

U.S. Department of Energy
Washington, D.C.

ORDER

DOE O 462.1A

Approved: 08-05-2026

**SUBJECT: IMPORT AND EXPORT OF CATEGORY 1 AND 2 RADIOACTIVE SOURCES
AND AGGREGATED QUANTITIES**

1. PURPOSE.

- a. This Order establishes the United States (U.S.) Department of Energy (DOE) requirements for the import and export of Category 1 and 2 radioactive sources and aggregated quantities that meet Category 1 or Category 2 threshold levels in support of the International Atomic Energy Agency (IAEA) CODEC/2004, Code of Conduct on the Safety and Security of Radioactive Sources, and CODEC/IMP-EXP/2005, Guidance on the Import and Export of Radioactive Sources.
- b. This Order assigns responsibilities and prescribes requirements for Departmental Elements and DOE contractors that conduct or support covered import/export activities.

2. CANCELLATIONS. This Order cancels DOE Order (O) 462.1, *Import and Export of Category 1 and 2 Radioactive Sources and Aggregated Quantities*, approved November 10, 2008, including Admin Chg 1 of July 10, 2013; certified: December 3, 2014. Cancellation of a directive does not, by itself, modify or otherwise affect any contractual or regulatory obligation to comply with applicable statutes, regulations, or contract terms.

3. APPLICABILITY.

a. Departmental Applicability.

- (1) Except as excluded in this section, this Order applies to all Departmental Elements that engage in the import or export of Category 1 and 2 radioactive sources and aggregated quantities that meet Category 1 or Category 2 threshold levels.
- (2) This Order must be implemented consistent with applicable United States (U.S.) law.
- (3) This Order must not be implemented in a manner designed to impede international commerce.

- (4) This Order must not be construed to supersede applicable requirements under other multilateral import and export arrangements, including those stemming from Nuclear Suppliers Group control lists and guidelines.

b. National Nuclear Security Administration Applicability.

- (1) The Administrator of the National Nuclear Security Administration (NNSA) must ensure that NNSA employees comply with their responsibilities under this Order.
- (2) Nothing in this Order must be construed to interfere with the NNSA Administrator's authority under Section 3212(d), Administrator for Nuclear Security, of Public Law 106-65, National Defense Authorization Act for Fiscal Year 2000, to establish Administration-specific policies, unless disapproved by the Secretary.

c. DOE Contractor Applicability.

- (1) Except as excluded in this section, DOE contractors that perform work involving the import or export of covered Category 1 and 2 radioactive sources and aggregated quantities must comply with the requirements of this Order applicable to their activities.
- (2) DOE contractors must not conduct activities directly related to the import or export of covered Category 1 and 2 radioactive sources unless written direction is received from the cognizant DOE contracting officer, and must verify such authorization prior to initiating any activity.
- (3) The requirements of this Order shall be incorporated into applicable contracts, including Management and Operating contracts. The contractor is responsible for flowing down the requirements of this Contractor Requirements Document, if applicable. Contractors shall comply with the requirements of applicable federal, state, and local laws and regulations in carrying out the requirements of this Order unless relief has been granted in writing. Omission of any applicable law or regulation from the Order does not affect the obligation of the contractor to comply with such law or regulation. Contractors must comply with the requirements of this Order, except to the extent modified by the equivalencies or exemptions identified herein or issued to the contractor in writing by DOE utilizing the process outlined in DOE O 251.1E, *Departmental Directives Program*, including as amended or updated.

d. Exclusions/Equivalencies.

- (1) This Order does not apply to imports or exports of Category 1 and 2 Radioactive Sources within military or defense programs.

- (2) This Order does not apply to imports or exports of radioactive material regulated, controlled, or licensed by the Nuclear Regulatory Commission pursuant to the *Atomic Energy Act of 1954*, as amended, and 10 CFR Part 110, Export and Import of Nuclear Equipment and Material.
- (3) This Order does not apply to imports or exports of Category 1 and 2 radioactive sources other than those within this Order's scope (i.e., Category 1 or 2 sources and aggregated quantities meeting Category 1 or 2 threshold levels).
- (4) Naval Nuclear Propulsion Program Equivalency. In accordance with Executive Order 12344, Naval Nuclear Propulsion Program, codified at 50 U.S.C. §§ 2406, Deputy Administrator for Naval Reactors, and 2511, Naval Nuclear Propulsion Program, the Deputy Administrator for Naval Reactors (Director) must implement and oversee requirements and practices pertaining to this Order for activities under the Director's cognizance, as deemed appropriate.

4. REQUIREMENTS.

a. General.

- (1) Covered imports and exports of Category 1 and 2 radioactive sources and aggregated quantities must be conducted in compliance with applicable U.S. laws, regulations, DOE directives, and nonproliferation and security objectives, including minimizing risk of malicious use.
- (2) Covered imports and exports must be conducted in a manner that supports nonproliferation and nuclear security objectives, including reducing the risk of malicious acts involving radioactive sources.

b. Requirements for Importing Radioactive Sources.

