCTIONS**:

Remove	Dated	Insert	Dated
ORO Control Form	09/05/2003	ORO Control Form	06/16/2005
ORO O 450, Ch. V, Chg. 1	09/05/2003	ORO O 450, Ch. V, Chg. 2	06/16/2005

ORO Directives are available on the ORO Directives Management Group Home Page at http://www.ornl.gov/doe/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 — 06/16/2005
Signature: DMG Team Leader, AD-440 — Date

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

U.S. Department of Energy

Oak Ridge Office

ORO O 450
Chapter V
Change 2

DATE: 06/16/2005

SUBJECT: ORO INTEGRATED SAFETY MANAGEMENT PROGRAM

1. PURPOSE. This Directive establishes the elements of the Oak Ridge Office (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 cancels and replaces ORO O 450, Chapter V, Change 1, ORO INTEGRATED SAFETY MANAGEMENT PROGRAM, dated September 5, 2003.

3. APPLICABILITY. The provisions of this Chapter apply to ORO Principal Staff.

4. RESPONSIBILITIES.

   a. Manager.

      (1) Establishes ISM policy based on the functions and principles of DOE P 450.4.

      (2) Approves initial ISM System (ISMS) program descriptions for ORO (see Attachment 1) and its contractors. Approves annual updates of the ORO ISMS program description and major changes of contractors' descriptions.

      (3) Appoints ISMS contractor verification and ORO review team leaders.

      (4) Approves ISMS verification plans.

   b. Assistant Manager for Environment, Safety, and Health (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 411.1-1F, MANUAL OF SAFETY MANAGEMENT FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES, LEVEL III, FOR OAK RIDGE OFFICE (ORO FRAM).

      (4) Supports ISMS verifications and reviews, as requested, by providing personnel and other resources.

c. Assistant Managers and Office Directors.

(1) Provide support for ISMS verifications and reviews.

(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 reviews in the Annual Assessment Plan. (See ORO O 220, Chapter XI, OAK RIDGE OPERATIONS ASSESSMENT PROGRAM, for details on the Annual Assessment Plan.)

(2) Ensure that the results of ISMS verifications and reviews are entered into the ORION2 System for use in trending and analysis. (See ORO O 220, Chapter XI, 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.

(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 411.1-1C, SAFETY MANAGEMENT FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES, dated December 31, 2003, 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 413.3-1 PROJECT MANAGEMENT FOR THE ACQUISITION OF CAPITAL ASSETS.

5. REQUIREMENTS AND PROCEDURES.

a. Procedures. None.

b. Requirements. See Attachment 1.

6. REFERENCES.

a. DOE P 411.1, SAFETY MANAGEMENT FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES, dated January 28, 1997.

b. DOE M 411.1-1C, SAFETY MANAGEMENT FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES, dated December 31, 2003.

c. DOE M 413.3-1 PROJECT MANAGEMENT FOR THE ACQUISITION OF CAPITAL ASSETS, dated March 28, 2003.

d. DOE O 414.1B, QUALITY ASSURANCE, dated April 29, 2004.

e. DOE O 425.1C, STARTUP AND RESTART OF NUCLEAR FACILITIES, dated March 13, 2003.

f. DOE O 450.1, Change 1, ENVIRONMENTAL PROTECTION PROGRAM, dated January 15, 2005

g. DOE P 450.2A, IDENTIFYING, IMPLEMENTING AND COMPLYING WITH ENVIRONMENT, SAFETY AND HEALTH REQUIREMENTS, dated May 15, 1996.

h. DOE G 450.3-3, TAILORING FOR INTEGRATED SAFETY MANAGEMENT APPLICATIONS, dated February 1, 1997.

i. DOE G 450.4-1B, Volumes 1 and 2, INTEGRATED SAFETY MANAGEMENT SYSTEM GUIDE FOR USE WITH SAFETY MANAGEMENT SYSTEM POLICIES (DOE P 450.4, DOE P 450.5); THE FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES MANUAL; AND THE DOE ACQUISITION REGULATION, dated March 1, 2001.

