

NUCLEAR REGULATORY COMMISSION

10 CFR Part 110

RIN 3150-AI16

[NRC-2008-0567]

Export and Import of Nuclear Equipment and Material; Updates and Clarifications

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Final rule.

**SUMMARY:** The United States Nuclear Regulatory Commission (NRC) is amending its regulations that govern the export and import of nuclear equipment and material. This rule allows International Atomic Energy Agency Code of Conduct on the Safety and Security of Radioactive Sources Category 1 and 2 quantities of radioactive materials to be imported under a general license. This rule also revises the definition of “radioactive waste” and removes the definition of “incidental radioactive material.” In addition, this rule updates, clarifies, and corrects several provisions.

**DATES:** The rule is effective on **[INSERT DATE THAT IS 30 DAYS FROM DATE OF PUBLICATION IN THE FEDERAL REGISTER]**.

**ADDRESSES:** You can access publicly available documents related to this document using the following methods:

*Federal e-Rulemaking Portal:* Go to <http://www.regulations.gov> and search for documents filed under Docket ID [NRC-2008-0567]. Address questions about NRC dockets to Ms. Carol Gallagher at 301-492-3668; e-mail [Carol.Gallagher@nrc.gov](mailto:Carol.Gallagher@nrc.gov).

*NRC's Public Document Room (PDR):* The public may examine and have copied for a fee publicly available documents at the NRC's PDR, Room O1 F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland.

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**SUPPLEMENTARY INFORMATION:**

**I. Background**

**II. Analysis of Public Comments on Proposed Rule**

**III. Section-by-Section Analysis**

## I. Background

On June 23, 2009, the NRC published a proposed rule that requested comments on the proposed changes to 10 CFR Part 110, Export and Import of Nuclear Equipment and Material (74 FR 29614). This final rule updates, clarifies, and corrects several provisions in 10 CFR Part 110 to improve NRC's regulatory framework for the export and import of nuclear equipment, material, and radioactive waste. It also clarifies and corrects the regulations addressing the general license for the export of byproduct material. In addition, changes are made to the regulations governing the export and import of International Atomic Energy Agency (IAEA) Code of Conduct on the Safety and Security of Radioactive Sources Category 1 and Category 2 quantities of radioactive materials listed in Appendix P to 10 CFR Part 110 and the definition of "radioactive waste" in 10 CFR Part 110. A discussion of the most significant changes follows.

### A. Category 1 and 2 Quantities of Radioactive Material Listed in Appendix P to 10 CFR Part 110.

The NRC reevaluated the need for a specific license for the import of Category 1 and 2 quantities of radioactive material to a U.S.-licensed user in light of enhancements made to the NRC's domestic regulatory framework. As a result, the NRC is amending 10 CFR Part 110 to allow imports of Category 1 and 2 quantities of materials listed in Appendix P under a general license.

After the attacks of September 11, 2001, the Commission determined that certain licensed material should be subject to enhanced security requirements and safeguarded during transport, and that individuals with unescorted access to risk-significant quantities of radioactive material should be subject to background investigations. The results of vulnerability assessments performed by the NRC were used in the development of security enhancement orders that were issued to licensees using a graded approach

based on the relative risk and quantity of material possessed by the licensee. (70 FR 72128; December 1, 2005) These security orders specifically address the security of byproduct material possessed in quantities greater than, or equal to, Category 1 and 2 quantities. The orders provide for enhanced security measures for such things as license verification before transfer, intrusion detection and response, access control, and coordination with local law enforcement authorities. The orders also contain requirements for the licensee to determine the trustworthiness and reliability of individuals permitted unescorted access to risk-significant radioactive materials. The determination involves a background investigation of the individual.

With the passage of the Energy Policy Act of 2005 giving the NRC new fingerprinting authority, the Commission determined that individuals with access to Category 1 and 2 quantities of radioactive material warrant fingerprinting and FBI criminal history records checks.

By the end of 2007, the NRC had issued orders to all NRC licensees that possessed Category 1 or 2 quantities of radioactive material (72 FR 70901; December 13, 2007) to require fingerprinting and FBI criminal history records checks for unescorted access to Category 1 or 2 quantities of radioactive material.

For all these requirements, NRC Agreement States have also imposed legally-binding measures on their licensees possessing Category 1 and 2 quantities of radioactive material.

During the same time period, the NRC issued two sets of orders to licensees transporting radioactive material in quantities greater than, or equal to, Category 2. The additional security measures contained in the orders provide for enhanced security measures during transportation that are beyond the current regulations, including enhanced security in preplanning and coordinating shipments, advance notification of shipments to the NRC and States through which the shipment will pass, control and

monitoring of shipments that are underway, trustworthiness and reliability of personnel, information security considerations, and control of mobile or portable devices.

The security requirements put in place by the orders supplement the existing domestic regulatory requirements. A rulemaking is currently underway that, if promulgated, would incorporate security requirements for Category 1 and 2 quantities of radioactive material into the domestic regulations. (SECY-09-0181; December 14, 2009 (ML0928201950)).

Another significant enhancement pertinent to these materials is the establishment of the National Source Tracking System (NSTS) that tracks from “cradle to grave” transactions involving Category 1 and 2 radioactive sources (71 FR 65686; November 8, 2006). Licensees are responsible for recording the manufacture, shipment, arrival, and disposal of all licensed and tracked Category 1 and 2 sources. For every nationally tracked source that is imported, the facility obtaining the source is required to report the information to the NSTS by the close of the next business day after receipt of the imported source. With the NSTS in place, there is much more information about imported sources available to the staff.

In light of the many security enhancements, the Commission had decided to eliminate the specific license requirement in § 110.27(f) for imports of radioactive material listed in Table 1 of Appendix P to 10 CFR Part 110. Conforming changes have been made to §§ 110.32, 110.43, and 110.50. Imports of radioactive material into the United States under a general license continue to be contingent on the consignee being authorized to receive and possess the material under a general or specific NRC or Agreement State license. See § 110.27(a). Moreover, importers of Category 1 and 2 materials under a general license are still subject to the notification requirements prior to shipment as required by § 110.50. The advance notification of imports of Category 1 and 2 quantities of material, § 110.50 (c) is revised to require the exporting facility name,

location, address, contact name and telephone number as part of the pre-shipment notification.

Additionally, § 110.50 (c) is revised to require advance notifications of imports to be submitted seven days in advance of shipment. This change will permit NRC staff adequate time to verify the information provided in the advance notification.

B. Import and Export of Radioactive Waste

This final rule revises the definition of radioactive waste and incorporates aspects of the removed definition of incidental radioactive material (IRM). The revised definition of “radioactive waste” improves consistency with and eliminates some of the differences between the licensing requirements for export and import and the domestic licensing requirements for possession. The revised definition links the specific license requirement for the export and import of radioactive waste to those materials (in the form of waste) that require a specific license in accordance with NRC’s domestic regulations. This eliminates the need for a specific license to export or import materials that, under NRC’s regulations in 10 CFR Chapter 1, do not require a specific license to possess them.

These changes require a specific export or import license for any material that, in accordance with the requirements in 10 CFR Chapter 1, requires a specific NRC license to possess it domestically, which is exported or imported for the purposes of (1) disposal in a land disposal facility as defined in Part 61, a disposal area as defined in Appendix A to Part 40, or an equivalent facility; or (2) recycling, waste treatment or other waste management process that generates radioactive material for disposal in a land disposal facility as defined in Part 61, a disposal area as defined in Appendix A to Part 40, or an equivalent facility. This change simplifies the regulatory framework by clearly stating

that exporting or importing material for recycling, waste treatment, or other waste management process that generates radioactive material for disposal in a 10 CFR Part 40 or Part 61 facility (or the equivalent) requires a specific export or import license.

The final rule removes the definition of “incidental radioactive material” from 10 CFR Part 110. This rule does incorporate aspects of IRM into the revised definition of radioactive waste and the exclusions from that definition. The scope of the exclusion related to contamination 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) is expanded and broadened to include some of the material that previously fell under the definition of IRM such as launderable protective clothing.

In response to comments, the Commission clarified that the first exclusion to the definition of “radioactive waste” applies only to sources of U.S. origin. Disused sources that originated in a country other than the United States would be considered “radioactive waste” under 10 CFR Part 110. Exclusion two is revised to clarify that the broader meaning of “nuclear facility” is intended and that the material must be shipped solely for recovery and beneficial reuse of the non-radioactive material. In addition, an illustrative list of activities that would meet the standard set forth in exclusion two is added to the Statement of Considerations. The Commission also added a sixth exclusion to the definition of “radioactive waste” to address the question of recycling activities that would not be considered as radioactive waste, such as utilizing depleted uranium in shielding applications or catalyst manufacturing. The six exclusions are set forth below:

1. Radioactive material in sealed sources or devices containing sealed sources that are of U.S. origin and being returned to any manufacturer, distributor or other entity which is authorized to receive and possess them. This change allows the return of U.S.

origin sources or devices to distributors and other appropriately authorized entities. A specific import license is required for the importation of sources originating outside of the United States for disposal in the United States. Licensing and notification requirements for Category 1 and Category 2 quantities of material listed in Table 1 of Appendix P are applicable.

2. A contaminant on any non-radioactive material (including service tools and protective clothing) used in a nuclear facility (an NRC- or Agreement State-licensed facility (or equivalent facility) or activity authorized to possess or use radioactive material), if the item is being shipped solely for recovery and beneficial reuse of the non-radioactive component in a nuclear facility and not for waste management purposes or disposal. The scope of the exclusion is expanded and broadened to include some of the material that previously fell under the definition of IRM such as launderable protective clothing. Other examples of materials meeting this exclusion include:

a) Importing contaminated metal for the purpose of recovery of the non-radioactive metal for beneficial reuse as shield blocks or other industrial/construction purposes in licensed facilities domestically and abroad is an import not "solely" for waste management or disposal purposes. This example is within the scope of exclusion two even though the recycling process will produce some waste that may require disposal at a Part 61 disposal site. This is similar to the laundering of protective clothing, which also may have a waste stream to a 10 CFR Part 61 facility.

b) Decontamination and repair of contaminated equipment such as pumps, valves, and motors that after recovery would be beneficially reused in a licensed facility.

c) Decontaminating shipping containers used to import radioactive material for the purpose of reusing the shipping containers.

d) Importing contaminated magnesium metal and using the recovered magnesium as a neutralizing agent for disposing of mixed waste in a licensed disposal facility.

3. Materials exempted from regulation by the NRC or equivalent Agreement State regulations. This exclusion is consistent with the previously mentioned revision that links the requirement for a specific import or export license for radioactive waste to the specific licensing requirements in 10 CFR Chapter 1 (e.g., 10 CFR Parts 30, 40, and 70). This change eliminates some of the differences between NRC's export and import regulations and domestic regulation of the same material or equipment.

4. Materials generated or used in a U.S. Government waste research and development testing program under international arrangements.

5. Materials being returned by or for the U.S. Government or military to a facility that is authorized to possess the material. This exclusion recognizes that the U.S. Government or military will, in certain circumstances, seek to return material to the United States. Material returned must be to a facility that is authorized to possess the material.

6. Materials imported solely for the purposes of recycling and not for waste management or disposal where there is a market for the recycled material and evidence of a contract or business agreement can be produced upon request by the NRC. This exclusion was added to address concerns regarding the legitimate recycling of radioactive material that might otherwise be seen as waste. For example, under certain circumstances, this exclusion would permit the import under general license of depleted uranium for use in shielding applications or catalyst manufacturing.

In response to comments, the Commission revised §§ 110.43 and 110.45 to clarify that the NRC consults, as applicable, with the Agreement State in which the facility is located and low-level waste compact commission(s).

## II. Summary of Public Comments

The Commission received 14 letters from the public commenting on the proposed rule. The commenters represent a variety of interests. Comments were received from individuals, licensees, Federal and State agencies, and citizen, environmental, and industry groups. The comments addressed a wide range of issues concerning the proposed changes to 10 CFR Part 110. Many of those responding to the proposed rule commented on multiple sections; therefore, several comments have been separated by section and addressed. Likewise, similar comments have been consolidated. The following is a summary of all significant comments, along with the NRC's responses.

### A. Section 110.2 - Definitions.

Comment: One commenter stated that the proposed definition for "bulk material" in § 110.2 is confusing. The commenter seeks clarification on whether the definition is intended to cover "raw" material (material produced in reactors) that is then incorporated into sealed sources. The commenter also states that the proposed definition seems to imply that Category 3, 4 and 5 sources would be considered bulk material. The commenter asked how it is known when the quantity is deemed to pose a risk similar to or greater than a Category 2 source.