- (1) The exporting state must provide to the receiving organization:
 - (a) Recipient name and address;
 - (b) Radionuclide(s) and activity;
 - (c) Unique source identifier where available;
 - (d) Expected timeframe for shipment.
- (2) The importing organization must verify:
 - (a) Recipient authorization;
 - (b) Regulatory approval from the importing state.

- (3) Imports of covered Category 1 and 2 radioactive sources must be conducted in compliance with applicable U.S. laws, regulations, DOE directives, and nonproliferation and security objectives, including minimizing risk of malicious use.
- (4) Importing activities must maintain records as auditable records demonstrating compliance with this Order for covered imports in accordance with DOE O 243.1C, *Records Management Program*.
- (5) Import of the radioactive source must be reported to the U.S. national system, the Nuclear Materials Management and Safeguards System (NMMSS). Instruction for reporting imports to NMMSS are in NMMSS Users Guide, a copy of which can be obtained by contacting NMMSS analysts at NMMSS@nnsa.doe.gov.

c. Requirements for Exporting Radioactive Sources.

- (1) Exporting organizations must include the following requirements to the approving official:
 - (a) Provide consent request including recipient, radionuclide(s), activity, and end-use;
 - (b) Verify importing state authorization;
 - (c) Verify recipient authorization;
 - (d) Assess proliferation and security risk;
 - (e) Provide advance notification to the importing state;
 - (f) Ensure compliance with transport requirements.
- (2) Exports of covered Category 1 and 2 radioactive sources must be conducted in compliance with applicable U.S. laws, regulations, DOE directives, and nonproliferation and security objectives, including minimizing risk of malicious use.
- (3) Exporting activities must maintain records as auditable records demonstrating compliance with this Order for covered exports in accordance with DOE O 243.1C.

d. Exceptional Circumstances (Senior-Level Authorization).

Exceptional circumstances must include documented justification:

- (1) If applicable import/export requirements cannot be followed for a proposed covered import or export, the activity must not proceed unless authorized under this section.

- (2) An import or export under exceptional circumstances must be authorized by the Deputy Secretary of Energy.
- (3) The responsible Departmental Element must consult with the NNSA Office of Defense Nuclear Nonproliferation and document the consultation outcome prior to seeking authorization regarding the applicability of exceptional circumstances prior to seeking authorization.
- (4) Exceptional circumstances must be limited to the following conditions:
 - (a) Considerable health or medical need acknowledged by the importing and exporting states; or
 - (b) Imminent radiological hazard or security threat presented by one or more radioactive sources; or
 - (c) A situation in which the exporting facility or exporting state maintains control of the radioactive sources during the period they are outside the exporting state and removes the sources at the conclusion of their use.

5. RESPONSIBILITIES.

- a. Deputy Secretary of Energy. The Deputy Secretary must authorize covered imports or exports in exceptional circumstances when applicable import/export requirements cannot be followed.
- b. Administrator, NNSA.
 - (1) The NNSA Administrator must ensure that NNSA employees comply with their responsibilities under this Order.
- c. Importing and Exporting Organizations (Departmental Elements conducting covered activities).
 - (1) Importing and exporting organizations must implement the applicable import and export requirements of this Order for covered activities.
 - (2) Importing and exporting organizations must consult with the NNSA Office of Defense Nuclear Nonproliferation and document the consultation outcome prior to seeking authorization when applicable import/export requirements cannot be followed for a proposed covered activity (including when exceptional-circumstance authorization may be required).
 - (3) Importing and exporting organizations must maintain records as auditable records demonstrating compliance with this Order of covered imports and exports in accordance with DOE O 243.1C.

- (4) Export of the radioactive source must be reported to NMMSS. Instructions for reporting imports to NMMSS are in NMMSS Users Guide. A copy can be obtained by contacting NMMSS analysts at NMMSS@nnsa.doe.gov.

d. DOE Contractors Performing Covered Activities.

- (1) DOE contractors must comply with the requirements of this Order applicable to their covered import/export activities as outlined in the Order and Attachment 1.
- (2) DOE contractors must not conduct activities directly related to the import or export of covered Category 1 and 2 radioactive sources unless written direction is received from the cognizant DOE contracting officer, and must verify such authorization prior to initiating any activity.

- e. Contracting Officer. For all applicable contracts and upon notification that a site/facility management contract is affected by this Order, the contracting officer(s) shall incorporate the requirements into the affected contract(s) via the “Laws, Regulations, and DOE Directives” clause of the contract, or through negotiation and modification, as appropriate.