j. DOE P 450.5, LINE ENVIRONMENT, SAFETY AND HEALTH OVERSIGHT, dated June 26, 1997.

k. DOE-HDBK-3027-99, ISMS VERIFICATION TEAM LEADERS HANDBOOK, dated June 1999

l. ORO O 220, Chapter XI, Oak Ridge Operations Assessment Program, dated June 1, 2004.

m. ORO M 411.1-1F, MANUAL OF SAFETY MANAGEMENT FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES, LEVEL III, FOR OAK RIDGE OFFICE (ORO FRAM), dated April 13, 2005.

n. DEAR 970.5223-1, "*Integration of Environment, Safety, and Health into Work Planning and Execution*."

7. DEFINITIONS.

a. **ASSESSMENTS** – 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. **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.

c. **INDEPENDENT ASSESSMENTS** – Independent assessments 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 414.1B)

d. **INTEGRATED ASSESSMENT SCHEDULE** – This schedule is a compilation of the assessments and management/self-assessment schedules for all offices in ORO. 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 414.1B.

e. **MANAGEMENT ASSESSMENT/SELF-ASSESSMENT** – Corporate-level ORO self-assessments of line management's programs and implementation thereof to ensure that the line 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 or COR.

f. **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.

g. **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 3 years, every 6 months, etc.).

h. **PLAN –** The high-level scoping document that identifies the assessment commitments for the upcoming fiscal year.

i. **READINESS REVIEW –** See DOE O 425.1C.

j. **SCHEDULE –** A schedule is the detailed plan of upcoming assessments, which provides more precise dates, team leaders, review areas, etc.

8. CONTRACTOR REQUIREMENTS DOCUMENT. None.

9. ATTACHMENTS.

a. Attachment 1 – ORO ISMS Program Description.

U.S. Department of Energy
Oak Ridge Office

Integrated Safety Management Program Description

06/16/2005

Table of Contents

Acronym List 3
List of Figures 4
Executive Summary 5
1.0 ISM PROGRAM OVERVIEW 6
1.1 Introduction 6
1.2 Guiding Principles 6
1.3 Core Functions 7
1.4 Federal Occupational Safety and Health Program 9
1.5 Contracts 9
1.6 ORO Directives System 10
1.7 ORO Planning Alignment Process 10
1.8 ORO Quality Assurance Program 12
1.9 ORO Emergency Management Program 12
2.0 IMPLEMENTATION OF ISM CORE FUNCTIONS AND GUIDING PRINCIPLES 12
2.1 Guiding Principles 12
2.1.1 Guiding Principle 1 – Line Management Responsibility 12
2.1.2 Guiding Principle 2 – Clear Roles and Responsibilities 13
2.1.3 Guiding Principle 3 – Competence Commensurate with Responsibility 13
2.1.4 Guiding Principle 4 – Balanced Priorities 13
2.1.5 Guiding Principle 5 – Identification of Safety Standards and Requirements 13
2.1.6 Guiding Principle 6 – Tailor Hazard Controls to Work 15
2.1.7 Guiding Principle 7 – Operations Authorization 15
2.2 Core Functions 15
2.2.1 Core Function 1 – Define the Scope of Work 15
2.2.2 Core Function 2 – Identify and Analyze Hazards 15
2.2.3 Develop and Implement Controls 16
2.2.4 Perform Work 16
2.2.5 Feedback and Improvement 16
3.0 ISM PROGRAM MAINTENANCE PROCESS 17
4.0 REFERENCES 18

Appendix A – ORO ISM Crosswalk A-1

Acronym List

AMESH	Assistant Manager for Environment, Safety, and Health
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
EMS	Environmental Management System
ES&H	Environment, Safety, and Health
FEOSH	Federal Employee Occupational Safety and Health
FRAM	Functions, Responsibilities, and Authorities Manual
HQ	Headquarters
IDP	Individual Development Plan
ISM	Integrated Safety Management
ISMS	Integrated Safety Management System
MSD	Management System Description
NNSA	National Nuclear Security Administration
ORION2	Oak Ridge Issues, Open Items, Nonconformances, and Noncompliances System
ORO	Oak Ridge Office
QAP	Quality Assurance Program
S/RID	Standards/Requirements Identification Document
TDG	Training and Development Group
TQP	Technical Qualification Program
WSS	Work Smart Standards

List of Figures

Figure 1. Relationship of the ISM Core Functions 8

Figure 2. ORO Directives That Support the ISM Core Functions 11

Figure 3. ORO Competence Commensurate with Responsibility Process 14

Executive Summary

This document describes the Department of Energy Oak Ridge 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*.