Response: The definition of bulk material includes both "raw" material produced for encapsulation in sealed sources, as well as, Category 3, 4, and 5 sealed sources that, in aggregate, are equal to or exceed Category 2 activity thresholds. The NRC believes that no changes are necessary to the proposed definition for "bulk material" and it is unchanged in this final rule.

Comment: One commenter suggested that the definition of “radioactive waste” should include other disposal methods that are approved by the NRC and Agreement States such as alternative disposals under 10 CFR 20.2002.

Response: The intent of the proposed changes to the definition of “radioactive waste” is to align the NRC’s export and import regulations with its domestic regulations; therefore, if a specific license is required for a domestic licensee to possess the material, then a specific license to export/import the material would also be required. The NRC and Agreement State licensees may request approval for alternative disposal methods for wastes held under their domestic possession license in accordance with 10 CFR 20.2002 or equivalent Agreement State regulations. Waste could not be imported and directly disposed of under 10 CFR 20.2002, as this type of authorization can only be granted to persons regulated by the NRC or the Agreement States. No change was made to the proposed definition of “radioactive waste” as a result of this comment.

Comment: One commenter suggested revising the proposed definition of “radioactive waste” to clarify that it does not include spent fuel. The respondent noted that it is not clear from the definition what the term “equivalent facility” includes and therefore the definition could be construed to include a facility for the disposal or storage of spent fuel or material that results from recycling, treatment or processing of spent fuel. This commenter also stated that the term “material imported for recycling...” could be read to include spent fuel. Another commenter also noted that the term “recycling” could be confused with the reprocessing of nuclear fuel.

Response: The change to the definition of “radioactive waste” in 10 CFR Part 110 refers exclusively to low level radioactive waste (LLW). Spent or irradiated fuel is not considered to be LLW; therefore, the definition of “radioactive waste” in 10 CFR Part 110 does not include spent or irradiated fuel. A sentence has been added to the

proposed definition of “radioactive waste” to clarify in this final rule that it does not include spent or irradiated fuel.

Comment: One commenter expressed concern about implementation of the revised definition of “radioactive waste” and the correlation between the need for a specific export or import license and the need for a specific domestic license for the same material. This commenter asked if the NRC will make its determination based on whether the conditions in the domestic specific license held by the potential exporter or importer allow possession of the foreign material. The commenter also asked if the NRC will judge the need for an export or import license only against NRC-issued specific licenses or against Agreement State-issued licenses as well. The commenter noted that the NRC and Agreement States have flexibility in writing license conditions and consequently, there may be a lack of national uniformity in the kinds of radioactive materials a domestic specific licensee may possess.

Response: An NRC import license only allows material to be brought into the United States. Once the material is in the United States, the material is subject to the domestic authorization process and operates no differently than if the material were of domestic origin. The import license is not a mechanism to alter the established domestic authorization process, including Agreement State regulations. The NRC will not issue an import license for radioactive waste unless the U.S. importer is authorized to possess the material under the applicable domestic regulation, whether that regulation is an Agreement State's or NRC's. No change was made to the proposed definition of “radioactive waste” as a result of this comment.

Comment: One commenter noted that the NRC's “changes to 10 CFR Part 110 will facilitate the licensing process for exports and imports of radioactive waste....” This

commenter suggested that the NRC complete an Environmental Impact Statement (EIS) to address the increased import of radioactive waste from foreign countries and their shipment within the United States. Further, this commenter would like the EIS to address cumulative impacts from shipments of all radioactive wastes from existing and new nuclear facilities, including shipments resulting from license extensions at existing facilities and the increased shipment of radioactive wastes expected as a result of proposed changes to 10 CFR Part 110.

Response: Under 10 CFR 51.22(c)(1), amendments to 10 CFR Part 110 are categorically excluded from environmental review based on a Commission finding by rule that this category of action does not individually or cumulatively have a significant effect on the human environment. In any event, the NRC does not anticipate an increase in imports or shipping of radioactive waste as a result of this revision. Therefore, no change was made to the proposed definition of “radioactive waste” as a result of this comment.

Comment: One commenter noted that the United States does not currently have an approved radioactive waste repository and questions how accepting imports of radioactive waste is consistent with the NRC’s mission to protect human and environmental health. The commenter further stated that if Yucca Mountain were opened in the near future, the current stockpiles of radioactive waste in the United States would fill the repository. This commenter suggested a moratorium on imports of radioactive waste until an approved repository is opened.

Response: The definition of “radioactive waste” in 10 CFR Part 110 refers exclusively to low-level radioactive waste. There are currently several low-level waste disposal facilities in the United States. High-level waste is not addressed in this final

rule. Therefore, no change was made to the proposed definition of “radioactive waste” as a result of this comment.

Comment: One commenter suggested that the term “recycling” in the proposed definition of “radioactive waste” be removed or defined further to clarify that recycling under the general license is authorized when the recycling provides for a beneficial re-use of the material. Another commenter noted that the proposed definition of “radioactive waste” is ambiguous with regard to the import of radioactive materials imported and used as “raw” materials directly by manufacturing facilities as opposed to waste processing facilities. The commenter stated that the proposed definition includes “radioactive material” that requires a specific license for possession and is intended for disposal, recycling, waste treatment or some other waste management process. As asserted by the commenter, the ambiguity is that as raw material, waste treatment or waste management would not apply to such non-waste; however, “recycling” without further clarification seems to inadvertently include non-waste, “raw” materials. The commenter suggested that the term “recycling” be modified to a more restrictive phrase such as “waste component recycling” which would clearly not apply to “raw” materials. As another possibility, the commenter suggested restricting the definition of radioactive waste to those imports that are consigned to licensed waste treatment and disposal facilities, so that imports of radioactive material going to licensed manufacturing facilities would not be included.

Another commenter addressed the concept of recycling in the context of exclusion two to the proposed definition of “radioactive waste,” stating that the term “recycling” in the main part of the definition seems to conflict with “recovery and beneficial use” in the exclusion. In the commenter’s view, recycling means the recovery and beneficial re-use of the recovered material. The commenter stated that it appears

the intent of the proposed definition is to clarify that, in general, while radioactive material imported for the purpose of processing and disposal is waste, radioactive material imported for the purpose of beneficial re-use is not waste as long as the re-used non-radioactive material is used in a nuclear facility. The commenter offered two suggestions to clarify this apparent conflict. First, the commenter suggested that we insert the word “recycling” prior to “for recovery and beneficial use” in the text of the exclusion. Second, the commenter suggested that we include a clarifying statement in the Statement of Considerations for the final rule that says the intent of the exclusion is to provide an exception to the general rule that would permit recycling under the general license where the recycling provides for beneficial re-use of the non-radioactive material in an environment licensed by the NRC or an Agreement State.

Response: In order to address the numerous concerns regarding the legitimate recycling of radioactive material that might otherwise be seen as waste, the NRC has decided to add a sixth exclusion to the proposed definition of “radioactive waste” to clarify that the definition does not include material imported solely for the purposes of recycling and not for waste management or disposal where there is a market for the recycled material and evidence of a contract or business agreement can be produced upon request by the NRC. An example of such material would be depleted uranium for use in shielding applications or catalyst manufacturing. An example of “recycling” that would be considered “radioactive waste” is the use of combustible material (such as wood or oil) as an energy source at an NRC- or Agreement State-licensed facility.

An import for the purpose of recycling is similar to the importation of useable radioactive materials and products, which occurs routinely. With respect to recycling of materials, as with products that contain radioactivity, recycled materials have a beneficial use yet waste may be generated as they are recycled. In the United States, these wastes would be managed safely in accordance with domestic licensing requirements.

The Commission is aware that there could be instances in which a person intends to import what is in fact radioactive waste, but which is argued to be for recycling purposes (i.e., sham recycling). Any person who imports materials under a general license for recycling, but with the purpose of disposing of them in the United States, would be subject to NRC enforcement action. In addition, there may be instances in which some small value may be obtained from the materials that are imported, but the primary intention is for disposal. In such cases, to avoid possible enforcement action, the staff recommends that the Commission be consulted before any such imports are made. This final rule includes the six exclusions under the definition for “radioactive waste.”

The Commission does not accept the second commenter’s suggestion to add the word “recycling” to exclusion two because the use of the word “recycling” could potentially open exclusion two to other general forms of recycling, which would not meet the intent of the exclusion. The intent of exclusion two is exclusively for the importation of materials being recovered and reused in an NRC- or Agreement State-licensed facility.

Comment: Several commenters addressed the proposed changes to exclusion one to the definition of “radioactive waste” regarding sealed sources and devices. Two commenters expressed support for the proposed changes and stated that they will allow for sources to be transferred and transported easily to an entity that may be able to recertify the source or recycle the source for beneficial use rather than disposal. Another commenter suggested that the purpose of the exclusion should be clarified to indicate that it does not cover importing sources originating in other countries for disposal in the United States.

Response: Exclusion one to the proposed definition of “radioactive waste” has been revised in this final rule to clarify that this exclusion only applies to sources of U.S. origin. Disused sources that originated in a country other than the United States would be considered “radioactive waste” under 10 CFR Part 110. Therefore, in the case of an import, a specific license is required for the importation of sources (in the form of waste or disused sources) originating outside of the United States for disposal in the United States. Licensing and notification requirements for Category 1 and 2 quantities of materials listed in Table 1 of Appendix P to 10 CFR Part 110 are applicable.

Comment: One commenter stated that importation of material destined for re-use should require a specific license. The application for a specific license constitutes a form of public disclosure and the public should be aware of radioactive materials, such as radioactive metals, that may be reused. This commenter asserted that reused radioactive metal could contaminate the general supply of reused scrap metal if it eventually makes its way back to unrestricted use. Consequently, the public should be notified and provided the opportunity to comment on a specific license for the import of radioactive materials proposed for reuse.

Response: The intent of this change is to address the re-use and recovery of these materials for use in an NRC- or Agreement State-licensed facility. Once imported to an NRC- or Agreement State-licensed facility the material and any waste generated as a result of the re-use or recovery process is subject to NRC or Agreement State domestic licensing requirements. Therefore, no change was made to the definition of “radioactive waste” as a result of this comment.

Comment: Several commenters asserted that the second exclusion to the proposed definition of “radioactive waste” could be abused if only a small fraction of the

import is for recovery or beneficial use of the non-contaminated material. Two commenters addressed the proposed language “not solely for waste management purposes or disposal” at the end of the exclusion. One commenter stated that this phrase should be further clarified, changed or replaced to indicate that the portion of the import destined for disposal must, at all times, be considered radioactive waste. Another commenter thought the closing phrase unnecessary because, if the import is for recovery and reuse of the non-radioactive material, then the import would never be “solely” for waste management purposes or disposal. This commenter speculated that the intent of the language is to ensure good faith intent for recovery and reuse of the material. This commenter recommended that this concern be addressed by stating that the purpose is “primarily” for recovery and re-use since all recovery efforts will likely have some waste processing or disposal aspects. The term “primarily” is proposed to make it clear that the recovery operation produces a product that is in fact useful and that the recovery operation is in good faith and not a pretense for waste management. The commenter recommended rewording the exclusion to read “...if the material is being shipped primarily for recycling, i.e., recovery and beneficial use of the non-radioactive material in a nuclear facility.” Another commenter asserted that some of the exclusions under the proposed definition of “radioactive waste” should be more restrictive. Specifically with regard to the second exclusion, the commenter stated that the disposable radioactive portion of the imported material should be recognized as “radioactive waste” at the time of import; otherwise, that disposable radioactive portion could simply appear to be domestic waste resulting from domestic processing.

Response: In the definition of “radioactive waste” in this final rule, the word “solely” has been moved from its proposed location in front of “for waste management” to between “shipped” and “for recovery” in order to clarify the intent of the exclusion. Once items have been imported to an NRC- or Agreement State-licensed facility for

beneficial recovery and/or re-use these items would then be subject to the NRC's or Agreement State's domestic licensing requirements. Circumvention of the specific licensing requirements for radioactive waste is subject to NRC or Agreement State enforcement action.

Comment: One commenter noted that "launderable protective clothing" and "service tools" are the examples provided in the second exclusion to the definition of "radioactive waste." This commenter suggested that the Statement of Considerations for the final rule expand on the discussion of examples in order to avoid confusion related to the use of the term "incidental radioactive material." The commenter also asserted that an expanded discussion of examples would help define what satisfies the standard of "primarily for recovery." The commenter recommended including, at a minimum, the following examples:

a) Importing contaminated metal for the purpose of recovery of the non-radioactive metal for beneficial re-use as shield blocks or other industrial/construction purposes in licensed facilities domestically and abroad is an import not "solely" for waste management or disposal purposes. The commenter noted that this example fits the language in the proposed rule even though the recycling process will produce some waste that will need to be sent to a 10 CFR Part 61 disposal site. This is similar to the laundering of protective clothing, which also has a waste stream to a 10 CFR Part 61 facility.

b) Decontamination and repair of contaminated equipment such as pumps, valves, and motors that after recovery would be beneficially reused in a licensed facility.

c) Incinerating contaminated wood or oil to generate steam in a licensed facility for process heat or electricity.

d) Decontaminating shipping containers used to import radioactive material for the purpose of reusing the shipping containers.

e) Importing contaminated magnesium metal and using the recovered magnesium as a neutralizing agent for disposing of mixed waste in a licensed disposal facility.

