



# U.S. Department of Energy

Oak Ridge Operations

ORO O 440 Chapter IV
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DATE: 9-30-96

**SUBJECT: RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT**

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1. PURPOSE. This Chapter correlates to DOE O 441.1 (formerly DOE 5400.5), RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT, dated February 8, 1990, which has now been renumbered in accordance with the new DOE Order Numbering System, as published in DOE M 251.1-1, Change 1, dated December 12, 1995. Nothing within the DOE Order has been changed at this point, but if a new DOE Order is published, it will be numbered in this manner. Until that time, the new number is assigned to the previous DOE Order. This new 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 DOE Order.
2. CANCELLATION. This Chapter cancels and replaces ORIG N 5400.5C, RADIATION PROTECTION OF THE PUBLIC AND THE ENVIRONMENT, dated March 22, 1995.
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 (e.g., American Museum of Science and Energy), and other contractors with responsibility for radiation protection of the public and the environment (e.g., Bechtel National, Inc., and MK-Ferguson Company at Weldon Spring, Missouri).
4. RESPONSIBILITIES.
  - a. Manager.
    - (1) Approves and forwards to the relevant program office(s) and the Deputy Assistant Secretary for the Environment reports or conditions that are required to be reported by DOE O 441.1, 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 O 441.1, Chapter II, subparagraph 1a(4).
    - (3) Temporarily suspends requirements of DOE O 441.1 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, and Quality.
    - (1) Reviews and concurs/nonconcurr in requests for exceptions to the dose limit standards of DOE O 441.1 or other DOE guidelines concerning environmental radiological protection of the public and the environment.

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INITIATED BY: TECHNICAL SUPPORT DIVISION

- (2) In coordination with the Contracting Officers' Representatives (COR), provides oversight of radiation protection of the public and the environment.
  - (3) Concur on reports to the Manager that describe conditions identified in DOE O 441.1, Chapter II, paragraph 7.
  - (4) Concur 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.
- c. Director, Technical Support Division (TSD).
- (1) Reviews plans, reports, and documents that are developed as required by DOE O 441.1 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 COR 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, and during remedial action activities.
  - (4) Concur with exceptions to the dose limit requirements of DOE O 441.1 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 Environmental Guidance and Environmental Compliance.
  - (6) Coordinates the preparation of the Annual Radionuclide National Emission Standards for Hazardous Air Pollutants reports required by DOE O 441.1 and 40 CFR 61, Subpart H.
- d. Contracting Officers/Contracting Officers' 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 O 441.1 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 O 441.1 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 O 441.1 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 O 441.1, 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 O 441.1, 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 TSD, of conditions that are required to be reported by DOE O 441.1, Chapter II, paragraph 7.
- (7) Approve/disapprove in emergency situations requests for exceptions from the requirements of DOE O 441.1. Report any such action in accordance with DOE O 231.2 (formerly DOE 5484.1), ENVIRONMENTAL PROTECTION, SAFETY AND HEALTH PROTECTION INFORMATION REPORTING REQUIREMENTS, dated February 24, 1981.
- (8) Temporarily suspend the requirements of DOE O 441.1 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 O 441.1. 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 O 441.1.

5. REQUIREMENTS AND PROCEDURES. None.
6. REFERENCES. None.
7. DEFINITIONS. None.
8. CONTRACTOR REQUIREMENTS DOCUMENT. See Contractor Requirements Document, Attachment 1 of this Chapter.
9. ATTACHMENTS.

Attachment 1 - Contractor Requirements Document.

**CONTRACTOR REQUIREMENTS DOCUMENT**

Contractors that are identified in paragraph 3 of this Chapter shall accomplish the following:

1. Establish and maintain an environmental radiation protection program consistent with the requirements of DOE O 441.1 and this Chapter.
2. Develop and implement the ALARA process for radiation protection of the public and the environment for all 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, and in remedial action activities.
4. Initiate specific requests for dose limit exceptions pursuant to DOE O 441.1, 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 O 441.1, 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 radiological protection of the public and the environment program in accordance with DOE O 224.3 (formerly DOE 5482.1B), ENVIRONMENT, SAFETY, AND HEALTH APPRAISAL PROGRAM, dated September 23, 1986.
7. Multiple contractors on a site shall have documented agreements among themselves delineating responsibilities for DOE O 441.1.