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.

The ORO ISM Program integrates all the elements of quality assurance, Environmental Management System (EMS), 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 1). The ORO Directives System and the Quality Assurance Program establish the framework for rigor and discipline in ORO's operations.

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 Office (ORO) implements in accordance with DOE P 450.4, *Safety Management System Policy*. Important companion documents to this program description are ORO M 100, *ORO Management System Description*, ORO M 411.1-1F, *Manual of Safety Management Functions, Responsibilities, and Authorities, Level III, for Oak Ridge Office* (ORO FRAM), and ORO O 110, *Organization and Structure*, ORO M 110, *Oak Ridge Office Organization Manual*, and ORO O 410, Chapter III, Attachment 1, "ORO Quality Assurance Program Description."

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 System (EMS) considerations, including pollution prevention, into all work planning and execution. The contractor oversight function ensures that each contractor's ISMS fully incorporates an Environmental Management System 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.

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

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*. Facility operations are reviewed and authorized by ORO. No new operations begin unless the appropriate operational readiness review/readiness assessment/line management assessment indicates readiness.

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.

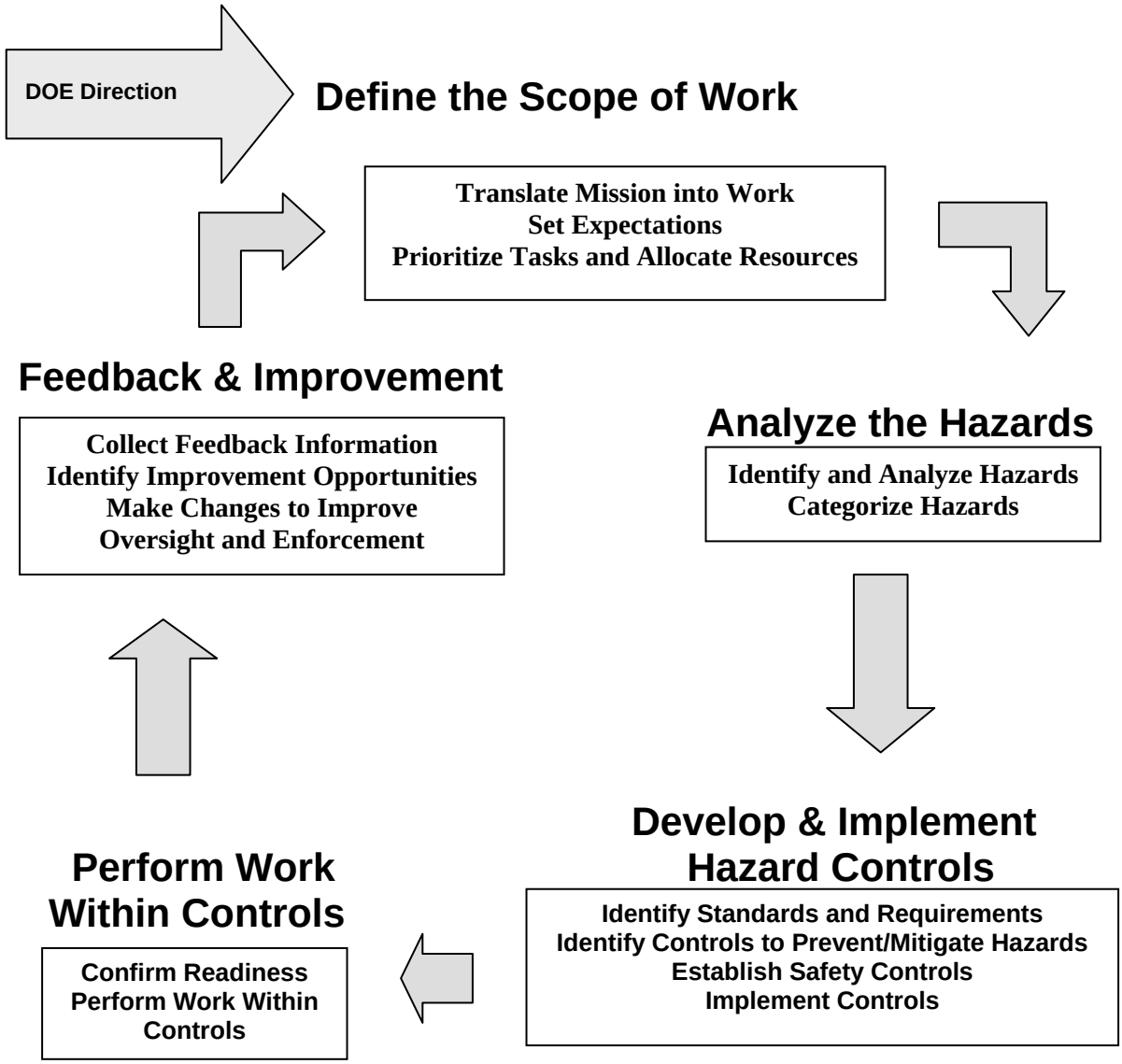

Figure 1. Relationship of the ISM Core Functions

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 in ORO O 440, Chapter I, *Worker Protection*, as Attachment 2, "Federal Employee Occupational Safety and Health Program."

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, and Health (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 1st web site [http://www-internal.oro.doe.gov/esq/safetyfirst/Hazard_Survey.pdf]. 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 1st web site. In April 2005, the Information Resources Management Division (IRMD) sent out a survey to all employees in ORO. This survey mainly focused on services provided by IRMD but it also asked for input from employees on potential safety hazards in the workplaces and the building.