In addition to the examples provided above, the commenter recommended that the NRC include any other examples that it has found acceptable in the past.

Another commenter also requested the NRC provide such a list and went on to suggest amending § 110.27 to add a paragraph (g) that reads:

Persons importing material primarily for recovery and beneficial use under a general license on the basis that the import meets [exclusion] 2 of the definition of "radioactive waste" must submit Form 7 to the NRC seven days prior to the import. The submitted form need only address the provisions of paragraphs (a) - (f) of 10 CFR 110.32. The Form 7 shall be submitted to the Deputy Director, Office of International Programs.

The commenter stated that this proposed provision would be solely a notice provision. It would not establish an obligation for the importer to await any NRC action following submittal of the form to the NRC.

Response: The first commenter's examples a), b), and d) would meet the standard for "primarily for recovery" provided there is a market for the recovered product to be reused in an NRC or Agreement State licensed facility and evidence of a contract or business agreement can be produced upon request by the NRC. The commenter's example e) would also meet the standard but it must be primarily for recovery and reuse of magnesium. Example c) does not meet the standard for "primarily for recovery" because it is an example of a waste process with a small amount of energy produced as a byproduct. The NRC does not consider waste processes to be "primarily for recovery."

In response to the second commenter's request for the provision of information on NRC Form 7, the NRC does not feel that placing an additional regulatory compliance

burden on the public is warranted at this time. The NRC believes that any questions the public may have regarding compliance with exclusion two to the definition of “radioactive waste” would best be addressed individually on a case-by-case basis. In accordance with 10 CFR 2.390, the NRC will make examples of recovery activities under exclusion two to the definition of “radioactive waste” publicly available. No changes to the proposed definition of “radioactive waste” were made as a result of these comments.

Comment: One commenter asserted that the term “nuclear facility” is unclear. The commenter asked whether the term is being used as in the Atomic Energy Act to mean a “production” or “utilization” facility, or is it intended to have a broader meaning to include any plant or activity which is licensed for use or possession of radioactive material? The commenter recommended that the term “nuclear facility” be defined as “a plant or activity licensed by either the Commission or an Agreement State for possession or use of radioactive material.”

Response: The NRC has revised exclusion two to the proposed definition of “radioactive waste” to clarify that the broader meaning of facility is intended in this final rule.

Comment: Two commenters addressed exclusion five to the definition of “radioactive waste” regarding the U.S. government or military. One commenter stated that the purpose and intent of this new exclusion is not clear, and that the circumstance, or combination of circumstances, under which the U.S. government or military would need to return material to an authorized U.S. facility could be interpreted very broadly. Another commenter suggested that U.S. government waste research and development testing programs under international arrangements should be specifically identified,

along with appropriate caps on the total amounts of relevant wastes to be imported and exported each year.

Response: This is not a new addition to 10 CFR Part 110. Current regulations at § 110.27, General license for imports, only allow the return of material under a general license if the material was going to a military or government facility. In the proposed rule, this concept was moved from § 110.27 to § 110.2 as an exclusion to the definition of “radioactive waste” and expanded to include an allowance for the U.S. military to bring radioactive waste items back to a licensed facility in the United States. The proposed provision is unchanged in this final rule.

B. Section 110.6 – Retransfers.

Comment: One commenter sought clarification on why the retransfer of byproduct material is not included in the requirements of § 110.6. The commenter also sought clarification on whether retransfers of special nuclear material produced through the use of U.S.-obligated material are subject to the requirements of this section.

Response: Byproduct material is not covered by the requirements of § 110.6 because there is no retransfer restriction on byproduct material in the Atomic Energy Act. Retransfers of special nuclear material produced through the use of U.S.-obligated material are subject to the requirements of this section.

C. 110.26 – General license for the export of nuclear reactor components.

Comment: One commenter questioned the proposed revision to § 110.26(a) to cover "components solely of U.S. origin" for three reasons:

- 1) U.S. origin has many meanings in the United States today, but given the wording "solely of U.S. origin" or "of U.S. origin," it is rather difficult to

purchase anything which is only of U.S. origin. The commenter requested further definition.

2) While the commenter agreed with the authorization contained in proposed § 110.26(a)(2), the commenter stated that the proposed wording conveys the authority to re-export nuclear components from such generally authorized countries as listed in § 110.26 (b) to each other. However, this is an authorization that U.S. companies would not be able to utilize if the component is required to be solely of U.S. origin.

3) Many nuclear components or parts are imported into the U.S. for ultimate end use as either a standalone nuclear component or for use in a larger nuclear component for future sale in either the U.S. or non-U.S. markets.

The commenter noted that many U.S. companies have international markets as well as foreign-based manufacturing facilities or joint ventures. Such global companies will import nuclear spare parts or components for utilization in larger U.S.-built nuclear components for sale both within the United States as well as outside of the United States. The commenter stated that these U.S. imports and subsequent exports create and maintain U.S. jobs and should not be delayed or subjected to a new NRC component license application process and associated application fees. The commenter said that to do so would remove a vital part of the purpose of § 110.26, which is to enable U.S. companies to export nuclear components quickly to a select list of generally authorized countries that do not require an NRC validated export license. These component exports are subject to NRC reporting requirements, but they enable the U.S. nuclear industry to sell our components in a very efficient manner to pre-approved countries. According to the commenter, the proposed change would penalize the U.S. nuclear industry in the world marketplace and cause a giant step backwards in the U.S.

nuclear industry's ability to freely sell these nuclear components or parts to pre-approved countries that are not subjected themselves subjected to similar restrictions.

Response: The NRC believes the commenter makes a valid point regarding limiting the general license under § 110.26 to "components solely of U.S. origin." With the increasing globalization of the nuclear industry, U.S. nuclear companies are outsourcing more and more items, including parts and components for reactor equipment and fuel assemblies. However, since the U.S. industry has been able to accept the current language of § 110.26 which allows use of the general license for "U.S. origin" component exports to a select list of countries, even when the "U.S. origin" component includes non-U.S. content, the proposed language is retained in this final rule. Further, the NRC added clarifying language to § 110.26 stating that "U.S. origin" includes components produced or finished in the United States, even with non-U.S. content unless the foreign content is obligated by supplier government conditions, such as a prior consent for retransfer condition.

#### D. 110.27 – General License for imports.

Comment: Two commenters addressed the proposed amendment to § 110.27 that would remove the paragraph that addresses activities conducted under a contract with the Department of Energy (DOE). The commenters suggested revising the Section-by-Section Analysis for § 110.27 to state that the NRC's import regulations do not apply to the DOE imports of source, special nuclear or byproduct material, including imports conducted on DOE's behalf by DOE contractors. The commenters also state that the Statement of Considerations for the proposed rule cites sections 54, 64, 82, and 91 of the Atomic Energy Act which govern exports, not imports, and are not applicable in this context.

For purposes of clarification, one commenter, suggested that in § 110.27(b), the words "source or special nuclear" should be inserted before "material" so that the sentence reads as follows:

The general license in paragraph (a) of this section does not authorize the import of source or special nuclear material in the form of irradiated fuel if the total weight of the [source or special nuclear] material exceeds 100 kilograms per shipment.

Response: The NRC's import regulations do not apply to DOE imports of source, special nuclear, or byproduct material including imports conducted on DOE's behalf by DOE contractors. The removal of § 110.27(a)(1) clarifies that DOE is not subject to NRC import licensing requirements. The Atomic Energy Act citations in the Statement of Considerations for the proposed rule apply to exports, not imports. The sections of the Atomic Energy Act that apply to imports of special nuclear, source or byproduct material are sections 53, 62, and 81. Section 110.27(b) has been rewritten in this final rule in response to the request for clarification.

Comment: One commenter noted that the clear intent of the proposed rule, as expressed in the Statement of Considerations to the proposed rule, is to grant a general license for the import of materials that are exempt from domestic licensing (e.g., material exempted by 10 CFR 40.13(a)) by the NRC. Section 110.27(a) of the proposed rule would grant a general license for the import of byproduct, source, and special nuclear material if the U.S. consignee were authorized to possess such material under a general or specific license from the NRC or an Agreement State. The commenter asserted that while the new definition of "radioactive waste" in the proposed rule would exclude "exempt" material such as 10 CFR 40.13(a) material, the controlling provision for the import of material under proposed § 110.27(a) seems to be the possession of an existing general or specific license. The commenter stated that under the framework for the

domestic licensing of byproduct, source, or special nuclear material, general licenses are not synonymous with "exemptions" for material: no license is required for the possession of exempt material. The commenter stated that § 110.27(a)(2) of the current regulations does grant a general license for the import of "exempt" material; however, this section would be deleted under the proposed rule, and the commenter suggested that original language be retained.

Response: The NRC's revisions to the definition of "radioactive waste" in 10 CFR Part 110 are designed, in part, to align export/import licensing criteria with domestic regulations that are implemented by the NRC and the Agreement States. If a specific license is required domestically, a specific import or export license would also be required. The changes to the definition of "radioactive waste" and the deletion of § 110.27(a)(2) are consistent with the intended alignment in that if the material (meaning any exempt material, not just material in the form of waste) is exempt from requiring a license domestically (e.g., 10 CFR 40.13(a) is only one example of an exemption), then that same material would be exempt from requiring a general import license as well. Therefore, an additional provision to provide authorization to import under a general license is redundant and unnecessary. As proposed, § 110.27(a)(1) and (a)(2) are removed in this final rule.

Comment: Two commenters generally addressed the proposal to allow imports of Category 2 quantities of materials under a general license. Specifically, they noted that imports conducted under the authority of a general license are not subject to the same public notification and comment requirements as imports conducted under specific licenses. One respondent stated that the general license could be used for unlimited imports without public knowledge.

Response: While it is correct that imports under a general license are not subject to the same public notification requirements as a specific license, the NRC is aware of and continues to regulate such imports. In accordance with § 110.50, pre-shipment notification is still required by the importer. Additionally, domestic licensees must report receipt of Category 1 and 2 radioactive sources to the NSTS. Imports of radioactive material into the United States are contingent on the consignee being authorized to receive and possess the material under a general or specific NRC or Agreement State license.

E. 110.43 – Import licensing criteria.

Comment: One commenter recommended that the NRC require more specificity in the application for a specific license to import radioactive waste and that foreign waste retain its “country of origin” attribution from import through disposal. With regard to the specificity in an application, this commenter is primarily concerned with the concept of waste characterization versus waste classification prior to its import. Specifically, the commenter noted that under the proposed rule, the NRC would only require an applicant to classify the radioactive waste in accordance with 10 CFR 61.55 when the waste is being imported for direct disposal. The commenter stated that this provision is too narrowly written and most waste would escape classification. The commenter asserted that if the imported waste was first processed or managed and then disposed of, under the proposed rule, the waste would not be classified prior to import. This commenter also stated that by allowing the importer to characterize the waste rather than classify it prior to import, the NRC may allow the import of radioactive waste that cannot be disposed of in this country. Further, the host state or compact would have insufficient information to make an informed decision about the appropriateness of the waste for disposal at facilities under its jurisdiction. Another commenter stated that in the past,

there have been situations where all the disposition pathways for waste resulting from the processing of imported radioactive wastes were not clearly identified in the original import license application. The commenter recommended that the NRC require license applications for the import of radioactive waste to include a list of all facilities that are projected to receive wastes for disposal that result from imported wastes. This should include licensed low-level waste disposal facilities as well as landfills that are licensed to accept materials such as those surveyed for bulk release (exempt wastes). The commenter stated that this would ensure that parties responsible for evaluating the application have the information necessary to conduct a thorough review.

Response: As discussed above in Section I.B of this document, the NRC's revisions to the definition of "radioactive waste" in 10 CFR Part 110 are designed, in part, to align export and import licensing criteria with domestic regulations that are implemented by the NRC and the Agreement States. Therefore, if a specific license is required to possess the material domestically, a specific license would be required to import or export that waste material. In accordance with domestic regulations, the NRC, when processing applications for the import of radioactive waste, would follow the waste attribution approaches used in the United States, which are, in almost all cases, developed by the Agreement States and compacts.

