

## Nuclear Regulatory Commission

## § 110.2

U.S.C. 2403). Section 110.11 also issued under sec. 122, 68 Stat. 939 (42 U.S.C. 2152) and secs. 54c and 57d, 88 Stat. 473, 475 (42 U.S.C. 2074). Section 110.27 also issued under sec. 309(a), Pub. L. 99-440. Section 110.50(b)(3) also issued under sec. 123, 92 Stat. 142 (42 U.S.C. 2153). Section 110.51 also issued under sec. 184, 68 Stat. 954, as amended (42 U.S.C. 2234). Section 110.52 also issued under sec. 186, 68 Stat. 955 (42 U.S.C. 2236). Sections 110.80-110.113 also issued under 5 U.S.C. 552, 554. Sections 110.130-110.135 also issued under 5 U.S.C. 553. Sections 110.2 and 110.42(a)(9) also issued under sec. 903, Pub. L. 102-496 (42 U.S.C. 2151 et seq.).

SOURCE: 43 FR 21641, May 19, 1978, unless otherwise noted.

### Subpart A—General Provisions

#### § 110.1 Purpose and scope.

(a) The regulations in this part prescribe licensing, enforcement, and rule-making procedures and criteria, under the Atomic Energy Act, for the export of nuclear equipment and material, as set out in §§ 110.8 and 110.9, and the import of nuclear equipment and material, as set out in § 110.9a. This part also gives notice to all persons who knowingly provide to any licensee, applicant, contractor, or subcontractor, components, equipment, materials, or other goods or services, that relate to a licensee's or applicant's activities subject to this part, that they may be individually subject to NRC enforcement action for violation of § 110.7b.

(b) The regulations in this part apply to all persons in the United States except: (1) The Departments of Defense and Energy for activities authorized by sections 54, 64, 82, and 91 of the Atomic Energy Act, except when the Department of Energy seeks an export license under section 111 of the Atomic Energy Act;

(2) Persons who export or import U.S. Munitions List nuclear items, such as uranium depleted in the isotope-235 and incorporated in defense articles. These persons are subject to the controls of the Department of State pursuant to 22 CFR 120-130 "International Traffic in Arms Regulations" (ITAR), under the Arms Export Control Act, as authorized by section 110 of the International Security and Development Cooperation Act of 1980;

(3) Persons who export uranium depleted in the isotope-235 and incorporated in commodities solely to take advantage of high density or pyrophoric characteristics. These persons are subject to the controls of the Department of Commerce under the Export Administration Act, as authorized by section 110 of the International Security and Development Cooperation Act of 1980;

(4) Persons who export nuclear referral list commodities. These persons are subject to the licensing authority of the Department of Commerce pursuant to 15 CFR part 799, such as bulk zirconium, rotor and bellows equipment, maraging steel, nuclear reactor related equipment, including process control systems and simulators; and

(5) Persons who import deuterium, nuclear grade graphite, or nuclear equipment other than production or utilization facilities. A uranium enrichment facility is not a production facility.

(6) Shipments which are only passing through the U.S. (in bond shipments) do not require an NRC import or export license; however, they must comply with the Department of Transportation/ IAEA packaging, and state transportation requirements.

[49 FR 47197, Dec. 3, 1984; 49 FR 49841, Dec. 24, 1984, as amended at 55 FR 34519, Aug. 23, 1990; 56 FR 40692, Aug. 15, 1991; 58 FR 13001, Mar. 9, 1993; 61 FR 35602, July 8, 1996; 63 FR 1900, Jan. 13, 1998; 65 FR 70289, Nov. 22, 2000]

#### § 110.2 Definitions.

As used in this part,

*Agreement for cooperation* means any agreement with another nation or group of nations concluded under section 123 of the Atomic Energy Act, as amended.

*Atomic Energy Act* means the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011).

*Byproduct material* means

(1) Any radioactive material (except special nuclear material) yielded in, or made radioactive by, exposure to the radiation incident to the process of producing or using special nuclear material (as in a reactor); and

(2) The tailings or wastes produced by the extraction or concentration or

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uranium or thorium from ore (see 10 CFR 20.1003).

*Classified information* means National Security Information classified under Executive Order 12356.

*Commission* means the United States Nuclear Regulatory Commission or its duly authorized representatives.

*Common defense and security* means the common defense and security of the United States.

