

U.S. Department of Energy

Oak Ridge Office

ORO O 410
Chapter II
Change 4

DATE: 11/16/2006

SUBJECT: MANAGEMENT OF NUCLEAR MATERIALS

1. PURPOSE. This Chapter correlates to DOE O 5660.1B, MANAGEMENT OF NUCLEAR MATERIALS, dated May 26, 1994, and subsequent Department of Energy (DOE) Defense Programs Policy Guidance, SUMMARY OF NUCLEAR MATERIALS MANAGEMENT POLICY GUIDANCE, dated December 12, 2000, by assigning responsibility and accountability and providing administrative and contractual guidance to the Oak Ridge Office (ORO), and its contractors, for the management of nuclear materials. Nothing in this issuance changes any requirements contained in any DOE Directive.
2. CANCELLATION. This Chapter cancels and replaces ORO O 410, Chapter II, Change 3, MANAGEMENT OF NUCLEAR MATERIALS, dated February 23, 2004.
3. APPLICABILITY. The provisions of this Chapter apply to ORO Staff and contractors 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 O 5660.1B 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. Assistant Manager for Science.
 - (1) Ensures that the Oak Ridge National Laboratory (ORNL) annually provides a 5-year forecast of nuclear materials requirements, and reviews/approves this forecast prior to submission to the ORO Office for Security and Emergency Management (OSEM).
 - (2) Coordinates with ORO contractors, and OSEM staff for special nuclear materials transaction deliveries based on approved materials allotments.
 - b. Assistant Manager for Security and Emergency Management.
 - (1) Performs those tasks identified in DOE O 5660.1B as follows:
 - (a) Subparagraphs 8i (1), (2), (5)-(11), and (18);
 - (b) Chapter I, subparagraph 2a (which addresses forecasting requirements) as modified by the referenced December 1997 policy guidance and any subsequent revisions;

- (c) Chapter III, subparagraph 5c (which addresses guidance, funding, and implementation of analytical studies); and
 - (d) Chapter V, subparagraph 2a (which addresses inventory management).
- (2) Reviews and approves the nuclear materials forecasts and related assumptions for ORO programs.
 - (3) Provides the Contracting Officer's Representative(s) (COR) with assumptions to be used in preparing the annual nuclear material inventory assessment.
 - (4) Issues withdrawal allotments to the COR for Special Nuclear Material (SNM) from the Materials Manager's Inventory and ensures that they fall within the established allotment control system mandated by the Director, Office of Stockpile Technology, NA-123, National Nuclear Security Administration.
- d. Contracting Officer's Representatives.
- (1) Perform those tasks identified in DOE O 5660.1B, subparagraphs 8i (3)-(5) and (12)-(15), to the extent those requirements are included in a contract.
 - (2) Determine which actions are to be taken by contractors and subcontractors to meet the allotment status report and assessment plan objectives of DOE O 5660.1B.
 - (3) Assist in site appraisals of nuclear materials management.
 - (4) Provide to OSEM copies of special analytical studies related to SNM.

5. REQUIREMENTS AND PROCEDURES.

- a. Forecasting Nuclear Materials Requirements. The 5-year nuclear materials forecast requirements will be provided to the OSEM no later than May 25 in a format for electronic transmission and conversion to storage media usable on personal computers. Quantities below the threshold quantities defined in DOE O 5660.1B, Attachment I-1, subparagraph 1b, may be omitted. These requirements are applicable to weapons and non-weapons research and development projects, non-production reactor projects (e.g., research reactor fabrication feedstock).
- b. Nuclear Materials Allotments. Authorization for withdrawal or shipment of any nuclear materials will be obtained by the respective site prior to any such transaction, as required in DOE O 5660.1B, Chapter IV. The annual allotment status reports will be submitted to OSEM by November 15. Comments to support any significant changes in transactions will be included in the report. The end of the fiscal year allotment status reports will contain a summary of all withdrawals and returns, which will be submitted in format for electronic transmission and conversion to storage media usable on personal computers.
- c. Annual Nuclear Material Inventory Assessment Reports. Unless otherwise agreed, all ORO Site Offices, including, Oak Ridge National Laboratories, and East Tennessee Technology Park, and sites under the Portsmouth Paducah Project Office, will provide to OSEM an annual

assessment of its nuclear material inventories for the past fiscal year within 60 calendar days of reconciling end-of-year inventories with the Nuclear Materials Management and Safeguards System (NMMSS), using guidance provided by ORO.

- d. Miscellaneous Activities. All ORO Sites will annually review all assigned project numbers and report any recommended changes to OSEM within 15 calendar days of receiving the NMMSS T-147 report.

6. REFERENCES.

- a. Memorandum from Xavier Ascanio, Director, Office of Operations and Construction Management for Defense Programs, SUMMARY OF NUCLEAR MATERIALS MANAGEMENT POLICY GUIDANCE, dated December 12, 2003, and subsequent revisions.

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 will accomplish the following to the extent set forth in their contract:

1. Implement nuclear materials management programs that conform with the policies and standards set forth in Department of Energy (DOE) O 5660.1B and this Chapter.
2. Incorporate appropriate nuclear materials management provisions in subcontracts.
3. Identify and promptly handle excess nuclear materials in accordance with DOE O 5660.1B and this Chapter.
4. Process and/or dispose of scrap consistent with DOE policy and procedures and appropriate funding availability.
5. Provide to the Contracting Officer's Representative by May 25 of each fiscal year forecasts for each existing, authorized, and contemplated research, development, and reactor project having or needing nuclear materials during the ensuing 5 fiscal years.
6. Perform analytical studies of nuclear materials management optimization issues based on guidance and information provided by DOE, and coordinate such studies with the appropriate DOE Headquarters organization.