Under domestic licensing requirements, waste disposed of at a 10 CFR Part 61 or equivalent Agreement State-licensed facility must be classified in accordance with 10 CFR 61.55. Under the shipping manifest requirements in Appendix G to 10 CFR Part 20, waste must be classified when it is being shipped for disposal. It is not required to be classified before shipment for disposal, i.e., waste being sent to a processor need not be classified, but waste being shipped directly for disposal must be classified in accordance with 10 CFR 61.55. The waste classification requirements are designed to provide for protection against an inadvertent intruder into a waste disposal site 100 years

or more after the site is closed. For higher concentrations of waste (and higher waste classes), additional measures are required at the disposal site to ensure that the intruder is protected even for wastes that pose a greater hazard. Thus, the classification of waste at intermediate points in its processing is not relevant to the purpose of waste classification.

The final rule does not require classification of waste being imported to a waste processor because such classification would have no safety relevance at that time. The licensed waste processor, after processing the waste, must classify the waste which would ensure that the disposal site facility requirements are met. This approach is consistent with domestic requirements. It should be noted that the NRC Chairman, on October 8, 2009, requested a vote paper from the NRC staff addressing blending of low-level radioactive waste. While blending is not related to the import of waste, the issue of when waste is to be classified will be addressed in the paper. Current regulations require that waste be classified when shipped for disposal. If, as a result of this current review, changes are made in classification requirements or practices, the staff will implement review procedures for waste import applications consistent with new domestic practices or requirements.

While it is agreed that it is undesirable to import waste that cannot be disposed of in the United States, the NRC will ensure, in its review of license applications, that when there is uncertainty regarding the final waste classification of waste to be disposed of, that an export license application has been applied for to ensure that no waste is left in the United States without a disposal option. This ensures that any waste without a domestic disposal option will not be orphaned in the United States, but will be returned to the country of origin.

With respect to Agreement States and compacts making informed decisions, the NRC will ensure in its consultations with States and compacts, as applicable, that the

waste to be processed and disposed of meets the classification requirements of the disposal facility and the license conditions of any intermediate facilities, such as a waste processor. The final rule notes that license applicants would need to characterize the waste before import to ensure that it meets the license requirements for a domestic processor. However, consistent with domestic regulations, classification is not required, since waste classification is designed to ensure safety of waste to be disposed of, and is not related to safety of the waste at intermediate points in its processing.

In response to the concerns raised by the second commenter regarding clearly identifying an imported waste's disposition pathway, the NRC will consult with the Agreement State and, if applicable, the low-level waste compact commission to ensure that an appropriate facility is authorized to accept waste for management or disposal.

With respect to the commenter's recommendation that import license applications include a list of all facilities projected to receive imported waste, under domestic regulations a waste processor receiving foreign waste could only transfer processed waste to authorized recipients. Thus, there would be no safety or security concerns, once waste was received by an authorized waste processor.

It is possible that other waste management or disposal facilities receiving waste from a processor could be subject to laws or regulations applicable to foreign wastes; however, assurances that foreign waste could be accepted at these facilities would be needed. Such assurance could come from consultations with the States and compacts. In cases where foreign waste is attributed to the foreign low-level waste generator, the NRC will consult with other affected States and compacts that receive processed waste. Section 110.32(f)(6) places an obligation on the foreign waste import applicant to identify where the waste, not attributed to the processor (i.e. foreign waste that remains attributed to the foreign low-level waste generator), will be disposed of within the United States. Again, in accordance with domestic regulations, the NRC will follow the waste

attribution approaches developed by the Agreement States and compacts in its processing of applications to import foreign waste. There, the applicable provisions of the proposed rule are unchanged in this final rule.

Comment: Several commenters expressed support for the proposed revisions to §§ 110.43 and 110.45, that provided clarification that the NRC consults (with respect to the import of radioactive waste) with the host State(s), and, if applicable, the appropriate low-level waste compact commission(s) to confirm that an appropriate facility has agreed to accept and is authorized to possess the waste for management or disposal. However, one commenter suggested that the NRC should codify the requirement to obtain the consent of any host State that is the proposed destination for imported radioactive waste before approving an import application by adding a new paragraph (g) to § 110.43.

Another commenter sought clarification regarding what the NRC intends to do if there is an impasse between the NRC and a host State or compact concerning whether an appropriate facility is authorized to accept foreign radioactive waste for disposal.

A third commenter suggested that the NRC should distinguish between Agreement States that should be consulted to determine if the site is licensed for disposal and host States under the compact system that are consulted to determine if the disposal is allowed under compact rules. Citing *EnergySolutions, LLC v. NW Interstate Compact on Low-Level Radioactive Waste Mgmt.*, No. 2:08-CV, D. Utah, June 17, 2009, this commenter stated that for a non-compact site such as the EnergySolutions Clive site, the concepts of host States and compacts do not apply. For a non-compact site, consultation with the State in which the site is located should only address the authorization for disposal under the State's Agreement State authority. This commenter

recommended that §§ 110.32(f)(6), 110.43(d), and 110.45(b)(4) should be changed to address these distinctions.

Response: The NRC revised §§ 110.43 and 110.45 in this final rule to further clarify those contacted and the intent of the proposed change. In response to the commenter's question regarding the NRC's actions in an impasse, the NRC believes that such an impasse is unlikely because the appropriateness and authorization of a facility will be determined by the regulatory authority (i.e. the NRC or Agreement State) and compacts as applicable.

#### F. 110.44 – Physical security standards

Comment: One commenter sought clarification of the intent and purpose of the incorporation by reference of the current INFCIRC/225/Rev. 4 (corrected), June 1999, in § 110.44(a). The commenter stated that it is their understanding that INFCIRC/225/Rev. 4 (corrected), June 1999, is currently undergoing review and revision by the IAEA and international community; incorporation by reference of the current INFCIRC document may not address the applicability of substantial INFCIRC changes underway that could be potentially incorporated in the future. The commenter stated that changes to INFCIRC/225/Rev. 4 (corrected), June 1999, may have a significant impact on physical security standards, policy, and guidance, both domestic and international.

Response: The NRC is aware of the current review by the IAEA and the international community and will make any necessary changes to this section once that document is finalized. Therefore, INFCIRC/225/Rev. 4 (corrected), June 1999, "The Physical Protection of Nuclear Materials and Nuclear Facilities" continues to be incorporated by reference in § 110.44(a) of this final rule.

G. 110.50 – Terms.

Comment: Currently, notifications for imports are required to be submitted at least seven days in advance of each shipment, to the extent practical, but in no case less than 24 hours in advance of each shipment. Several commenters addressed the proposed amendment to § 110.50(c) that would require advance notification for imports to be submitted seven days in advance of shipment. Specifically, one commenter stated that a seven-day advance notification requirement would cause many importers of Category 2 sources to be out of compliance with the proposed regulation. This commenter noted that there are many instances where his customers do not tell him when a source is being returned.

Another commenter stated that it is unclear why the NRC now needs seven-days advance notice. The commenter stated that the only explanation is to allow NRC adequate time to verify information. The commenter questioned the verification information if the importer is an established licensee and routinely receives returned sources. This commenter also noted that the NSTS would account for imported sources once received under an NRC or Agreement State license. The commenter recommended that the NRC have no requirement for advance notification for the import of Category 2 sources because the sources will be accounted for in the NSTS and there is no documented benefit to the advance notification requirement.

One commenter noted that with regard to imports of Category 1 quantities of material, which are typically bulk and raw material shipments, 24-hour advance notification is currently received and that seven-day advance notification is not provided because final shipping arrangements often change on a daily basis. The commenter recommended that the NRC retain the current requirement that allows for 24-hour advance notification.

Response: The pre-shipment notification requirement contained in § 110.50 is being included in this final rule as proposed because the current policy of “no less than 24 hours in advance” is insufficient for NRC staff to verify pre-shipment information and coordinate with other applicable government agencies, such as an Agreement State and/or the U.S. Customs and Border Protection. Insufficient time to complete these activities could result in a delay of the import entering the United States. The NRC suggests that licensees work with their clients to better inform them of their obligations to comply with United States’ regulations so that the client can provide the requisite information to ensure the U.S. licensee is not out of compliance. In the event the shipment date is changed after the NRC has been notified, the NRC will not require a revised notification submission if the shipment will take place within 14 days of the initial shipment date provided to the NRC. If the shipment date will be delayed for a longer period of time, a new notification should be provided to the NRC.

### **III. Section-by-Section Analysis of the Final Rule**

#### *Subpart A – General Provisions*

*Section 110.1, Purpose and scope.* This final rule removes paragraph (b)(1) and the remainder of paragraph (b) is renumbered accordingly. Paragraph (b) is clarified regarding the regulation of U.S. Munitions List nuclear items.

*Section 110.2, Definitions.* This final rule revises the definitions for *Agreement for Cooperation, Atomic Energy Act, Classified Information, Conversion facility, Depleted uranium, Effective kilograms of special nuclear material, Embargoed, Executive Branch, General license, Heels, Medical isotope, Natural uranium, Non-Nuclear Weapons State, NRC Public Document Room, Obligations, Person, Physical security, Production facility, Radioactive waste, Radiopharmaceutical, Recipient Country, Restricted destinations,*

and *Specific license*. The revision to the definition of *radioactive waste* is discussed in detail in Section I.B of this document. The definitions for *Bulk material*, *Low-level waste compact*, and *Nuclear Suppliers Group* are added for clarification purposes. In addition, this final rule removes the definition of *Incidental radioactive material* as discussed in Section I.B of this document.

*Section 110.6, Retransfers.* This final rule adds language clarifying the scope of the provisions to be consistent with the requirements of the Atomic Energy Act. Paragraph (b) is amended to update the address for the Department of Energy.

*Section 110.7, Information collection requirements: OMB approval.* This final rule restructures the section for clarification and makes a minor editorial change.

*Section 110.7a, Completeness and accuracy information.* This final rule makes an editorial change to paragraph (b).

#### *Subpart B – Exemptions*

*Section 110.10, General.* This final rule amends paragraph (c) to clarify that an exemption does not relieve any person from complying with the regulations of other U.S. Federal and/or State government agencies.

*Section 110.11, Export of IAEA safeguards samples.* This final rule makes editorial changes.

#### *Subpart C – Licenses*

*Section 110.19, Types of licenses.* This final rule removes paragraph (b) which relates to exports of incidental radioactive material. This final rule also amends paragraph (a) by removing the last sentence regarding compliance with other applicable regulations, and the paragraphs designation. The requirement that general and specific licensees are subject to other applicable laws or regulations is addressed in § 110.50(a).

*Section 110.20, General license information.* This final rule removes references to “incidental radioactive material” and corrects citations in paragraph (a). Paragraph (d)

is amended to preclude use of generally licensed material in any illegal or inappropriate activity such as use in a radiological dispersion device, diversion of material or equipment, and other malicious acts.

*Section 110.21, General license for the export of special nuclear material.* This final rule removes the general license provision related to the export of incidental radioactive material in paragraph (e) and makes editorial changes to paragraphs (a), (b), and (c).

*Section 110.22, General license for the export of source material.* This final rule deletes paragraph (c), makes editorial changes, corrects internal reference errors in the section, and adds a reference to paragraph (d) to the text of paragraph (e). Paragraph (c) is removed because it repeats rule text found in § 110.21(b)(3). The final rule also removes the general license provision related to the export of incidental radioactive material in paragraph (g).

*Section 110.23, General license for the export of byproduct material.* This final rule makes editorial and organizational changes to clarify requirements. The reporting requirements in paragraph (b) for exports of americium and neptunium are moved to § 110.54, Reporting requirements.

*Section 110.24, General license for the export of deuterium.* This final rule makes editorial changes to clarify the text in order to improve readability.

*Section 110.25.* This final rule adds and reserves § 110.25. This change is made to clarify that there is not a printing error in 10 CFR Part 110 and reserves this section for possible future changes to the regulations.

*Section 110.26, General license for the export of nuclear reactor components.* This final rule restructures paragraph (a) to clarify that the general license covers components of U.S. origin. In response to a comment received on the proposed rule, a clarifying note is added at the end of § 110.26 regarding “U.S. origin”. The text of

paragraph (a)(1) is incorporated into the introductory text of paragraph (a). Paragraphs (a)(2) and (a)(3) are redesignated as (a)(1) and (a)(2), respectively. New paragraph (a)(2) is revised to allow a component to be returned to the United States after final fabrication or repair or to be used in a nuclear power or research reactor in one of the destinations listed in the section. This allows, for example, a component that was sent to Japan for final fabrication or repair to be sent to Spain for use in a nuclear power or research reactor in that country. The list of destinations previously contained in paragraph (a) are now in the new paragraph (b) of this final rule. Subsequent paragraphs are renumbered accordingly.