*Conversion facility* means any facility for the transformation from one uranium chemical species to another, including: conversion of uranium ore concentrates to UO<sub>3</sub>, conversion of UO<sub>3</sub> to UO<sub>2</sub>, conversion of uranium oxides to UF<sub>4</sub> or UF<sub>6</sub>, conversion of UF<sub>4</sub> to UF<sub>6</sub>, conversion of UF<sub>6</sub> to UF<sub>4</sub>, conversion of UF<sub>4</sub> to uranium metal, and conversion of uranium fluorides to UO<sub>2</sub>.

*Depleted uranium* means uranium having a percentage of uranium-235 less than the naturally occurring distribution of U-235 found in natural uranium (less than 0.711 weight percent U-235). It is obtained from spent (used) fuel elements or as byproduct tails or residues from uranium isotope separation.

*Deuterium* means deuterium and any deuterium compound, including heavy water, in which the ratio of deuterium atoms to hydrogen atoms exceeds 1:5000.

*Disposal* means permanent isolation of radioactive material from the surrounding environment.

*Dual-use* means equipment and materials that may be used in nuclear or non-nuclear applications.

*Effective kilograms of special nuclear material* means:

(1) For plutonium and uranium-233, their weight in kilograms;

(2) For uranium enriched 1 percent or greater in the isotope U-235, its element weight in kilograms multiplied by the square of its enrichment expressed as a decimal weight fraction; and

(3) For uranium enriched below 1 percent in the isotope U-235, its element weight in kilograms multiplied by 0.0001.

*Embargoed* means that no nuclear material or equipment can be exported to certain countries under an NRC general license because there is a U.S. trade embargo in effect.

*Executive Branch* means the Departments of State, Energy, Defense and Commerce and the Arms Control and Disarmament Agency.

*Export* means to physically transfer nuclear equipment or material to a person or an international organization in a foreign country, except DOE distributions as authorized in Section 111 of the Atomic Energy Act or Section 110 of the International Security and Development Cooperation Act of 1980.

*General license* means an export or import license effective without the filing of a specific application with the Commission or the issuance of licensing documents to a particular person.

*Heels* means small quantities of natural, depleted or low-enriched uranium (to a maximum of 20 percent), in the form of UF<sub>6</sub> left in emptied transport cylinders being returned to suppliers after delivery of the product.

*High-enriched uranium* means uranium enriched to 20 percent or greater in the isotope uranium-235.

*IAEA* means the International Atomic Energy Agency.

*Import* means import into the United States.

*Incidental radioactive material* means any radioactive material not otherwise subject to specific licensing under this part that is contained in or a contaminant of any non-radioactive material that:

(1) For purposes unrelated to the regulations in this part, is exported or imported for recycling or resource recovery of the non-radioactive component; and

(2) Will not be processed for separation of the radioactive component before the recycling or resource recovery occurs or as part of the resource recovery process.

The term does not include material that contains or is contaminated with "hazardous waste" as defined in section 1004(5) of the Solid Waste Disposal Act, 42 U.S.C. 6903(5).

*Individual shipment* means a shipment consisting of one lot of freight tendered to a carrier by one consignor at one place at one time for delivery to one consignee on one bill of lading. This lot may consist of:

(1) Only one item or

(2) A number of containers all listed on the same set of shipping documents. This one lot of freight or “distinct” shipment can be transported on the same carrier with other distinct shipments containing the same items as long as each shipment is covered by separate sets of shipping documents.

The phrase *introduced into a hearing* means the introduction or incorporation of testimony or documentary matter into the record of a hearing.

*License* means a general or specific export or import license issued pursuant to this part.

*Licensee* means a person authorized by a specific or a general license to export or import nuclear equipment or material pursuant to this part.

*Low-enriched uranium* means uranium enriched below 20 percent in the isotope uranium-235.

*Management* means storage, packaging, or treatment of radioactive waste.

*Natural uranium* means uranium as found in nature, containing about 0.711 percent of Uranium 235, 99.283 percent of uranium-238, and a trace (0.006 percent) of uranium-234.

*NPT* means the Treaty on the Non-Proliferation of Nuclear Weapons (TIAS 6839).

*Non-nuclear weapon State* means any State not a nuclear weapon State as defined in the Treaty on the Non-Proliferation of Nuclear Weapons. *Nuclear weapon State* means any State which has manufactured and exploded a nuclear weapon or other nuclear explosive device prior to January 1, 1967.

*Non-Proliferation Act* means the Nuclear Non-Proliferation Act of 1978 (Pub. L. 95-242).