ORO employees working in general office areas 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.

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 non-mandatory guidance. Four types of Directives are utilized: (1) ORO Orders, (2) ORO Chapters, (3) ORO Notices, and (4) ORO Manuals. 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 Office Annual Performance Plan*, which can be accessed through the ORO Manager's web page, link ORO's core competencies and values to the office activities. Execution year planning incorporates many other key documents, such as the DOE Strategic Plan, Office of Science Strategic Plan, and the President's Management Agenda goals and priorities, and the *Oak Ridge Office Performance 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, *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 XI, *ORO Assessment Program*, implements a process of reviewing contractor activities. ISMS budget information is requested each year in the local Budget Formulation Handbook to provide information to local senior management.

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.

EXTERNAL DRIVERS

Public Laws
40 CFR Environmental Regulations
10 CFR 830
10 CFR 835
Congressional Actions
Secretary's Agreement with President
DOE Mission
Environmental Management (EM) Paths to Closure
EM Accelerated Cleanup
DOE Directives Program

ORO MISSION

DEFINE THE SCOPE OF WORK

ORO Annual Performance Plan
ORO M 100, ORO Management System Description
ORO M 110, Oak Ridge Office Organization Manual
ORO M 411.1-1F, ORO FRAM
ORO O 110, Organization and Structure
ORO Contracts
Federal Facility Agreements
Records of Decision
ORO and NNSA "Stop Work/Suspend Work" Responsibility Declaration
ORO O 130, Ch. I, Budget Formulation
ORO O 150, Emergency Management and Planning (All Chapters)
ORO O 250, Ch. II, ORO Directives System
ORO O 430, Ch. I, Life Cycle Asset Management
ORO O 410, Ch. I, Work Authorization System
ORO O 410, Ch. III, Quality Assurance

IDENTIFY/ANALYZE THE HAZARDS

ORO O 420, Ch XIII, Safety Basis Documents Review System
ORO O 220, Ch. XI, ORO Assessment Program

