

DIRECTIVES CONTROL FORM - ORO FINAL DIRECTIVE

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

1. **NUMBER AND TITLE OF DIRECTIVE:** **ORO O 450, Chapter IV, Change 1, ENVIRONMENT, SAFETY, AND HEALTH (ES&H) SELF-ASSESSMENT AND CONTRACTOR ASSESSMENT 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 SURA

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 change to Chapter IV is part of the Sunset Review Process and was written to transmit current policy concerning the ES&H Oversight Program.

5. **CONTACT POINT:** Telicia Mims Technical Support Division, SE-32 576-4201
Name Organization Telephone

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 O 450, Chapter IV, Pages IV-1 through IV-8	12/29/1999	ORO O Control Form ORO O 450, Chapter IV, Chg. 1, Pages IV-1 through IV-12	01/02/2002 01/02/2002

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

Original Signed By
Wayne H. Albaugh 01/03/2002
Signature Team Leader, AD-440 Date

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

Rev. 11/30/1999

U.S. Department of Energy

Oak Ridge Operations

ORO O 450 Chapter IV Change 1

DATE: 01/02/2002

SUBJECT: ENVIRONMENT, SAFETY, AND HEALTH (ES&H) SELF-ASSESSMENT AND CONTRACTOR ASSESSMENT PROGRAM

1. PURPOSE. This directive establishes the elements of an effective Oak Ridge Operations (ORO) line assessment program for the Environment, Safety and Health (ES&H) Program, which for the purposes of this chapter also includes the Quality and Emergency Management Programs. This chapter correlates to DOE P 450.5, LINE ENVIRONMENT, SAFETY AND HEALTH OVERSIGHT, dated June 26, 1997, and DOE O 210.1, PERFORMANCE INDICATORS AND ANALYSIS OF OPERATIONS INFORMATION, dated September 27, 1995. Nothing in this issuance changes any requirements contained in any Department of Energy (DOE) directive.
2. CANCELLATION. This chapter cancels and replaces ORO O 450, Chapter IV, ENVIRONMENT, SAFETY, AND HEALTH (ES&H) OVERSIGHT PROGRAM, dated December 29, 1999.
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 Integrated Safety Management (ISM) and assessment policy. The Manager has added an eighth principle to ORO's ISM policy. (See Attachment 2.)
 - (2) Approves ISM System (ISMS) descriptions.
 - (3) Appoints ISMS verification and Accident Investigation team leaders.
 - (4) Approves contractor assessment programs developed by the Contracting Officer's Representative(s) (CORs).
 - (5) Approves ISMS verification plans.
 - (6) Transmits Corrective Action Plans (CAPs) to appropriate DOE Headquarters (HQ) offices or approves CAPs if approval authority has been delegated.
 - (7) Requests for-cause reviews, as necessary.

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INITIATED BY: ASSESSMENT AND EMERGENCY
MANAGEMENT DIVISION

- b. Assistant Manager for Environment, Safety, Health and Emergency Management (AMESH).
- (1) Serves as the focal point for the coordination of self-assessment processes and processes for assessment of ORO's contractors in accordance with DOE P 450.5, paragraph 2. For example:
 - (a) Accompanies the line in operational awareness walkdowns, as requested;
 - (b) Participates in and/or leads readiness reviews and other assessments, as requested;
 - (c) Coordinates and maintains an ORO Integrated Assessment Schedule; and
 - (d) Establishes and maintains an ORO Assessment Resource Center (internet-accessible assessment reports, procedures, guides, checklists, and a physical assessment library).
 - (2) Coordinates ISMS verifications of ORO's contractors as requested by the COR.
 - (3) Coordinates ORO's responses to information requests from DOE HQ (e.g., Office of Independent Oversight [EH-2]) and external elements.
 - (4) Supports the development and implementation of ORO line programs to assess contractors' ES&H programs (see Attachment 3), as requested by the COR(s).
 - (5) Facilitates/coordinates the programmatic development of the ORO Facility Representative Program in support of all line programs.
 - (6) Facilitates/coordinates the programmatic development of the ORO Lessons Learned Program in support of all line programs.
 - (7) As requested by the COR(s):
 - (a) Conducts closure or verification of corrective actions;
 - (b) Serves as the point-of-contact for inspections/investigations by EH-2; and
 - (c) Conducts independent verification of closure of CAPs for EH-2 findings per the DOE Implementation Plan for Defense Nuclear Facilities Safety Board (DNFSB) Recommendation 98-1.
 - (8) Develops and coordinates an ORO Issues Management Program through a system of the following:
 - (a) Tracks the status of issues/actions for the responsible management official (e.g., from EH-2 reviews, opportunities for improvement, Accident Investigation Board judgments of need, and other reviews/assessments, including self-assessments) and develops reports on the status of actions.