*NRC Public Document Room* means the facility at 2120 L Street, NW., Washington, DC where certain public records of the NRC that were made available for public inspection in paper or microfiche prior to the implementation of the NRC Agencywide Documents Access and Management System, commonly referred to as ADAMS, will remain available for public inspection. It is also the place where computer terminals are available to access the Electronic Reading Room component of ADAMS on the NRC Web site, <http://www.nrc.gov>, where copies can be

made or ordered as set forth in § 9.35 of this chapter. The facility is staffed with reference librarians to assist the public in identifying and locating documents and in using the NRC Web site and ADAMS. The NRC Public Document Room is open from 7:45 am to 4:15 pm, Monday through Friday, except on Federal holidays. Reference service and access to documents may also be requested by telephone (202-634-3273 or 800-397-4209) between 8:30 am and 4:15 pm, or by e-mail ([PDR@nrc.gov](mailto:PDR@nrc.gov)), fax (202-634-3343), or letter (NRC Public Document Room, LL-6, Washington, D.C. 20555-0001).

*NRC records* means any documentary material made by, in the possession of, or under the control of the Commission under Federal law or in connection with the transaction of public business as evidence of any of the Commission's activities.

*NRC Web site*, <http://www.nrc.gov>, is the Internet uniform resource locator name for the Internet address of the Web site where NRC will ordinarily make available its public records for inspection.

*Nuclear grade graphite* means graphite with a boron equivalent content of less than 5 parts per million and density greater than 1.5 grams per cubic centimeter.

*Nuclear reactor* means an apparatus, other than an atomic weapon or nuclear explosive device, designed or used to sustain nuclear fission in a self-supporting chain reaction.

*Nuclear reactor internals* means the major structures within a reactor vessel that have one or more functions such as supporting the core, maintaining fuel alignment, directing primary coolant flow, providing radiation shields for the reactor vessel, and guiding in-core instrumentation.

*Nuclear Referral List (NRL)* means the nuclear-related, dual-use commodities on the Commerce Control List that are subject to the nuclear non-proliferation export licensing controls of the Department of Commerce. They are contained in 15 CFR part 774 of the Department of Commerce's Export Administration Regulations and are designated by the symbol (NP) as the reason for control.

*Obligations* means the commitments entered into by the U.S. Government under Atomic Energy Act (AEA) section 123 agreements for cooperation in the peaceful uses of atomic energy. Imports and exports of material or equipment pursuant to such agreements are subject to these commitments, which in some cases involve an exchange of information on imports, exports, retransfers with foreign governments, peaceful end-use assurances, and other conditions placed on the transfer of the material or equipment. The U.S. Government informs the licensee of obligations attached to material or equipment being imported into the U.S. and approves changes to those obligations.

*Packaging* means one or more receptacles and wrappers and their contents, excluding any special nuclear material, source material or byproduct material, but including absorbent material, spacing structures, thermal insulation, radiation shielding, devices for cooling and for absorbing mechanical shock, external fittings, neutron moderators, nonfissile neutron absorbers and other supplementary equipment.

*Participant* means a person, identified in a hearing notice or other Commission order, who takes part in a hearing conducted by the Commission under this part, including any person to whom the Commission grants a hearing or leave to intervene in an export or import licensing hearing, either as a matter of right or as a matter of discretion.

*Person* means any individual, corporation, partnership, firm, association, trust, estate, institution, group, Government agency other than the Commission or, with respect to imports, the Department of Energy; any State or political entity within a State; any foreign government or political entity of such government; and any authorized representative of the foregoing.

*Physical security* means measures to reasonably ensure that source or special nuclear material will only be used for authorized purposes and to prevent theft or sabotage.

*Production facility* means any nuclear reactor or plant specially designed or used to produce special nuclear material through the irradiation of source

material or special nuclear material, the chemical reprocessing of irradiated source or special nuclear material, or the separation of isotopes, other than a uranium enrichment facility.

*Public health and safety* means the public health and safety of the United States.

*Radioactive material* means source, byproduct, or special nuclear material.

*Radioactive waste* means any waste that contains or is contaminated with source, byproduct, or special nuclear material, including any such waste that contains or is contaminated with "hazardous waste" as defined in section 1004(5) of the Solid Waste Disposal Act, 42 U.S.C. 6903(5), but such term does not include radioactive material that is—

(1) Contained in a sealed source, or device containing a sealed source, that is being returned to any manufacturer qualified to receive and possess the sealed source or the device containing a sealed source;

(2) A contaminant on service equipment (including service tools) used in nuclear facilities, if the service equipment is being shipped for use in another nuclear facility and not for waste management purposes or disposal; or

(3) Generated or used in a United States Government waste research and development testing program under international arrangements.