DEVELOP AND IMPLEMENT CONTROLS

ORO O 250, Ch. IV, Impact Assessments
ORO O 250, Ch. V, Development, Approval, and Maintenance of WSS
ORO O 250, Ch. VII, Maintenance of S/RIDs
ORO O 250, Ch. VIII, Requirements Change Notices

PERFORM WORK WITHIN CONTROLS

ORO O 420, Ch. XI, Authorization Agreements
ORO O 440, Worker Protection (All Chapters)
ORO O 450, Ch. I, General Environmental Protection Program
ORO O 470, Ch. IX, Control and Accountability of Nuclear Materials

FEEDBACK AND CONTINUOUS IMPROVEMENT

ORO O 220, Ch. XI, ORO Assessment Program
ORO O 220, Ch. X, Accident Investigations
ORO 230, Ch. IV, Occurrence Reporting
DOE-STD-7501-99, The DOE Corporate Lessons Learned Program
ORO O 410, Ch. III, Quality Assurance
ORO O 440, Ch. V, Employee Concerns Management System
Performance Management Evaluation Plans
Contractor ISMS Program Annual Review

Figure 2. ORO Directives That Support the ISM Core Functions

1.8 ORO Quality Assurance Program

DOE O 414.1B, *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*. "ORO Quality Assurance Program Description," which is Attachment 1 to ORO O 410, Chapter III, reflects DOE O 414.1B. 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 151.1B, *Comprehensive Emergency Management System*, and its associated guides. ORO O 150, Chapter I, *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, *Employee Emergency Plans and Fire Prevention Plans*, and the General Services Administration *Occupant Emergency Program Guide.* 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. The crosswalk of ORO documents, processes, and programs with the ISM Functions and Guiding Principles is found in Appendix A.

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 411.1-1F) and its companion documents (ORO M 100, *ORO Management System Description*, ORO O 110, *Organization and Structure*, and ORO M 110, Oak *Ridge Office 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.

2.1.2 Guiding Principle 2 – Clear Roles and Responsibilities

The ORO FRAM (ORO M 411.1-1F) and its companion documents (ORO M 100, *ORO Management System Description*, ORO O 110, *Organization and Structure*, and ORO M 110, *Oak Ridge Office 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 Office Annual Performance Plan* flows from the President's Management Agenda, the DOE Headquarters strategic goals and contract objectives, with the *Oak Ridge Office Annual Performance Plan* 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 (contract directives appendix, "List B"). ORO organizations use DOE Directives and/or ORO Directives and/or line procedures, if needed, to carry out these activities.

