

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 440, Chapter IV, Change 4, RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT**

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. ORAU UT-Battelle ISOTEK (Bldg. 3019, ORNL)

Other contractors (list by type) All with radiation protection responsibility.

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 Yes
If yes, describe: This ORO Chapter is part of the ORO sunset review process. Changes to this Chapter include editorial updates.

5. **CONTACT POINT:** David Page Environmental Protection Group, SE-30-1 576-1357
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 Control Form	05/06/2002	ORO Control Form	06/21/2004
ORO O 440, Ch. IV, Chg. 3	05/06/2002	ORO O 440, Ch. IV, Chg. 4	06/21/2004

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 06/21/2004
Signature: DMG Team Leader, AD-440 Date

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

Rev. 06/14/2004

NNSA/YSO CONTROL FORM – FINAL DIRECTIVE

PART A (To be completed by the ORO DIRECTIVES MANAGEMENT GROUP, AD-440):

DIRECTIVE NUMBER, TITLE, AND DATE:

ORO O 440, CHAPTER IV, CHANGE 4, RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT, dated 06/21/2004

PURPOSE OF TRANSMITTAL: New Directive Revised Directive

DOES THIS DIRECTIVE CANCEL/REPLACE OR EXTEND ANY OTHER DIRECTIVES? Yes No
If "Yes," list what action (cancel/replace or extend) and list the Directive(s), including the number(s), title(s), and date(s):

This Directive cancels and replaces ORO O 440, Chapter IV, Change 3, RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT, dated 05/06/2002.

The attached Directive is forwarded for review and action. Complete Part B and forward this form to ORO DMG, AD-440, by 07/06/2004.

PART B (To be completed by the NNSA Y-12 SITE OFFICE, Y12-01):

CONTRACTOR APPLICABILITY:

Does this Directive affect the work performed by BWXT Y-12, L.L.C.? Yes No

Does this Directive affect the work performed by BWXT Y-12, L.L.C., subcontractors? Yes No

If "Yes," list the subcontractors:

Many contractors have approved Standards/Requirements Identification Documents (S/RID) 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.

SIGNIFICANT PROVISIONS: Are there any significant changes or impacts? Yes No

List summary of Directive changes and, if "Yes" above, describe the significant changes or impacts:

IMPLEMENTATION: Does the Directive contain special implementation requirements and/or dates? Yes No
If "Yes," describe:

FOR DOE DIRECTIVE – SUPPLEMENTAL DIRECTIVE REQUIRED?

Is a new or revised supplemental Directive required? Yes No

If "Yes," target date for submission of YSO Directive is _____.

IDENTIFY CONTACT POINT: Doug Dearolph 241-8398
Name Telephone

APPROVED BY COR FOR DIRECTIVES: Diane McCarten 06/30/2004 576-9330
Signature Date Telephone

PART C (To be completed by the ORO DIRECTIVES MANAGEMENT GROUP, AD-440):

DOE Directives are available on the DOE Directives Portal at <http://www.directives.doe.gov/>. ORO Directives are available on the ORO Directives Management Group Home Page at http://www.ornl.gov/roe/roe_oro_dmg/oro_dir.htm. Directives will no longer be mailed in printed copy unless you do not have Internet capabilities.

APPROVED FOR DISTRIBUTION IN ACCORDANCE WITH OFFICIAL DIRECTIVE DISTRIBUTION LIST:

Wayne H. Albaugh, AD-440 07/06/2004
Name Date

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

(Revised 11/06/2003)