*Restricted destinations* means countries that are not parties to the NPT or are listed for reasons recommended by the executive branch.

*Retransfer* means the transport from one foreign country to another of nuclear equipment or nuclear material previously exported from the United States, or of special nuclear material produced through the use of source material or special nuclear material previously exported from the United States.

*Sealed source* means any special nuclear material or byproduct material encased in a capsule designed to prevent leakage or escape of that nuclear material.

*Secretary* means the Secretary of the Commission.

*Source material* means:

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(1) Natural or depleted uranium, or thorium, other than special nuclear material; or

(2) Ores that contain by weight 0.05 percent or more of uranium, thorium or depleted uranium.

*Special nuclear material* means plutonium, uranium-233 or uranium enriched above 0.711 percent by weight in the isotope uranium-235.

*Specific activity* (millicuries per gram) equals  $3.575 \times 10^8$  divided by (the atomic weight times the half life in years).

*Specific license* means an export or import license issued to a named person upon an application filed pursuant to this part.

*Storage* means the temporary holding of radioactive material.

*Target* means material subjected to irradiation in an accelerator or nuclear reactor to induce a reaction or produce nuclear material.

*Transfer* means the transfer of possession from one person to another person.

*Transport* means the physical movement of material from one location to another.

*Treatment* means any method, technique, or process, including storage for radioactive decay, designed to change the physical, chemical or biological characteristics or composition of any radioactive material.

*Tritium* means not only tritium but also includes compounds and mixtures containing tritium in which the ratio of tritium to hydrogen by atoms exceeds one part in 1,000.

*United States*, when used in a geographical sense, includes Puerto Rico and all territories and possessions of the United States.

*Uranium enrichment facility* means:

(1) Any facility used for separating the isotopes of uranium or enriching uranium in the isotope 235, except laboratory scale facilities designed or used for experimental or analytical purposes only; or

(2) Any equipment or device, or important component part especially designed for such equipment or device, capable of separating the isotopes of uranium or enriching uranium in the isotope 235.

*Utilization facility* means:

(1) Any nuclear reactor, other than one that is a production facility and

(2) Any of the following major components of a nuclear reactor:

(i) Reactor pressure vessel (designed to contain the core of a nuclear reactor);

(ii) Reactor primary coolant pump;

(iii) "On-line" reactor fuel charging and discharging machine; and

(iv) Complete reactor control rod system.

(3) A utilization facility does not include the steam turbine generator portion of a nuclear power plant.

[43 FR 21691, May 19, 1978, as amended at 45 FR 18906, Mar. 24, 1980; 49 FR 47197, Dec. 3, 1984; 49 FR 49841, Dec. 24, 1984; 51 FR 27826, Aug. 4, 1986; 53 FR 43422, Oct. 27, 1988; 56 FR 24684, May 31, 1991; 57 FR 18393, Apr. 30, 1992; 58 FR 13002, Mar. 9, 1993; 58 FR 57963, Oct. 28, 1993; 59 FR 48997, Sept. 26, 1994; 60 FR 37562, July 21, 1995; 61 FR 35602, July 8, 1996; 64 FR 48955, Sept. 9, 1999; 65 FR 70289, Nov. 22, 2000]

### § 110.3 Interpretations.

Except as authorized by the Commission in writing, no interpretation of the meaning of the regulations in this part other than a written interpretation by the Commission's General Counsel is binding upon the Commission.

### § 110.4 Communications.

Except where otherwise specified in this part, all communications and reports concerning the regulations in this part should be addressed to the Deputy Director, Office of International Programs, Office of International Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555, telephone (301) 415-2344. Communications and reports may be delivered in person at the Commission's offices at 11555 Rockville Pike, Rockville, Maryland 20852 or at 2120 L Street NW. (Lower Level), Washington, DC 20037.

[58 FR 13002, Mar. 9, 1993, as amended at 59 FR 48997, Sept. 26, 1994; 62 FR 59277, Nov. 3, 1997; 65 FR 70290, Nov. 22, 2000]

### § 110.5 Licensing requirements.

Except as provided under subpart B of this part, no person may export any nuclear equipment or material listed in § 110.8 and § 110.9, or import any nuclear equipment or material listed in § 110.9a,