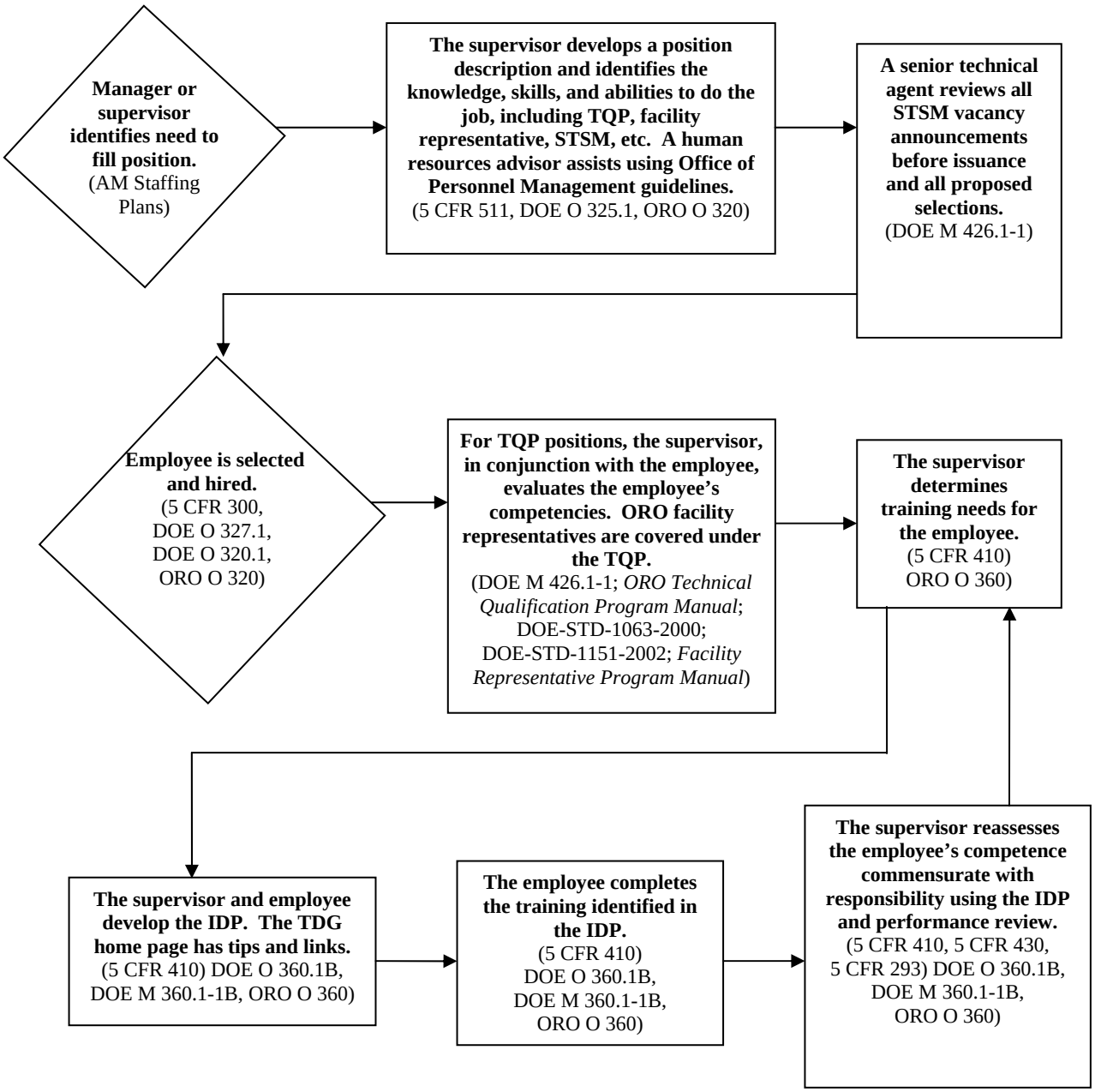

Figure 3. ORO Competence Commensurate with Responsibility Process

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 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 10 CFR 830, *Nuclear Safety Management*.

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 425.1C. ORO organizations use DOE Directives and/or ORO Directives and/or line procedures, if needed, to carry out these activities.

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 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 Office 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 nuclear activities, 10 CFR 830 formalizes the hazard review process. For contractor oversight, the ORO oversight program is described in ORO O 220, Chapter XI.

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 1st 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 1st 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 O 450.1, *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 M 100, *ORO Management System Description*, ORO O 110, *Organization and Structure*; and ORO M 110, *Oak Ridge Office Organization Manual*. Line program managers use line procedures if needed.

2.2.3 Core Function 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 Core Function 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 1st web site has been developed to provide information and assistance to the employees. 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. When unescorted or acting as an escort, ORO employees 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 Core Function 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 News Update," *Inside Oak Ridge*, DOECAST, 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 220, Chapter XI, 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 XI, 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 Departments 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://www.eh.doe.gov/camp/trackingsys.html. The ORO issues management system, ORION2, is available at the following internet address: http://www-internal.oro.doe.gov/esq/orion2/index2.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.

To ensure continuous improvement and to facilitate discussion of Lessons Learned, a collection of what are deemed the most critical performance measures for the ORO are displayed in an area known as the "War Room", conference room 3046 in the Federal Building. This display is a flexible and dynamic collection of metrics designed to reflect not only those areas of greatest interest and importance to Oak Ridge managers, but also those areas of greatest interest to DOE HQ. The metrics include key schedule, cost, and other performance data for the primary program areas of Science, Environmental Management, and Nuclear Fuel Supply; key environmental, safety, and health performance trends; status of progress toward the President's Management Agenda; major contract actions; small business goals; and diversity trends and statistics. The performance metrics are updated monthly by an analytical team and then are statused and discussed each month by the Senior Management as the primary focus of one of their standing staff meetings. Coupled with the ORO Integrated Assessment Schedule and the statusing of the milestones and objectives in the Annual Performance Plan, the performance measures displayed in the War Room support the necessary, comprehensive, and integrated methodology to ensure feedback and continuous improvement.