- (b) Analyzes and trends ORO and contractor performance (e.g., from the Feedback and Improvement Tracking System [FITS]) to identify positive and negative trends and recommends improvements to ORO management and the line, as requested.
 - (c) Coordinates the corrective action process as identified in DOE O 414.1A, QUALITY ASSURANCE, and ORO O 410, Chapter III, QUALITY ASSURANCE.
 - (d) Communicates results of the issues management system through reports to management and posting on the AMESH web site.
 - (e) Maintains ORO O 410, Chapter III.
 - (f) Coordinates corporate feedback and improvement processes (such as the above items, the Occurrence Reporting and Processing System, etc.). Reports on the status to the Manager and Senior Board.
- (9) Assists ORO line management in conducting periodic assessments of its implementation of the 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), dated October 31, 2000.
- (10) Supports the line on independent assessments, as requested.
- (11) Supports ISMS verifications, periodic assessments, and for-cause reviews, as requested, by providing personnel and other resources.
- (12) Performs unannounced worker protection inspections of ORO's contractors as required by DOE O 440.1A, WORKER PROTECTION MANAGEMENT FOR DOE FEDERAL AND CONTRACTOR EMPLOYEES.
- (13) Performs organizational self-assessments against the DOE *Criteria for Performance Excellence*.
- (14) Performs periodic corporate-level management assessments.
- c. Assistant Managers for Administration; Laboratories; Environmental Management; and Assets Utilization; and Director of the Office of Nuclear Fuel Security and Uranium Technology.
- (1) Direct each COR to develop a program for assessing contractors' ES&H programs in keeping with DOE P 450.5 and this chapter.
 - (2) Provide support for ISMS verifications, and for-cause reviews.
 - (3) Assess his/her organization's management processes in a self-assessment program.

- (4) Identify and correct problems that hinder the organization from achieving its objectives and track the corrective actions to closure.
 - (5) Share ES&H data and status of corrective actions with AMESH.
- d. Contracting Officer's Representatives.
- (1) Establish and implement an effective line program for assessing contractors' ES&H, quality, and emergency management programs. The program must address the elements of ISM as defined in DOE P 450.5. (See Attachment 3.)
 - (2) Make copies available of both DOE and contractor self-assessment results to the AMESH Assessment Team (which can be done via the internet or a reading room) for the purpose of analyzing ORO-wide trends.
 - (3) Coordinate with the Manager and the AMESH on the scope of ISMS verification reviews, concur in team leader selection, and review verification plans and subsequent 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 contractors prepare CAPs for EH-2 findings and transmit the CAPs through the Manager to the appropriate DOE HQ Program Office in accordance with the DOE Implementation Plan for DNFSB Recommendation 98-1.
 - (5) Ensure that contractors provide input to the ORO issues management system (i.e., HQ Corrective Action Tracking System [CATS] and the ORO FITS). Ensure the existence and effective implementation of the contractor's Issues Management System/Program.
 - (6) Analyze contractor 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, and share the results with the AMESH Assessment Team.
 - (7) Develop a management assessment plan/schedule in accordance with DOE O 414.1A, Criterion 9, and provide the assessment plan/schedule to the AMESH Assessment Team for inclusion in the ORO Integrated Assessment Schedule.
 - (8) Ensure that Standards/Requirements Identification Documents and Work Smart Standards sets are kept current with assistance from the Directives Management Group (DMG) in accordance with ORO O 250, Chapter V, DEVELOPMENT, APPROVAL, AND MAINTENANCE OF WORK SMART STANDARDS, and Chapter VII, MAINTENANCE OF STANDARDS/REQUIREMENTS IDENTIFICATION DOCUMENTS.
 - (9) Implement the 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.

- (10) Perform those tasks identified in paragraph 5 of DOE O 210.1, PERFORMANCE INDICATORS AND ANALYSIS OF OPERATIONS INFORMATION.
- (11) Ensure that prime contracts contain a requirement for the contractor to perform ES&H oversight of its direct subcontractors and their subcontractors, consistent with this chapter and DOE P 450.4.
- (12) Share ES&H data and status of corrective actions with AMESH.