New paragraph (b) is revised to include additional destinations to which exports may be sent under a general license. These destinations are Cyprus, Estonia, Hungary, Malta, Poland, Slovak Republic, and Slovenia. The United States has received broad generic assurances from EURATOM which also apply to these new EURATOM member countries for purposes of section 109b. of the Atomic Energy Act.

The reporting requirements contained in paragraph (d) for exports of reactor components are moved to § 110.54, Reporting requirements, in this final rule.

*Section 110.27, General license for imports.* This final rule removes paragraphs (a)(1) and (a)(2). NRC's import regulations do not apply to DOE imports of source, special nuclear, or byproduct material including imports conducted on DOE's behalf by DOE contractors. Paragraph (a)(2) is removed because a general license is not required for the import of byproduct, source, or special nuclear material when that same material is exempt from NRC domestic licensing requirements. This change clarifies that material that is exempt or else not subject to domestic licensing requirements (e.g., § 31.18 and § 40.13) does not require a general or specific import license unless otherwise mandated in 10 CFR Part 110.

Paragraph (b) is revised to clarify that the 100 kilograms per shipment limit only applies to the material and does not include the weight of the container. As revised, this paragraph states that the general license in paragraph (a) does not authorize the import of more than 100 kilograms per shipment of source and/or special nuclear material in the form of irradiated fuel.

This final rule revises paragraph (f) by removing the specific license requirement for imports of radioactive material listed in Table 1 of Appendix P to 10 CFR Part 110 and referencing the advance notification requirement in § 110.50.

*Section 110.30, Members of the Nuclear Suppliers Group.* This final rule updates the list of Nuclear Suppliers Group members by adding China, Croatia, Estonia, Iceland, Kazakhstan, Lithuania, and Malta.

*Section 110.31, Application for a specific license.* The final rule amends this section to require requests for an exemption from a licensing requirement to be filed on NRC Form 7. This is consistent with NRC regulations that require all licensing requests (e.g., exports, imports, amendment, and renewal applications) to be made using NRC Form 7. See 71 FR 19102; April 13, 2006.

This final rule also requires a request for an exemption from a licensing requirement to be accompanied by the appropriate fee in accordance with the fee schedules in §§ 170.21 and 170.31. This change is consistent with the Fiscal Year 2007 NRC Fee Rule which established a flat fee for requests for exemptions from the NRC's export and import licensing requirements. See 72 FR 31402; June 6, 2007. This change updates 10 CFR Part 110 to reflect recent changes to the fee schedule in 10 CFR Part 170.

Additionally, this final rule adds a signature requirement to § 110.31 that each application submitted on NRC Form 7 must be signed by the applicant or licensee or a person duly authorized to act for and on behalf of the applicant or licensee. This change

is consistent with requirements related to applications for specific licenses in other parts of the NRC's regulations. It also clarifies that a signature is required to certify the veracity of information submitted to the agency on the NRC Form 7.

Finally, the order of paragraphs (b) and (c) is reversed so that § 110.31 flows in a more logical manner where the requirement for an application for a specific license to export or import or a request for an exemption from a licensing requirement precedes the requirement that such an application or request be accompanied by the appropriate license fee. In paragraph (b), as revised, "combined export/import" is removed to be consistent with the proposal to allow imports of Category 1 and 2 materials listed in Table 1 of Appendix P of 10 CFR Part 110 under general license.

*Section 110.32, Information required on an application for a specific license/NRC Form 7.* This final rule change to paragraph (b) to clarify that the name and address of any other party, including the supplier of the equipment or material, if different from the applicant, must be provided on the application. Paragraphs (f)(1) and (f)(2) are amended for consistency purposes. Specifically, for the export of nuclear equipment to a foreign reactor, a license application will include the name of the facility so the NRC will know whether Executive Branch review is required, per § 110.41(a)(7).

This section is also amended to clarify that applicants for the import of radioactive waste must provide the classification of that waste as defined in 10 CFR 61.55 when the waste is being imported for direct disposal. If the waste is being imported for treatment or management at an NRC- or Agreement State-licensed waste processor, classification, as defined in 10 CFR 61.55, is not required. Rather, a detailed characterization (physical and chemical characteristics) of the waste being imported for treatment or management must be provided in the application.

Paragraph (g) is deleted to conform to the change that allows Category 1 and Category 2 quantities of radioactive materials to be imported under a general license. This change is discussed in more detail in the section-by-section analysis for § 110.27.

Paragraph (h) is redesignated as new paragraph (g) and allows the exporter of Category 2 quantities of material listed in Table 1 of Appendix P to provide the pertinent documentation that the recipient of the material has the necessary authorization under the laws and regulations of the importing country to receive and possess the material to the NRC at least 24 hours prior to the shipment. The requirement that the applicant for a Category 1 export license provide the NRC, at the time the application is submitted, with pertinent documentation demonstrating that the recipient of the radioactive material has the necessary authorization (usually in the form of a license) under the laws and regulations of the importing country to receive and possess the material remain unchanged.

#### *Subpart D – Review of License Applications*

*Section 110.40, Commission review.* This final rule amends this section to reduce the number of export license applications that require Commission review, and instead focuses Commission review on the export license applications that raise significant policy issues. For example, mandatory Commission review of export applications for nuclear grade graphite for nuclear end use and 1,000 kilograms or more of deuterium oxide are no longer required unless the export raises an important policy issue. This change also increases the proposed export of one effective kilogram of high-enriched uranium, plutonium or uranium-233 to five effective kilograms for mandatory Commission review. The change mandates Commission review of export and import license applications that raise significant policy issues. Significant policy issues include, but are not limited to, the proposed initial decision on whether to issue a license with special limitations to a country, or the proposed decision on issuance of a license

covering a facility where major safety or security issues have been recently raised. If the staff is uncertain whether a license application raises a significant policy issue, the license application should receive Commission review. However, any export that is subject to special limitations as determined by the staff or the Executive Branch will be considered one that raises a significant policy issue and will continue to require Commission review. By focusing on policy issues, this change increases efficiency and reduces fees on routine NRC export applications. This final rule also adds a requirement for Commission review of export applications of material listed in Table 1 of Appendix P to 10 CFR Part 110 involving exceptional circumstances, as defined in § 110.42, or Category 1 quantities of material to any country listed in § 110.28.

*Section 110.41, Executive Branch review.* The final rule makes a minor editorial change and requires Executive Branch review of exports raising significant policy issues, including exports of radioactive material listed in Table 1 of Appendix P to 10 CFR Part 110 involving exceptional circumstances, as defined in § 110.42. Also, the export of radioactive material listed in Table 1 of Appendix P to any country listed in §§ 110.28 or 110.29 requires the review of the Executive Branch in accordance with § 110.41(a)(9).

*Section 110.43, Import licensing criteria.* This final rule clarifies that, with respect to the import of radioactive waste, the NRC consults with, as applicable, the Agreement State in which the facility is located and the low-level waste compact commission(s) to confirm that an appropriate facility has agreed to accept and is authorized to possess the waste for management or disposal. This change addresses commenters questions that the NRC received on the scope of the Agreement State and low-level waste compact commission's role (if applicable) regarding the NRC's review of import applications for radioactive waste.

Additionally, this final rule removes the import licensing criteria related to the imports of radioactive material listed in Appendix P. This change conforms § 110.43

with the change to allow Category 1 and Category 2 quantities of radioactive materials to be imported under a general license. This change is discussed in more detail in the section-by-section analysis for § 110.27.

*Section 110.44, Physical security standards.* This final rule corrects the Website address for the National Archives and Records Administration. Changes to § 110.44(b)(1) clarify that the Commission determinations on the adequacy of physical security measures are based on receipt by the appropriate U.S. Executive Branch agency of written assurances from the relevant recipient country governments that physical security measures for providing protection are at least comparable to the recommendations set forth in INFCIRC/225/Rev. 4 (corrected), June 1999.

*Section 110.45, Issuance or denial of license.* This final rule removes the parenthetical text in paragraph (a) that states “If an Executive Order provides an exemption pursuant to section 126a of the Atomic Energy Act, proposed exports to EURATOM countries are not required to meet the criteria in § 110.42(a)(4) and (5)”. This is no longer needed because the Agreement for Cooperation in the Peaceful Uses of Nuclear Energy between the European Atomic Energy Community (EURATOM) and the United States of America that went into effect in 1995 obviates the need for a presidential exemption.

This final rule makes conforming changes to paragraph (b)(4) which are consistent with the changes to § 110.43(d), regarding the issuance of an import license for radioactive waste. Paragraph (b)(5) is removed to eliminate the criteria related to the imports of radioactive material listed in Appendix P to 10 CFR Part 110. This change conforms § 110.45 with the change to allow Category 1 and Category 2 quantities of radioactive materials to be imported under a general license. This change is discussed in more detail in the section-by-section analysis for § 110.27. Additionally, paragraph (d) is amended to clarify that the provisions in this paragraph do not apply to Commission

decisions regarding license applications for specific licenses to export radioactive material listed in Table 1 of Appendix P.

*Subpart E – License Terms and Related Provisions*

*Section 110.50, Terms.* This final rule makes several editorial, clarifying, and conforming changes to this section. In paragraph (a)(1), changes clarify that each license is subject to all applicable provisions of the Atomic Energy Act or other applicable law. Paragraph (a)(4) is rewritten and renumbered as paragraph (a)(5) to make clear that each license issued by the NRC for the export or import of nuclear material authorizes only the export or import of that nuclear material and accompanying packaging, fuel element, hardware, or other associated devices or products. Paragraph (b)(5) is revised to remove reference to 10 CFR Parts 40, 70, 71, and 73 and renumbered as paragraph (a)(3). This license term applies to both general and specific licenses and is moved to paragraph (a).

In paragraph (b)(2), changes clarify that a licensee may export or import only for the purpose(s) and/or end-use(s) stated in the specific export or import license issued by the NRC. Paragraph (b)(3) is amended by adding a new paragraph (b)(3)(i) and renumbering current paragraphs (b)(3)(i) and (b)(3)(ii) as (b)(3)(ii) and (b)(3)(iii), respectively. New paragraph (b)(3)(i) clarifies that prior to shipment of certain nuclear material or equipment that has associated with it export controls imposed by other countries (foreign-obligated material or equipment), a license amendment may be required to authorize the shipment. Alternatively, the licensee is to give the NRC 40-days advance notice of the intended shipment.

Paragraph (b)(4) is redesignated as new paragraph (c) and includes the requirements for advanced notifications related to the export or import of radioactive material listed in Table 1 of Appendix P to 10 CFR Part 110. Changes to the advance notification requirements conforms this section to the change to allow Category 1 and

Category 2 quantities of radioactive materials to be imported under a general license. This change is discussed in more detail in the section-by-section analysis for § 110.27. Additionally, editorial changes update the Web site information for the Office of International Programs and provide specific details on where to send the information required for export and import notifications.

*Section 110.51, Amendment and renewal of licenses.* This final rule separates the requirements for license amendments and renewals into separate paragraphs. This change clarifies the differences in requirements between amendment and renewal requests and improves readability of the section. No substantive changes are made to the requirements of the paragraphs.

*Section 110.53, United States address, records, and inspections.* This final rule clarifies that both general and specific licensees are required to have an office in the United States where papers may be served and where records required by the Commission will be maintained. Also, similar clarifying language is added to paragraph (b) of this section that license applicants and both general and specific licensees shall maintain records concerning its exports and imports. Clarifying language is added that byproduct material records must be retained for three years after the date of each export or import shipment.

*Section 110.54, Reporting requirements.* The reporting requirements in § 110.23 for exports of americium and neptunium, and in § 110.26 for exports of reactor components have been moved to § 110.54. This change consolidates the reporting requirements in 10 CFR Part 110 into one section.

#### *Subpart F – Violations and Enforcement*

*Sections 110.60, Violations, 110.66, Enforcement hearing, and 110.67, Criminal penalties.* This final rule makes non-substantive changes for the purposes of consistency and clarification.

*Subpart G – Public Notification and Availability of Documents and Records*

*Section 110.70, Public notice of receipt of an application.* This final rule clarifies that the Commission will publish in the *Federal Register* a notice of receipt for applications for amendment or renewal for the export of the nuclear equipment and material listed in § 110.70(b)(1) through (b)(5) and for applications for amendment or renewal for the import of radioactive waste. Once a notice has been published, the Commission would not publish in the *Federal Register* proposed minor amendments to the application or license. Proposed amendments would be posted on the NRC's Web site.

*Subpart H – Public Participation Procedures Concerning License Applications*

*Section 110.80, Basis for hearings.* This final rule corrects the omission of the word “import” from the section. This change clarifies that the procedures in 10 CFR Part 110 constitute the exclusive basis for hearings on export and import license applications.