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.

4.0 REFERENCES

4.1 Federal Laws, Regulations, and Standards

- 5 CFR 293, *Personnel Records*
- 5 CFR 300, *Employment (General)*
- 5 CFR 410, *Training*
- 5 CFR 430, *Performance Management*
- 5 CFR 511, *Classification Under The General Schedule*
- 10 CFR 830, *Nuclear Safety Management*
- 10 CFR 830, Subpart B, *Safety Basis Requirements*
- 10 CFR 835, *Occupational Radiation Protection*
- 29 CFR 1960, *Basic Program Elements for Federal Employee Occupational Safety and Health Programs and Related Matters*
- 29 CFR 1910.38, *Employee Emergency Plans and Fire Prevention Plans*
- 40 CFR, *Protection of Environment, Environmental Regulations*
- DEAR 970.5223-1, *Integration of Environment, Safety, and Health into Work Planning and Execution*
- General Services Administration *Occupant Emergency Program Guide*

4.2 DOE Directives

- DOE O 151.1B, *Comprehensive Emergency Management System*
- DOE O 320.1, *Acquiring and Positioning Human Resources*
- DOE O 327.1, *Furlough or Reduction in Force in the Senior Executive Service*
- DOE O 360.1B, *Federal Employee Training*
- DOE M 360.1-1B, *Federal Employee Training Manual*
- DOE O 413.3, *Project Management for the Acquisition of Capital Assets*
- DOE O 414.1B, *Quality Assurance*
- DOE O 425.1C, *Startup and Restart of Nuclear Facilities*
- DOE M 426.1-1A, *Federal Technical Capability Manual*
- DOE O 440.1A, *Worker Protection Management for DOE Federal and Contractor Employees*
- DOE O 450.1, *Environmental Protection Program*
- DOE P 450.4, *Safety Management System Policy*
- DOE O 451.1B, *National Environmental Policy Act Compliance Program*
- DOE 5400.5, *Radiation Protection of the Public and the Environment*

4.3 ORO Directives

- ORO M 100, *ORO MANAGEMENT SYSTEM DESCRIPTION*
- ORO O 110, *ORGANIZATION AND STRUCTURE*
- ORO M 110, *OAK RIDGE OFFICE ORGANIZATION MANUAL*
- ORO O 130, Chapter I, *Budget Formulation*
- ORO O 150, *EMERGENCY MANAGEMENT AND PLANNING* (All Chapters)
- ORO O 220, Chapter X, *Accident Investigations*
- ORO O 220, Chapter XI, *ORO Assessment Program*

- ORO O 230, Chapter IV, *Occurrence Reporting and Processing of Operations Information*
- ORO O 250, Chapter II, *Oak Ridge Office Directives System*
- ORO O 250, Chapter IV, *Impact Assessments*
- ORO O 250, Chapter V, *Development, Approval, and Maintenance of Work Smart Standards Sets*
- ORO O 250, Chapter VII, *Maintenance of Standards/Requirements Identification Documents*
- ORO O 250, Chapter VIII, *Requirements Change Notices*
- ORO O 320, *FEDERAL EMPLOYMENT* (All Chapters)
- ORO O 360, *EMPLOYEE EDUCATION AND TRAINING* (All Chapters)
- ORO O 410, Chapter I, *Work Authorization System*
- ORO O 410, Chapter III, *Quality Assurance*
- ORO O 410, Chapter III, Attachment 1, "ORO Quality Assurance Program Description"
- ORO O 410, Chapter IV, *Management Control Program*
- ORO M 411.1-1F, *Manual of Safety Management Functions, Responsibilities, and Authorities, Level III, Oak Ridge Operations (ORO FRAM)*
- ORO O 420, Chapter XI, *Authorization Agreements*
- ORO O 420, Chapter XIII, *Safety Basis Documents Review System*
- ORO O 440, *WORKER PROTECTION* (All Chapters)
- ORO O 440, Chapter I, *Worker Protection Management For DOE Federal and Contractor Employees*
- ORO O 440, Chapter I, Attachment 2, "Federal Employee Occupational Safety and Health Program," also known as the "Safety and Health Committee Charter"
- ORO O 440, Chapter V, *Employee Concerns Management System*
- ORO O 450, Chapter I, *General Environmental Protection Program*
- ORO O 470, Chapter IX, *Control and Accountability of Nuclear Materials*