6. REFERENCES.

- a. *Atomic Energy Act of 1954*, as amended, codified at 42 U.S.C. §§ 2011-2286i.
- b. *Energy Reorganization Act of 1974*, as amended, codified at 42 U.S.C. §§ 5801-5891.
- c. Executive Order 12344, “Naval Nuclear Propulsion Program,” codified at 50 U.S.C. §§ 2406, *Deputy Administrator for Naval Reactors*.
- d. 10 CFR Part 110, *Export and Import of Nuclear Equipment and Material*.
- e. DOE O 243.1C, *Records Management Program*, dated February 8, 2022.
- f. DOE O 251.1E, *Departmental Directives Program*, dated December 19 2024.
- g. IAEA/CODEC/2004, “Code of Conduct on the Safety and Security of Radioactive Sources,” January 2004.
- h. IAEA/CODEOC/IMP-EXP/2005, “Guidance on the Import and Export of Radioactive Sources,” March 2005.
- i. *Nuclear Materials Management and Safeguards System Users Guide*.

7. DEFINITIONS.

- a. Aggregated quantities. Accumulation of sources into a single location where sources are in close proximity, treated as one source for category assignment.
- b. Authorization. Written permission in the form of a registration, license, or alternative legal control granted by a regulatory body.
- c. Category. A designation (Category 1, 2 or 3) of radioactive sources based on quantity, type and health effects as defined in IAEA TECDOC 1344, Categorization of Radioactive Sources.
- d. Defense or military programs. All activities or operations directly related to the defense of the United States of America and all activities or operations carried out by, or for, any branch of the U.S. armed services.
- e. End-use. Ultimate use of an exported item.
- f. End-user. Person or entity abroad that receives and ultimately uses exported items, not a forwarding agent or intermediary.
- g. Radioactive source. Radioactive material permanently sealed in a capsule or bonded in solid form, not exempt from regulatory control.
- h. State. Nation state or country for purposes of this Order.

8. CONTACT. Address questions concerning this Order to the NNSA Office of Defense Nuclear Nonproliferation's Office of Nonproliferation and Arms Control at npacactions@nnsa.doe.gov.



JAMES P. DANLY
Deputy Secretary

ATTACHMENT 1
CONTRACTOR REQUIREMENTS DOCUMENT
DOE O 462.1A, IMPORT AND EXPORT OF RADIOACTIVE SOURCES

Regardless of the performer of the work, the contractor is responsible for complying with the requirements of this Contractor Requirements Document (CRD) and flowing down CRD requirements to subcontractors at any tier to the extent necessary to ensure contractor compliance.

1. GENERAL.

- a. Department of Energy (DOE) contractors shall not conduct activities directly related to the import or export of Category 1 and 2 radioactive sources unless written direction is received from the cognizant DOE contracting officer.
- b. Contractors must assist DOE personnel with actions in support of the International Atomic Energy Agency (IAEA) IAEA/CODEOC/2004, Code of Conduct on the Safety and Security of Radioactive Sources, and IAEA/CODEOC/IMP-EXP/2005, Guidance on the Import and Export of Radioactive Sources.
- c. The requirements contained in this CRD are intended to cover activities involving the export or import of Category 1 and 2 radioactive sources.
- d. Maintain records in accordance with DOE directives.

2. REQUIREMENTS FOR IMPORTING RADIOACTIVE SOURCES.

- a. All imports of Category 1 and 2 radioactive sources must be conducted in compliance with U.S. laws, regulations, and policies and with DOE standards and directives.
- b. During the import of Category 1 and 2 radioactive sources, the contractor will prepare supporting documentation as directed by DOE, which may include
 - (1) Name of the recipient organization,
 - (2) Recipient location and legal address or principal place of business,
 - (3) Radionuclides and radioactivity of the shipment,
 - (4) Unique identifier for the request,
 - (5) Recommended timeframe for a decision on the request; and
 - (6) Statement that the radioactive sources will be transported, utilized, and managed in a manner consistent with DOE standards, directives, and other requirements related to the safety and security of radioactive sources.

3. REQUIREMENTS FOR EXPORTING RADIOACTIVE SOURCES.

- a. All exports of Category 1 and 2 radioactive sources must be conducted in compliance with U.S. laws, regulations, and policies and with DOE standards and directives.
- b. During the export of Category 1 and 2 radioactive sources, the contractor will prepare supporting documentation as directed by DOE, which may include
 - (1) Name of the recipient organization,
 - (2) Recipient location and legal address or principal place of business,
 - (3) Radionuclides and radioactivity of the shipment,
 - (4) Unique identifier for this request,
 - (5) End-uses and end-users,
 - (6) Timeframe for actions associated with the export, and
 - (7) Description of the importing state's regulatory framework for Category 1 and 2 radioactive sources.
 - (8) Ensure that
 - (a) Written consent for the export has been provided by the importing state, and
 - (b) The recipient is authorized to receive the radioactive sources under U.S. law and policy and laws and policies of the importing state.