*Section 110.81, Written comments.* This final rule clarifies that 30 days after public notice of receipt of the application means 30 days after the application is posted on the NRC Web site at <http://www.nrc.gov> or in the *Federal Register* for those applications required to be published in the *Federal Register*.

*Section 110.82, Hearing request or intervention petition.* This final rule adds language stating that hearing requests and intervention petitions are considered timely when filed no later than 30 days after publication of notice on the NRC Web site. This change is consistent with § 110.70, which states that the Commission will notice the receipt of each specific license application for an export or import by making a copy available at the NRC Web site, <http://www.nrc.gov>. Paragraphs (c)(2) and (c)(3) are renumbered accordingly.

*Subpart I – Hearings*

*Section 110.112, Reporter and transcript for an oral hearing.* This final rule clarifies the scope of information that will be made available at the NRC Website or Public Document Room. Any portions of the transcript for an oral hearing containing classified information, Restricted Data, Safeguards information, proprietary information, or other sensitive unclassified information will not be made available to the public.

*Appendix L to 10 CFR Part 110 – Illustrative list of byproduct material under NRC export/import licensing authority.*

This final rule revises the list of byproduct material in Appendix L to include several radionuclides that are now classified as byproduct material as a result of the Energy Policy Act of 2005, which expanded the definition of byproduct material in Section 11e. of the Atomic Energy Act.

### **Agreement State Compatibility**

Under the “Policy Statement on Adequacy and Compatibility of Agreement State Programs” approved by the Commission on June 30, 1997, and published in the *Federal Register* on September 3, 1997 (62 FR 46517), this rule is classified as Compatibility Category “NRC.” Compatibility is not required for Category “NRC” regulations. The NRC program elements in this category are those that relate directly to areas of regulation reserved to the NRC by the Atomic Energy Act of 1954, as amended, or the provisions of Title 10 of the Code of Federal Regulations. Although an Agreement State may not adopt program elements reserved to NRC, it may wish to inform its licensees of certain requirements via a mechanism that is consistent with the particular State’s administrative procedure laws but does not confer regulatory authority on the State. The NRC will provide the Agreement States additional information so that they can inform

their licensees of the change to and obligations under the revised import/export regulations.

### **Voluntary Consensus Standards**

The National Technology Transfer and Advancement Act of 1995 (Pub. L. 104-113) requires that Federal Agencies use technical standards that are developed or adopted by voluntary consensus standards bodies unless using such a standard is inconsistent with applicable law or otherwise impractical. This action does not constitute the establishment of a standard for which the use of a voluntary consensus standard would be applicable.

### **Environmental Impact: Categorical Exclusion**

The NRC has determined that this final rule is the type of action described in categorical exclusion 10 CFR 51.22(c)(1). Therefore, neither an environmental impact statement nor an environmental assessment has been prepared for this rule.

### **Paperwork Reduction Act Statement**

This final rule decreases the information collection burden on licensees to update, clarify, and correct several provisions. The public burden for this information collection is estimated to be a reduction of 6 hours, which is insignificant. Because the burden for this information collection is insignificant, Office of Management and Budget (OMB) approval of the final rule is not required. Existing requirements were approved by the Office of Management and Budget, approval number 3150-0036.

Abstract:

The NRC is amending its regulations that govern the export and import of nuclear equipment and material. In addition to updating, clarifying, and correcting several provisions, the final rule allows Category 1 and 2 quantities of material to be imported under a general license.

### **Public Protection Notification**

The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid OMB control number.

### **Regulatory Analysis**

A regulatory analysis has not been prepared for this regulation. The NRC is amending its regulations at 10 CFR Part 110 to update, clarify, and correct several provisions improving NRC's regulatory framework for the export and import of nuclear equipment, material, and radioactive waste. Most of the changes are administrative in nature and result in no changes to the information collection burden or costs to the public. In addition to updating, clarifying and correcting several provisions of 10 CFR Part 110, this final rule allows imports of Category 1 and 2 quantities of material under a general license instead of a specific license. The final rule also revises the definition of "radioactive waste." In addition, the definition of "incidental radioactive material" has been removed and aspects of it have been incorporated into the revised definition of "radioactive waste." The changes to 10 CFR Part 110 facilitate the licensing process for exports and imports of radioactive waste and improve the efficiency and consistency of

licensing actions. These changes do not result in a significant increase to the information collection burden or costs to the public.

### **Regulatory Flexibility Certification**

As required by the Regulatory Flexibility Act of 1980, (5 U.S.C. 605(b)), the Commission certifies that this rule does not have a significant economic impact on a substantial number of small entities. This rule affects only companies exporting or importing nuclear equipment, material, and radioactive waste to and from the United States and does not fall within the scope of the definition of “small entities” set forth in the Regulatory Flexibility Act (5 U.S.C. 601(3)), or the Size Standards established by the NRC (10 CFR 2.810).

### **Backfit Analysis**

The NRC has determined that a backfit analysis is not required for this rule because these amendments do not involve any provisions that impose backfits as defined in 10 CFR Chapter I.

### **Congressional Review Act**

In accordance with the Congressional Review Act of 1996, the NRC has determined that this action is not a major rule and has verified this determination with the Office of Information and Regulatory Affairs of OMB.

## List of Subjects in 10 CFR Part 110

Administrative practice and procedure, Classified information, Criminal penalties, Export, Import, Intergovernmental relations, Nuclear materials, Nuclear power plants and reactors, Reporting and recordkeeping requirements, Scientific equipment.

For the reasons set out in the preamble and under the authority of the Atomic Energy Act of 1954, as amended; the Energy Reorganization Act of 1974, as amended; and 5 U.S.C. 553, the NRC is adopting the following amendments to 10 CFR Part 110.

### **PART 110—EXPORT AND IMPORT OF NUCLEAR EQUIPMENT AND MATERIAL**

1. The authority citation for Part 110 continues to read as follows:

**Authority:** Secs. 51, 53, 54, 57, 63, 64, 65, 81, 82, 103, 104, 109, 111, 126, 127, 128, 129, 134, 161, 181, 182, 183, 187, 189, 68 Stat. 929, 930, 931, 932, 933, 936, 937, 948, 953, 954, 955, 956, as amended (42 U.S.C. 2071, 2073, 2074, 2077, 2092-2095, 2111, 2112, 2133, 2134, 2139, 2139a, 2141, 2154-2158, 2201, 2231-2233, 2237, 2239); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841; sec 5, Pub. L. 101-575, 104 Stat 2835 (42 U.S.C. 2243); sec. 1704, 112 Stat. 2750 (44 U.S.C. 3504 note); Energy Policy Act of 2005; Pub. L. 109-58, 119 Stat. 594 (2005).

Sections 110.1(b)(2) and 110.1(b)(3) also issued under Pub. L. 96-92, 93 Stat. 710 (22 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.).

2. In § 110.1, paragraph (b) is revised to read as follows:

**§ 110.1 Purpose and scope.**

\* \* \* \* \*

(b) The regulations in this Part apply to all persons in the United States except:

(1) Persons who import or export 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 regulations promulgated pursuant to the Arms Export Control Act and administered by the Department of State, Directorate of Defense Trade Controls, and the Department of Justice, Bureau of Alcohol, Tobacco, Firearms and Explosives, as authorized by section 110 of the International Security and Development Cooperation Act of 1980.

(2) 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 continued in force under Executive Order 13222 (August 22, 2001), as extended;

(3) Persons who export nuclear referral list commodities such as bulk zirconium, rotor and bellows equipment, maraging steel, nuclear reactor related equipment,

including process control systems and simulators. These persons are subject to the licensing authority of the Department of Commerce pursuant to 15 CFR Part 730 et seq.;

(4) 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 for the purposes of import; and

(5) 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.

3. In § 110.2:

a. The definition of “Incidental radioactive material” is removed;

b. The definitions of “Agreement for Cooperation”, “Atomic Energy Act”, “Classified Information”, “Conversion facility”, “Depleted uranium”, “Effective kilograms of special nuclear material”, “Embargoed”, “Executive Branch”, “General license”, “Heels”, “Medical isotope”, “Natural uranium”, “Non-Nuclear Weapons State”, “NRC Public Document Room”, “Obligations”, “Person”, “Physical security”, “Production facility”, “Radioactive waste”, “Radiopharmaceutical”, “Recipient Country”, “Restricted destinations”, and “Specific license” are revised; and

c. The definitions of “Bulk material”, “Low-level waste compact”, and “Nuclear Suppliers Group” are added in alphabetical order.

The revisions and additions read as follows:

**§ 110.2 Definitions.**

\* \* \* \* \*

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

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

*Bulk Material* means any quantity of any one or more of the radionuclides listed in Table 1 of Appendix P to this Part in a form that is:

- (1) Not a Category 1 radioactive source;
- (2) Not a Category 2 radioactive source;
- (3) Not plutonium-238; and
- (4) Deemed to pose a risk similar to or greater than a Category 2 radioactive source.

\* \* \* \* \*

*Classified Information* means Classified National Security Information under Executive Order 12958, as amended, or any successor Executive Order and Restricted Data under the Atomic Energy Act.

\* \* \* \* \*

*Conversion facility* means any facility for the transformation from one uranium chemical species to another, including conversion of uranium ore concentrates to uranium trioxide (UO<sub>3</sub>), conversion of UO<sub>3</sub> to uranium dioxide (UO<sub>2</sub>), conversion of uranium oxides to uranium tetrafluoride (UF<sub>4</sub>) or uranium hexafluoride (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 uranium-235 found in natural uranium (less than 0.711 weight percent uranium-235). It is obtained from spent (used) fuel elements or as byproduct tails or residues from uranium isotope separation.

\* \* \* \* \*

*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 uranium-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 uranium-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. Exports to embargoed countries must be pursuant to a specific license issued by the NRC and require Executive Branch review pursuant to § 110.41.

\* \* \* \* \*

*Executive Branch* means the Departments of State, Energy, Defense and Commerce.

\* \* \* \* \*

*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. A general license is a type of license issued through rulemaking by the NRC and is not an exemption from the requirements in this Part. A general license does not relieve a person from complying with other applicable NRC, Federal, and State requirements.

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

\* \* \* \* \*

*Low-level waste compact*, as used in this Part, means a compact entered into by two or more States pursuant to the Low-Level Radioactive Waste Policy Amendments Act of 1985.

\* \* \* \* \*

*Medical isotope*, for the purposes of § 110.42(a)(9), includes molybdenum-99, iodine-131, xenon-133, and other radioactive materials used to produce a radiopharmaceutical for diagnostic, therapeutic procedures or for research and development.

*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.

\* \* \* \* \*

*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 (China, France, Russia, United Kingdom, United States).

\* \* \* \* \*

*NRC Public Document Room* means the facility at One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland, 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 NRC makes computer terminals available to access the Publicly Available Records System (PARS) component of ADAMS on the NRC Website, <http://www.nrc.gov>, and where copies can be viewed or ordered for a fee 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 Website and ADAMS. The NRC Public Document Room is open from 7:45 a.m. to 4:15 p.m., Monday through Friday, except on Federal holidays. Reference service and access to documents may also be requested by telephone (301-415-4737 or 800-397-4209) between 8:30 a.m. and 4:15 p.m., or by e-mail ([PDR.Resource@nrc.gov](mailto:PDR.Resource@nrc.gov)), facsimile (301-415-3548), or letter (NRC Public Document Room, One White Flint North, 11555 Rockville Pike (first floor), Rockville, Maryland 20852-2738).

\* \* \* \* \*

*Nuclear Suppliers Group* (NSG) is a group of nuclear supplier countries which seeks to contribute to the non-proliferation of nuclear weapons through the implementation of Guidelines for nuclear exports and nuclear-related exports.

*Obligations* means the commitments undertaken by the U.S. Government or by foreign governments or groups of nations with respect to imports or exports of nuclear material (except byproduct material) and equipment listed in §§ 110.8 and 110.9. Imports and exports of material or equipment subject to these commitments involve conditions placed on the transfer of the material or equipment, such as peaceful end-use

assurances, prior consent for retransfer, and exchanges of information on the import or export. The U.S. Government informs the licensee of obligations attached to material or equipment being imported into the United States and approves changes to those obligations.

\* \* \* \* \*

*Person* means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, Government agency, other than the Commission or the Department of Energy, except that the Department of Energy shall be considered a person within the meaning of the regulations in this Part to the extent that its activities are subject to the licensing and related regulatory authority of the Commission pursuant to section 111 of the Atomic Energy Act; any State or political subdivision of, or any political entity within a State, any foreign government or nation or any political subdivision of any such government or nation, or other entity; and any legal successor, representative, agent, or agency of the foregoing.

*Physical security or Physical protection* 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 for purposes of import.