4.4 <u>DOE Technical Standards</u>

- DOE-STD-1063-2000, *Facility Representatives*
- DOE-STD-1151-2002, *Facility Representative Functional Area Qualification Standard*
- DOE-STD-7501-99, *The DOE Corporate Lessons Learned Program*

4.5 <u>Other Documents</u>

- *Oak Ridge Office Annual Performance Plan*
- *Oak Ridge Operations and National Nuclear Security Administration, "<u>Stop Work/Suspend Work" Responsibility</u>* declaration of October 2000
- *ORO Technical Qualification Program Manual*
- *Facility Representative Program Manual*

ORO ISM CROSSWALK

ISM Functions

Define the Scope of Work
Contract Statement of Work
Budget Submittals
PEMPs
ORO FRAM
Line Annual Assessment Plans

Analyze the Hazards
Safety Basis Documents Review and Approval Process
Authorization Basis Documents Review and Approval Process
Work Smart Standards (WSS) Sets
Standards/Requirements Identification Documents (S/RIDs)

Develop and Implement Controls
Safety Basis Documents Review and Approval Process
Authorization Basis Documents Review and Approval Process
Federal and State Environmental Permits
Authorization Agreements
Baseline Change Control
ORO Directives
ORO Organization-Specific Procedures

Perform Work Within Controls
Safety Basis Documents Flow down and Implementation
Authorization Basis Documents Flow down and Implementation
ORO Organization-Specific Procedures
Assessments
Personnel Performance Plans
WSS Sets
S/RIDs

Provide Feedback and Continuous Improvement
Safety Basis Document Change Packages and Annual Updates
Authorization Basis Document Change Packages and Annual Updates
Unreviewed Safety Question Process
ORO Performance Indicators
Employee Appraisals
Self-Assessments
Manager's Assurance Memorandum
External Assessments
PEMP

ORO Assessment Program
ORPS
ORION2
CATS
DARTS
SIMS
CAIRS
Lessons Learned Programs
ES&H Status Report
Standards Management Program

ISM Guiding Principles

Line Management Responsibility for Safety
ORO FRAM
Oak Ridge Office Organization Manual
ORO organization-specific procedures
MSD

Clear Roles and Responsibilities
ORO FRAM
Oak Ridge Office Organization Manual
Employee Performance Plans
Position Descriptions
ORO Mission Statement
ORO Goals and Objectives
MSD

Competence Commensurate with Responsibilities
Technical Qualification Program
Individual Development Plans
Facility Representative Qualification Program
Employee Performance Plans
ORO Staffing Plan
Position Descriptions
MSD

Balanced Priorities
ES&H Management Plan
Strategic Plans
ORO Annual Performance Plan
PEMP
Line Annual Assessment Plans
MSD

Identification of Standards and Requirements
Standards Management Program
Organization-specific procedures
Authorization Agreements
Work Smart Standards Sets
Standards/Requirements Identification Documents
Material Safety Data Sheets
MSD

Hazard Controls Tailored to the Work Being Performed
Safety Basis/Authorization Basis Documents Review and Approval Process
Authorization Agreements
Work Smart Standards Sets
Standards/Requirements Identification Documents
Material Safety Data Sheets
Permits
MSD

Work Authorization
Authorization Agreements
Startup and Restart Process
Permits
MSD