5. REQUIREMENTS AND PROCEDURES.

- a. Assessment Program Objectives. ORO's ES&H Assessment Program is consistent with DOE P 450.5 and other guidance documents and directives. DOE O 414.1A contains the requirements for the corrective action process. Attachment 3 describes the components of an effective line ES&H program to assess contractors, while allowing sufficient flexibility in implementation details.
- b. Requirements. See Attachments 2 and 3.
- c. Guidance. ORO M 450, OAK RIDGE OPERATIONS ES&H ASSESSMENT MANUAL, is the companion document to this directive. This manual further delineates the requirements and/or processes covered by this Chapter. This manual is currently in development.

6. REFERENCES.

- a. 10 CFR 830, Subpart A, QUALITY ASSURANCE REQUIREMENTS, dated January 10, 2001.
- b. DOE P 411.1, SAFETY MANAGEMENT FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES, dated January 28, 1997.
- c. DOE P 450.4, SAFETY MANAGEMENT SYSTEM POLICY, dated October 15, 1996.
- d. DOE P 450.5, LINE ENVIRONMENT, SAFETY AND HEALTH OVERSIGHT, dated June 26, 1997.
- e. DOE O 151.1A, COMPREHENSIVE EMERGENCY MANAGEMENT SYSTEM, dated November 1, 2000.
- f. DOE O 210.1, PERFORMANCE INDICATORS AND ANALYSIS OF OPERATIONS INFORMATION, dated September 27, 1995.
- g. DOE O 225.1A, ACCIDENT INVESTIGATIONS, dated November 26, 1997.
- h. DOE O 232.1A, OCCURRENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION, dated July 21, 1997.
- i. DOE M 411.1-1B, SAFETY MANAGEMENT FUNCTIONS, RESPONSIBILITIES, AND AUTHORITIES, dated May 22, 2001.

- j. DOE O 414.1A, QUALITY ASSURANCE, dated September 29, 1999.
- k. DOE O 425.1B, STARTUP AND RESTART OF NUCLEAR FACILITIES, dated December 21, 2000.
- l. DOE O 440.1A, WORKER PROTECTION MANAGEMENT FOR DOE FEDERAL AND CONTRACTOR EMPLOYEES, dated March 27, 1998.
- m. DOE N 203.1, SOFTWARE QUALITY ASSURANCE, dated October 2, 2000.
- n. DOE G 200.1-1, SOFTWARE ENGINEERING METHODOLOGY, dated May 21, 1997.
- o. ORO O 220, Chapter V, Change 1, APPRAISAL OF DOE CONTRACTOR PERFORMANCE, dated June 18, 1999, and any subsequent revisions.
- p. ORO O 230, Chapter IV, OCCURRENCE REPORTING AND PROCESSING OF OPERATION INFORMATION, dated February 28, 1997, and any subsequent revisions.
- q. ORO O 250, Chapter V, Change 2, DEVELOPMENT, APPROVAL, AND MAINTENANCE OF WORK SMART STANDARDS, dated April 26, 2001, and any subsequent revisions.
- r. ORO O 250, Chapter VII, Change 2, MAINTENANCE OF STANDARDS/REQUIREMENTS IDENTIFICATION DOCUMENTS, dated April 27, 2001, and any subsequent revisions.
- s. ORO O 410, Chapter III, Change 2, QUALITY ASSURANCE, dated November 4, 1998, and any subsequent revisions.
- t. 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.
- u. ORO O 420, Chapter IV, Change 2, CONDUCT OF OPERATIONS REQUIREMENTS FOR DOE FACILITIES, dated December 17, 1998, and any subsequent revisions.
- v. Draft ORO M 450, ENVIRONMENT, SAFETY, AND HEALTH (ES&H) ASSESSMENT MANUAL, to be published.
- w. DOE *Criteria for Performance Excellence*.
- x. U.S. Department of Energy Report on Contract Reform, Action Item No. 27, *Department-Wide Guidelines for Coordination of Contractor Oversight Programs*, undated.
- y. *Oak Ridge Operations Office Facility Representatives Program Manual*, Revision 1, dated November 1995.
- z. DOE-STD-7501-99, *The DOE Corporate Lessons Learned Program*, dated December 1999.

- aa. DOE-HDBK-3027-99, *ISMS Verification Team Leaders Handbook*, dated June 1999.
- bb. DOE-HDBK-7502-95, *Implementing U. S. Department of Energy Lessons Learned Programs*, dated August 1995.
- cc. *U. S. Department of Energy Plan to Address and Resolve Safety Issues Identified by Internal Independent Oversight, Implementation Plan for Defense Nuclear Facilities Safety Board Recommendation 98-1*, dated March 10, 1999.
- dd. Under Secretary Grumbly's memorandum, "*Protocol for Review and Approval of Documented SMS Descriptions Associated With Defense Nuclear Facilities*," dated February 21, 1997.
- ee. ORO Manager's memorandum to the Assistant Managers, "*Guidance for Integrated Safety Management*," dated September 9, 1999.