\* \* \* \* \*

*Radioactive waste*, for the purposes of this Part, means any material that contains or is contaminated with source, byproduct, or special nuclear material that by its possession would require a specific radioactive material license in accordance with this Chapter and is imported or exported for the purposes of disposal in a land disposal facility as defined in 10 CFR Part 61, a disposal area as defined in Appendix A to 10 CFR Part 40, or an equivalent facility; or recycling, waste treatment or other waste management process that generates radioactive material for disposal in a land disposal facility as defined in 10 CFR Part 61, a disposal area as defined in Appendix A to 10 CFR Part 40, or an equivalent facility. Radioactive waste does not include radioactive material that is—

(1) Of U.S. origin and contained in a sealed source, or device containing a sealed source, that is being returned to a manufacturer, distributor or other entity which is authorized to receive and possess the sealed source or the device containing a sealed source;

(2) A contaminant on any non-radioactive material (including service tools and protective clothing) used in a nuclear facility (an NRC- or Agreement State-licensed facility (or equivalent facility) or activity authorized to possess or use radioactive material), if the material is being shipped solely for recovery and beneficial reuse of the non-radioactive material in a nuclear facility and not for waste management purposes or disposal;

(3) Exempted from regulation by the Nuclear Regulatory Commission or equivalent Agreement State regulations;

(4) Generated or used in a U.S. Government waste research and development testing program under international arrangements;

(5) Being returned by or for the U.S. Government or military to a facility that is authorized to possess the material; or

(6) Imported solely for the purposes of recycling and not for waste management or disposal where there is a market for the recycled material and evidence of a contract or business agreement can be produced upon request by the NRC.

Note: The definition of *radioactive waste* in this Part does not include spent or irradiated fuel.

*Radiopharmaceutical*, for the purposes of § 110.42(a)(9), means a radioactive isotope that contains byproduct material combined with chemical or biological material and is designed to accumulate temporarily in a part of the body for therapeutic purposes or for enabling the production of a useful image for use in a diagnosis of a medical condition.

*Recipient Country*, for the purposes of § 110.42(a)(9), means Canada, Belgium, France, Germany, and the Netherlands.

*Restricted destinations* means countries that are listed in § 110.29 based on recommendations from the Executive Branch. These countries may receive exports of certain materials and quantities under a general license, but some exports to restricted destinations will require issuance of a specific license by the NRC including Executive Branch review pursuant to § 110.41.

\* \* \* \* \*

*Specific license* means an export or import license document issued to a named person and authorizing the export or import of specified nuclear equipment or materials based upon the review and approval of an NRC Form 7 application filed pursuant to this Part and other related submittals in support of the application.

\* \* \* \* \*

4. Section 110.6 is revised to read as follows:

**§ 110.6 Retransfers.**

(a) Retransfer of any nuclear equipment or material listed in §§ 110.8 and 110.9 (except byproduct material), including special nuclear material produced through the use of equipment, source material, or special nuclear material bearing obligations to the United States pursuant to an agreement for cooperation, requires authorization by the Department of Energy, unless the export to the new destination is authorized by the NRC under a specific or general license or an exemption from licensing requirements. See definition of "obligations" in § 110.2.

(b) Requests for authority to retransfer are processed by the Department of Energy, National Nuclear Security Administration, Office of International Regimes and Agreements, Washington, DC 20585.

5. In § 110.7, paragraph (c) is revised to read as follows:

**§ 110.7 Information collection requirements: OMB approval.**

\* \* \* \* \*

(c) This Part contains information collection requirements in addition to those approved under the control number specified in paragraph (a) of this section. The information collection requirements contained in §§ 110.19, 110.20, 110.21, 110.22, 110.23, 110.31, 110.32, and 110.51, and NRC Form 7 are approved under control number 3150-0027.

6. In § 110.7a, paragraph (b) is revised to read as follows:

**§ 110.7a Completeness and accuracy of information.**

\* \* \* \* \*

(b) Each licensee or applicant for a license shall notify the Commission of information identified by the applicant or licensee as having, for the regulated activity, a

significant implication for public health and safety or common defense and security. An applicant or licensee violates this paragraph if the applicant or licensee fails to notify the Commission of information that the applicant or licensee has identified as having a significant implication for public health and safety or common defense and security. Notification shall be provided to the Administrator of the appropriate Regional Office within two working days of identifying the information. This requirement is not applicable to information which is already required to be provided to the Commission by other reporting or updating requirements.

7. In § 110.10, paragraph (c) is revised to read as follows:

**§ 110.10 General.**

\* \* \* \* \*

(c) The granting of an exemption does not relieve any person from complying with the regulations of other U.S. Federal and/or State government agencies applicable to exports or imports under their authority.

8. Section 110.11 is revised to read as follows:

**§ 110.11 Export of IAEA safeguards samples.**

A person is exempt from the requirements for a license to export special nuclear material set forth in sections 53 and 54d. of the Atomic Energy Act and from the regulations in this Part to the extent that the person exports special nuclear material in IAEA safeguards samples, if the samples are exported in accordance with § 75.8 of this chapter, or a comparable Department of Energy order, and are in quantities not exceeding a combined total of 100 grams of contained plutonium, uranium-233 and uranium-235 per facility per year. This exemption does not relieve any person from complying with Parts 71 or 73 of this chapter or any Commission order under section 201(a) of the Energy Reorganization Act of 1974 (42 U.S.C. 5841(a)).

9. Section 110.19 is revised to read as follows:

**§ 110.19 Types of licenses.**

Licenses for the export and import of nuclear equipment and material in this Part consist of general licenses and specific licenses. A general license is effective without the filing of an application with the Commission or the issuance of licensing documents to a particular person. A specific license is issued to a named person and is effective upon approval by the Commission of an application filed pursuant to the regulations in this Part and issuance of licensing documents to the applicant.

10. In § 110.20, paragraphs (a) and (d) are revised to read as follows:

**§ 110.20 General license information.**

(a) A person may use an NRC general license as authority to export or import nuclear equipment or material, if the nuclear equipment or material to be exported or imported is covered by the NRC general licenses described in §§ 110.21 through 110.27. If an export or import is not covered by the NRC general licenses described in §§ 110.21 through 110.27, a person must file an application with the Commission for a specific license in accordance with §§ 110.31 through 110.32.

\* \* \* \* \*

(d) A general license for export may not be used if the exporter knows, or has reason to believe, that the material will be used in any illegal activity or any activity related to isotope separation, chemical reprocessing, heavy water production or the fabrication of nuclear fuel containing plutonium, unless these activities are generically authorized under an appropriate agreement for cooperation.

\* \* \* \* \*

11. In § 110.21 paragraph (e) is removed and paragraphs (a)(3), (a)(4), (b), and (c) are revised to read as follows:

**§ 110.21 General license for the export of special nuclear material.**

(a) \* \* \*

(3) Special nuclear material, other than plutonium-236 and plutonium-238, in sensing components in instruments, if no more than 3 grams of enriched uranium or 0.1 gram of plutonium or uranium-233 are contained in each sensing component.

(4) Plutonium-236 and plutonium-238 when contained in a device, or a source for use in a device, in quantities of less than  $3.7 \times 10^{-3}$  TBq (100 millicuries) of alpha activity (189 micrograms plutonium-236, 5.88 milligrams plutonium-238) per device or source.

(b) Except as provided in paragraph (d) of this section, a general license is issued to any person to export the following to any country not listed in § 110.28 or § 110.29:

(1) Special nuclear material, other than plutonium-236 and plutonium-238, in individual shipments of 0.001 effective kilogram or less (e.g., 1.0 gram of plutonium, uranium-233 or uranium-235, or 10 kilograms of 1 percent enriched uranium), not to exceed 0.1 effective kilogram per calendar year to any one country.

(2) Special nuclear material in fuel elements as replacements for damaged or defective unirradiated fuel elements previously exported under a specific license, subject to the same terms as the original export license and the condition that the replaced fuel elements must be returned to the United States within a reasonable time period.

(3) Uranium, enriched to less than 20 percent in uranium-235, in the form of uranium hexafluoride (UF<sub>6</sub>) heels in cylinders being returned to suppliers in EURATOM.

(c) Except as provided in paragraph (d) of this section, a general license is issued to any person to export plutonium-236 or plutonium-238 to any country listed in § 110.30 in individual shipments of 1 gram or less, not to exceed 100 grams per calendar year to any one country.

\* \* \* \* \*

12. Section 110.22 is revised to read as follows:

**§ 110.22 General license for the export of source material.**

(a) Except as provided in paragraph (e) of this section, a general license is issued to any person to export the following to any country not listed in § 110.28:

(1) Uranium or thorium, other than uranium-230, uranium-232, thorium-227, and thorium-228, in any substance in concentrations of less than 0.05 percent by weight.

(2) Thorium, other than thorium-227 and thorium-228, in incandescent gas mantles or in alloys in concentrations of 5 percent or less.

(3) Thorium-227, thorium-228, uranium-230, and uranium-232 when contained in a device, or a source for use in a device, in quantities of less than  $3.7 \times 10^{-3}$  TBq (100 millicuries) of alpha activity (3.12 micrograms thorium-227, 122 micrograms thorium-228, 3.7 micrograms uranium-230, 4.7 milligrams uranium-232) per device or source.

(b) Except as provided in paragraph (f) of this section, a general license is issued to any person to export uranium or thorium, other than uranium-230, uranium-232, thorium-227, or thorium-228, in individual shipments of 10 kilograms or less to any country not listed in § 110.28 or § 110.29, not to exceed 1,000 kilograms per calendar year to any one country or 500 kilograms per calendar year to any one country when the uranium or thorium is Canadian-obligated.

(c) Except as provided in paragraph (e) of this section, a general license is issued to any person to export uranium or thorium, other than uranium-230, uranium-232, thorium-227, or thorium-228, in individual shipments of 1 kilogram or less to any country listed in § 110.29, not to exceed 100 kilograms per calendar year to any one country.

(d) Except as provided in paragraph (e) of this section, a general license is issued to any person to export uranium-230, uranium-232, thorium-227, or thorium-228 in individual shipments of 10 kilograms or less to any country listed in § 110.30, not to exceed 1,000 kilograms per calendar year to any one country or 500 kilograms per calendar year to any one country when the uranium or thorium is Canadian-obligated.

(e) Paragraphs (a), (b), (c), and (d) of this section do not authorize the export under general license of source material in radioactive waste.

13. Section 110.23 is revised to read as follows:

**§ 110.23 General license for the export of byproduct material.**

(a) A general license is issued to any person to export byproduct material (see Appendix L to this Part) to any country not listed in § 110.28 and subject to the following limitations:

(1) The general license in this section does not authorize the export of byproduct material in the form of radioactive waste.

(2) The general license in this section does not authorize the export of the following radionuclides:

Americium-242m	Curium-245
Californium-249	Curium-247
Californium-251	

(3) For byproduct materials listed in Table 1 of Appendix P to this Part, individual shipments under a general license for export must be less than the terabequerel (TBq) values specified in Category 2 of Table 1 unless a more restrictive requirement applies.

(4) The general license authorizes exports of the following radionuclides when contained in a device, or a source for use in a device, in quantities less than  $3.7 \times 10^{-3}$

TBq (100 millicuries) of alpha activity per device or source, unless the export is to a country listed in § 110.30:

Actinium-225	Einsteinium-252
Actinium-227	Einsteinium-253
Californium-248	Einsteinium-254
Californium-250	Einsteinium-255
Californium-252	Fermium-257
Californium-253	Gadolinium-148
Californium-254	Mendelevium-258
Curium-240	Neptunium-235
Curium-241	Polonium-208
Curium-242	Polonium-209
Curium-243	Polonium-210
Curium-244	Radium-223

(5)(i) For americium-241, exports under the general license to a country listed in § 110.29 must not exceed  $3.7 \times 10^{-2}$  TBq (one curie) per shipment.

(ii) For americium-241, exports under the general license to a country listed in § 110.29 that exceed  $3.7 \times 10^{-2}$  TBq (one curie) per shipment, must be contained in industrial process control equipment or petroleum exploration equipment in quantities not exceeding 0.60 TBq (16 curies) per device and not exceeding 7.4 TBq/calendar year (200 curies/calendar year) to any one country.

(iii) All exports of americium are subject to the reporting requirements listed in § 110.54 (b).

(6) For neptunium-235 and -237, exports under the general license must not exceed one gram for individual shipment and must not exceed a cumulative total of 10 grams per calendar year to any one country. All exports of neptunium are subject to the reporting requirements listed in § 110.54 (b).

(7) For polonium-210, exports under the general license, when contained in static eliminators, must not exceed 3.7 TBq (100 curies) per individual shipment.