U.S. Department of Energy

Oak Ridge Operations

ORO O 440
Chapter IV
Change 4

DATE: 06/21/2004

SUBJECT: RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT

1. PURPOSE. This Chapter correlates to DOE 5400.5, Change 2, RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT, dated January 7, 1993. This Oak Ridge Operations (ORO) Chapter assigns responsibility and accountability and provides administrative and/or contractual guidance to ORO and its contractors. Nothing in this issuance changes any requirements contained in any Department of Energy (DOE) Directive.
2. CANCELLATION. This Chapter cancels and replaces ORO O 440, Chapter IV, Change 3, RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT, dated May 6, 2002.
3. APPLICABILITY. The provisions of this Chapter apply to ORO Principal Staff, management and operating contractors, other contractors that have responsibility for operating DOE-owned facilities, and other contractors with responsibility for radiation protection of the public and the environment to the extent set forth in their contract.
4. RESPONSIBILITIES. Many ORO contractors have developed Standards/Requirements Identification Documents (S/RIDs) or Work Smart Standards (WSS) Sets that may not include requirements referenced or included in DOE 5400.5, Change 2, or this Chapter. Interpretation and performance of Federal responsibilities outlined below must take into account the approved standards set for each particular contract and must not be deemed to add any requirements to the approved set.
 - a. Manager.
 - (1) Approves and forwards to the relevant program office(s) and the Deputy Assistant Secretary for Environment (EH-4) reports or conditions that are required to be reported by DOE 5400.5, Change 2, Chapter II, Paragraph 7.
 - (2) Transmits to the Assistant Secretary for Environment, Safety, and Health (EH-1) requests for temporary increases in the public dose limit pursuant to DOE 5400.5, Change 2, Chapter II, subparagraph 1a(4).
 - (3) Temporarily suspends requirements of DOE 5400.5, Change 2, when doing so is in his/her judgment necessary to minimize damage to life or property or to protect public health and safety. Whenever this provision is invoked, such suspension and the reason therefore are to be reported to EH-1.

- b. Assistant Manager for Environment, Safety, Health, and Emergency Management.
- (1) Reviews and concurs/nonconcurr in requests for exceptions to the dose limit standards of DOE 5400.5, Change 2 or other DOE guidelines concerning environmental radiological protection of the public and the environment.
 - (2) In coordination with the Contracting Officer's Representatives (CORs), provides oversight of radiation protection of the public and the environment.
 - (3) Concurs on reports to the Manager that describe conditions identified in DOE 5400.5, Change 2, Chapter II, Paragraph 7.
 - (4) Concurs with the COR in such actions as may be appropriate, including curtailment and suspension of operations when, in his/her opinion, such operations may result in undue risk to the public and the environment.
 - (5) Reviews and concurs/nonconcurr in requests to establish volumetric limits for radioactivity to regulatory agencies and EH-1.
- c. Team Leader, Environmental Protection Group (EPG).
- (1) Reviews plans, reports, and documents that are developed, as required by DOE 5400.5, Change 2, and DOE O 231.1A, to ensure they are technically correct, adequately address current and upcoming environmental and public radiological issues, meet DOE requirements, and cover the scope of the ongoing radiological protection programs.
 - (2) Provides technical support to the CORs to accomplish radiological protection of the public and the environment objectives; and assists in routine and special communications with regulatory agencies, DOE Headquarters (HQ), the public, and others.
 - (3) Advises and assists the COR and contractors to ensure that prescribed environmental radiological standards, policies, laws, and permits are considered in the specifications of new facilities, during decontamination and decommissioning of facilities, in the establishment of volumetric limits for radioactivity, and during remedial action activities.
 - (4) Concurs with exceptions to the dose limit requirements of DOE 5400.5, Change 2, or other DOE guidelines concerned with radiological protection of the public and the environment that must be submitted to HQ for approval.
 - (5) Coordinates the preparation of ORO-wide consensus comments on draft guidance, draft reports, memoranda of understanding, pending legislation, and other documents issued/distributed by the HQ Offices of the Deputy Assistant Secretary for Environment (EH-4) concerning radiation protection of the public and the environment.
 - (6) Coordinates the preparation of the Annual Radionuclide National Emission Standards for Hazardous Air Pollutants reports required by DOE 5400.5, Change 2, and Title 40, Code of Federal Regulations (CFR), Part 61, Subpart H.

d. Contracting Officers/Contracting Officer's Representatives.