7. DEFINITIONS.

- (a) **Corporate-Level Management Assessments** – Corporate-level ORO self-assessment of line management's programs and implementation thereof to ensure that the line is effectively performing ES&H assessments of ORO's contractors. 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.
- (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 may 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. The COR is responsible for ensuring the independence of the reviewers. (Reference Criterion 10 of DOE O 414.1A.)

- (d) **Integrated Assessment Schedule** – This schedule is a compilation of the ES&H 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.
 - (e) **Operational Awareness Assessments** may include any of a variety of activities, such as walkthroughs, to analyze and evaluate operations through observations, interviews, or documented reviews. Walkthroughs, as well as any follow up, should be documented.
 - (f) **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 (e.g., annually, every three years, every six months, 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 - Key Elements of an Effective Line Assessment Program.

CONTRACTOR REQUIREMENTS DOCUMENT

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

1. Develop and maintain a self-assessment program in accordance with DOE P 450.5 and this chapter. Provide access to final reports and corrective action tracking systems that contain results of self-assessments and their associated corrective actions. Provide copies of reports upon request.
2. Incorporate key elements of an effective ES&H oversight process into their self-assessment program as identified in DOE P 450.5 and this chapter.
3. Provide an ISMS description and annual updates to the COR and Site Manager for approval.
4. Develop performance metrics from the management level to the activity level and provide the data to the COR and Site Manager on request.
5. Provide results of self-assessment activities to the COR and Site Manager.
6. Cooperate fully with assessment teams and make relevant facilities and materials available.
7. Prepare CAPs addressing findings from assessments and other oversight activities within 30 days of being provided the assessment report.
8. Complete corrective actions in a timely manner and verify the effectiveness of those actions.
9. Evaluate trends and use trend data to make additional improvements.
10. Provide administrative support for assessments by DOE, as requested.
11. Perform ES&H oversight of direct subcontractors and their subcontractors, consistent with this chapter.
12. Develop a system/process to provide input to the ORO issues management system.

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.)

KEY ELEMENTS OF AN EFFECTIVE LINE ASSESSMENT PROGRAM

The following are paraphrased excerpts from DOE P 450.5:

1. The line (i.e., each COR) is responsible for ensuring that the contractor has a robust, rigorous, self-assessment program that has the following elements:
 - (a) Performance measures and performance indicators.
 - (b) Line and independent evaluations.
 - (c) Compliance with applicable requirements (Rules, regulatory standards, contract terms).
 - (d) Data collection, analysis, and CAPs.
 - (e) Continuous feedback and performance improvement.
2. Once the contractor has achieved an effective self-assessment program, then the line's assessments of the contractor's program move to the following:
 - (a) Operational awareness of contractor work activities, typically through DOE local line managers and staff (such as Facility Representatives, subject matter experts, and other specialists).
 - (b) Review performance against formally established ES&H performance measures, other ES&H performance indicators, and by using contractor self-assessments. Ensure that corrective action plans are in place and followed.
 - (c) Review and assess in support of required assessments, such as:
 - Readiness Assessments,
 - Operational Readiness Reviews,
 - ISMS Phase I and II verifications, and
 - Authorization basis document reviews (such as those needed for Safety Analysis Reports, Technical Safety Requirements, and Bases for Interim Operations).
 - (d) A periodic, value-added appraisal of sufficient frequency and duration to confirm the contractor's safe performance of work and the effectiveness of the self-assessment program. A cost-effective appraisal meeting the intent of this policy might need to be no more than two weeks in duration and no more than once a year at each site. The scope of periodic appraisals, including additional areas of review, is determined by field elements with input from DOE HQ and the contractor. DOE uses the analysis of contractor self-assessment results, performance measures, and operational awareness, as input to scoping the annual appraisal.

Appraisals by non-line organizations, such as EH-2, or external organizations, such as the Environmental Protection Agency and state agencies, are fully considered and not ordinarily duplicated. The appraisals are conducted primarily by DOE employees. Issues identified but unresolved during a periodic appraisal are referred to local DOE personnel (facility representatives, etc.) for further examination.

- (e) For-cause reviews, as necessary.