- (1) Concur in and forward to the Manager and the appropriate program office, contractor requests for exceptions to the dose limit requirements of DOE 5400.5, Change 2, or other DOE guidelines concerned with radiological protection of the public and the environment.
- (2) Conduct or oversee appraisals of contractors' compliance with the requirements of DOE 5400.5, Change 2, and this Chapter, including resolution of deficiencies.
- (3) Certify to the appropriate program office(s), with a copy to EH-1, those requirements and programs of DOE 5400.5, Change 2, with which the site is in compliance.
- (4) Utilize, and require contractors to utilize, the As Low As Reasonably Achievable (ALARA) process for all DOE activities and facilities as specified in DOE 5400.5, Change 2, Chapter II, Paragraph 2.
- (5) Endorse or disapprove contractor requests for exemptions, where the site is not in compliance, to applicable requirements and programs of DOE 5400.5, Change 2, and approve/disapprove plans and schedules for achieving compliance. Exemption requests for areas of noncompliance are to be forwarded to the appropriate program office(s).
- (6) Review, approve, and inform the Manager, through EPG, of conditions that are required to be reported by DOE 5400.5, Change 2, Chapter II, Paragraph 7.
- (7) Approve/disapprove in emergency situations requests for exceptions from the requirements of DOE 5400.5, Change 2. Report any such action in accordance with DOE O 231.1A, ENVIRONMENT, SAFETY, AND HEALTH REPORTING, dated August 19, 2003.
- (8) Temporarily suspend the requirements of DOE 5400.5, Change 2, when doing so is, in their judgment, necessary to minimize danger to life or property or to protect public health and safety. Such suspension is to be reported to EH-1 at the earliest practical time.
- (9) Consult with the appropriate Cognizant Secretarial Officer (CSO) or Operations Office Health Physics Representative concerning the applicability of supplemental or interim guidance issued by EH-1 or others intended to implement DOE 5400.5, Change 2. If the guidance is applicable, formally transmit it to the contractor(s).
- (10) Approve plans and schedules to install or update waste water treatment systems in existing facilities when justified by the best available technology analysis.
- (11) Develop and propose to the CSO an interim strategy, with documentation, when unable to comply with the requirements to manage and control radioactive materials in liquid discharges or to phase out soil columns.
- (12) For real property that has been remediated to as low as practicable levels and is to be released for general public use, provide a statement specifying the levels of residual radioactive material present at sites where the cost of remedial action for contaminated

soil is unreasonably high in terms of long-term benefits and where the residual materials do not pose a clear present or future risk after necessary control measures have been taken. Provide this statement to State and/or local agencies in accordance with the guidelines of DOE 5400.5, Change 2.

5. REQUIREMENTS AND PROCEDURES. None.
6. REFERENCES.
 - a. Title 40, CFR, Part 61, Subpart H, NATIONAL EMISSION STANDARDS FOR EMISSIONS OF RADIONUCLIDES OTHER THAN RADON FROM DEPARTMENT OF ENERGY FACILITIES.
 - b. DOE O 231.1A, ENVIRONMENT, SAFETY, AND HEALTH REPORTING, dated August 19, 2003.
7. DEFINITIONS. None.
8. CONTRACTOR REQUIREMENTS DOCUMENT. See Contractor Requirements Document, Attachment 1 of this Chapter.
9. ATTACHMENTS.
 - a. Attachment 1 - Contractor Requirements Document.

CONTRACTOR REQUIREMENTS DOCUMENT

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

1. Establish and maintain an Environmental Radiation Protection Program consistent with the requirements of DOE 5400.5, Change 2 and this Chapter.
2. Develop and implement the As Low As Reasonably Achievable (ALARA) process for radiation protection of the public and the environment for all Department of Energy (DOE) activities and facilities.
3. Ensure that DOE environmental radiation protection standards and guides are incorporated in plans and specifications for all new facilities, in major modifications to existing facilities, in decontamination and decommissioning of existing facilities, in the establishment of volumetric limits for radioactivity, and in remedial action activities.
4. Initiate specific requests for dose limit exceptions pursuant to DOE 5400.5, Change 2, Chapter II, subparagraph 1a(4) or other DOE guidelines concerned with radiological protection of the public and the environment.
5. If the site is not in compliance with applicable requirements and programs of DOE 5400.5, Change 2, initiate requests for exemptions and develop a plan and schedule, based on the availability of funds, for achieving compliance.
6. Conduct internal appraisals of the Environmental Radiation Protection Program in accordance with their Integrated Safety Management Description regarding feedback and continuous improvement.
7. Multiple contractors on a site will have documented agreements among themselves delineating responsibilities for DOE 5400.5, Change 2.