(8)(i) For tritium in any dispersed form (e.g., luminescent light sources and paint, accelerator targets, calibration standards, labeled compounds), exports under the general license must not exceed 0.37 TBq (10 curies (1.03 milligrams)) per item, not to exceed 37 TBq (1,000 curies (103 milligrams)) per shipment, or 370 TBq (10,000 curies (1.03 grams)) per calendar year to any one country.

(ii) For tritium in any dispersed form (e.g., luminescent light sources and paint, accelerator targets, calibration standards, labeled compounds), exports under the general license to the countries listed in § 110.30 must not exceed the quantity of 1.48 TBq (40 curies (4.12 milligrams)) per item, not to exceed 37 TBq (1,000 curies (103 milligrams)) per shipment or 370 TBq (10,000 curies (1.03 grams)) per calendar year to any one country.

(iii) For tritium in luminescent safety devices installed in an aircraft, exports under the general license must not exceed 1.48 TBq (40 curies (4.12 milligrams)) per light source.

(iv) The general license in this section does not authorize the export of tritium for recovery or recycle purposes.

14. Section 110.24 is revised to read as follows:

**§ 110.24 General license for the export of deuterium.**

(a) A general license is issued to any person to export to any country not listed in § 110.28 or § 110.29 deuterium in individual shipments of 10 kilograms or less (50 kilograms of heavy water). No person may export more than 200 kilograms (1000 kilograms of heavy water) per calendar year to any one country.

(b) A general license is issued to any person to export to any country listed in § 110.29 deuterium in individual shipments of 1 kilogram or less (5 kilograms of heavy water). No person may export more than 5 kilograms (25 kilograms of heavy water) per calendar year to any one country listed in § 110.29.

**§ 110.25 [Reserved]**

15. Section 110.25 is added and reserved.

16. Section 110.26 is revised to read as follows:

**§ 110.26 General license for the export of nuclear reactor components.**

(a) A general license is issued to any person to export to a destination listed in paragraph (b) of this section any nuclear reactor component of U.S. origin described in paragraphs (5) through (9) of Appendix A to this Part if--

(1) The component will be used in a light or heavy water-moderated power or research reactor; or

(2) The component is in semifabricated form and will be undergoing final fabrication or repair in those countries for either subsequent return to the United States for use in a nuclear power or research reactor in the United States or in one of the destinations listed in paragraph (b) of this section.

(b) The export of nuclear reactor components under the general license established in paragraph (a) of this section is approved to the following destinations:

Austria	Lithuania
Belgium	Luxembourg
Bulgaria	Malta
Canada	Netherlands
Cyprus	New Zealand
Czech Republic	Philippines
Denmark	Poland
Estonia	Portugal
Finland	Republic of Korea
France	Romania
Germany	Slovak Republic
Greece	Slovenia
Hungary	Spain
Indonesia	Sweden
Ireland	Switzerland
Italy	Taiwan
Japan	United Kingdom
Latvia	

(c) This general license does not authorize the export of components, in final or semi-fabricated form, for research reactors capable of continuous operation above 5 MW thermal.

(d) This general license does not authorize the export of essentially complete reactors through piecemeal exports of facility components. When individual exports of components would amount in the aggregate to export of an essentially complete nuclear reactor, a facility export license is required.

(e) All exports under paragraph (a) of this section are subject to the reporting requirements in § 110.54(c).

Note: U.S. Origin includes components produced or finished in the United States, even with non-U.S. content unless the foreign content is obligated by supplier government conditions, such as a prior consent for retransfer condition.

\* \* \* \* \*

17. In § 110.27, paragraphs (a), (b), and (f) are revised to read as follows:

**§ 110.27 General license for import.**

(a) Except as provided in paragraphs (b) and (c) of this section, a general license is issued to any person to import byproduct, source, or special nuclear material if the U.S. consignee is authorized to receive and possess the material under a general or specific NRC or Agreement State license issued by the Commission or a State with which the Commission has entered into an agreement under Section 274b. of the Atomic Energy Act.

(b) The general license in paragraph (a) of this section does not authorize the import of more than 100 kilograms per shipment of source and/or special nuclear material in the form of irradiated fuel.

(c) Paragraph (a) of this section does not authorize the import under a general license of radioactive waste.

\* \* \* \* \*

(f) Importers of radioactive material listed in Appendix P to this Part must provide the notifications required by § 110.50.

**§ 110.30 [Amended]**

18. Section 110.30 is amended by adding “China”, “Croatia”, “Estonia”, “Iceland”, “Kazakhstan”, “Lithuania”, and “Malta” in alphabetical order.

19. Section 110.31 is revised to read as follows:

**§ 110.31 Application for a specific license.**

(a) A person shall file an application for a specific license to export or import with the Deputy Director of the NRC's Office of International Programs, using an appropriate method listed in § 110.4.

(b) Applications for an export, import, amendment or renewal licenses or a request for an exemption from a licensing requirement under this Part shall be filed on NRC Form 7.

(c) An application for a specific license to export or import or a request for an exemption from a licensing requirement must be accompanied by the appropriate fee in accordance with the fee schedules in § 170.21 and § 170.31 of this chapter. A license application will not be processed unless the specified fee is received.

(d) Each application on NRC Form 7 shall be signed by the applicant or licensee or a person duly authorized to act for and on behalf of the applicant or licensee.

(e) Each person shall provide in the license application, as appropriate, the information specified in § 110.32. The Commission also may require the submission of additional information if necessary to complete its review.

(f) An application may cover multiple shipments and destinations.

(g) The applicant shall withdraw an application when it is no longer needed. The Commission's official files retain all documents related to a withdrawn application.

20. Section 110.32 is revised to read as follows:

**§ 110.32 Information required in an application for a specific license/NRC Form 7.**

(a) Name and address of applicant.

(b) Name and address of any other party, including the supplier of equipment or material, if different from the applicant.

(c) Country of origin of equipment or material, and any other countries that have

processed the material prior to its import into the U.S.

(Note: This is meant to include all obligations attached to the material, according to the definition of *obligations* in § 110.2. Licensees must keep records of obligations attached to material which they own or is in their possession.)

(d) Names and addresses of all intermediate and ultimate consignees, other than intermediate consignees performing shipping services only.

(e) Dates of proposed first and last shipments.

(f) Description of the equipment or material including, as appropriate, the following:

(1) Maximum quantity of material in grams or kilograms (terabequerels or TBq for byproduct material) and its chemical and physical form.

(2) For enriched uranium, the maximum weight percentage of enrichment and maximum weight of contained uranium-235.

(3) For nuclear equipment, the name of the facility and its total dollar value.

(4) For nuclear reactors, the name of the facility, its design power level and its total dollar value.

(5) For proposed exports or imports of radioactive waste, the volume, physical and chemical characteristics, route of transit of shipment, classification (as defined in § 61.55 of this chapter) if imported or exported for direct disposal at Part 61 or equivalent Agreement State licensed facility, and ultimate disposition (including forms of management or treatment) of the waste.

(6) For proposed imports of radioactive waste, the industrial or other process responsible for generation of the waste, and the status of the arrangements for disposition, including pertinent documentation of these arrangements.

(7) Description of end use by all consignees in sufficient detail to permit accurate evaluation of the justification for the proposed export or import, including the need for shipment by the dates specified.

(g)(1) For proposed exports of Category 1 quantities of material listed in Table 1 of Appendix P to this Part, pertinent documentation that the recipient of the material has the necessary authorization under the laws and regulations of the importing country to receive and possess the material.

(2) For proposed exports of Category 2 quantities of material listed in Table 1 of Appendix P to this Part, pertinent documentation that the recipient of the material has the necessary authorization under the laws and regulations of the importing country to receive and possess the material. This documentation must be provided to the NRC at least 24 hours prior to the shipment.

(3) Pertinent documentation shall consist of a copy of the recipient's authorization to receive and possess the material to be exported or a confirmation from the government of the importing country that the recipient is so authorized. The recipient authorization shall include the following information:

(i) Name of the recipient;

(ii) Recipient location and legal address or principal place of business;

(iii) Relevant radionuclides and radioactivity being imported or that the recipient is authorized to receive and possess;

(iv) Uses, if appropriate; and

(v) The expiration date of the recipient's authorization (if any).

21. Section 110.40 is revised to read as follows:

**§ 110.40 Commission review.**

(a) Immediately after receipt of a license application for an export or import requiring a specific license under this Part, the Commission will initiate its licensing review and, to the maximum extent feasible, will expeditiously process the application concurrently with any applicable review by the Executive Branch.

(b) The Commissioners shall review a license application for export of the following:

(1) A production or utilization facility.

(2) More than 5 effective kilograms of high-enriched uranium, plutonium or uranium-233.

(3) An export involving assistance to end uses related to isotope separation, chemical reprocessing, heavy water production, advanced reactors, or the fabrication of nuclear fuel containing plutonium, except for exports of source material or low-enriched uranium to EURATOM or Japan for enrichment up to 5 percent in the isotope uranium-235, and those categories of exports which the Commission has approved in advance as constituting permitted incidental assistance.

(4) The initial export to a country since March 10, 1978 of source or special nuclear material for nuclear end use.

(5) An initial export to any country listed in § 110.28 or § 110.29 involving over:

(i) 10 grams of plutonium, uranium-233 or high-enriched uranium;

(ii) 1 effective kilogram of low-enriched uranium;

(iii) 250 kilograms of source material or heavy water; or

(iv) 37 TBq (1,000 curies) of tritium.

(6) The export of radioactive material listed in Table 1 of Appendix P of this Part involving:

(i) Exceptional circumstances in § 110.42(e); or

(ii) Category 1 quantities of material to any country listed in § 110.28.

(c) The Commission will review export and import license applications raising significant policy issues.

(d) If the Commission has not completed action on a license application within 60 days after receipt of the Executive Branch judgment, as provided for in § 110.41, or the license application when an Executive Branch judgment is not required, it will inform the applicant in writing of the reason for delay and, as appropriate, provide follow-up reports.

22. In § 110.41, paragraphs (a)(2) and (a)(10) are revised to read as follows:

**§ 110.41 Executive Branch review.**

(a) \* \* \*

(2) More than one effective kilogram of high-enriched uranium or 10 grams of plutonium or uranium-233.

\* \* \* \* \*

(10) An export raising significant policy issues or subject to special limitations as determined by the Commission or the Executive Branch, including exports of radioactive material listed in Table 1 of Appendix P to this Part involving exceptional circumstances in § 110.42(e).

\* \* \* \* \*

23. In § 110.43, paragraphs (e) and (f) are removed and paragraph (d) is revised to read as follows:

**§ 110.43 Import licensing criteria.**

\* \* \* \* \*

(d) With respect to the import of radioactive waste, an appropriate facility has agreed to accept and is authorized to possess the waste for management or disposal as confirmed by NRC consultations with, as applicable, the Agreement State in which the facility is located and low-level waste compact commission(s).

24. Section 110.44 is revised to read as follows:

**§ 110.44 Physical security standards.**

(a) Physical security measures in recipient countries must provide protection at least comparable to the recommendations in the current version of IAEA publication INFCIRC/225/Rev. 4 (corrected), June 1999, "The Physical Protection of Nuclear Material and Nuclear Facilities," and is incorporated by reference in this Part. This incorporation by reference was approved by the Director of the Office of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR Part 51. Notice of any changes made to the material incorporated by reference will be published in the *Federal Register*. Copies of INFCIRC/225/Rev. 4 may be obtained from the Deputy Director, Office of International Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, and are available for inspection at the NRC library, 11545 Rockville Pike, Rockville, Maryland 20852-2738. A copy is available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

(b) Commission determinations on the adequacy of physical security measures are based on:

(1) Receipt by the appropriate U.S. Executive Branch Agency of written assurances from the relevant recipient country government that physical security

measures providing protection at least comparable to the recommendations set forth in INFCIRC/225/Rev. 4 (corrected).

(2) Information obtained through country visits, information exchanges, or other sources. Determinations are made on a country-wide basis and are subject to continuing review. Appendix M to this Part describes the different categories of nuclear material to which physical security measures are applied.

25. In § 110.45, paragraphs (a), (b) and (d) are revised to read as follows:

**§ 110.45 Issuance or denial of license.**

(a) The Commission will issue an export license if it has been notified by the State Department that it is the judgment of the Executive Branch that the proposed export will not be inimical to the common defense and security, and:

(1) Finds, based upon a reasonable judgment of the assurances provided and other information available to the Federal government, that the applicable criteria in § 110.42, or their equivalent, are met.

(2) Finds that there are no material changed circumstances associated with an export license application (except for byproduct material applications) from those existing at the time of issuance of a prior license to export to the same country, if the prior license was issued under the provisions of paragraph (a)(1) of this section.

(b) The Commission will issue an import license if it finds that:

(1) The proposed import will not be inimical to the common defense and security;

(2) The proposed import will not constitute an unreasonable risk to the public health and safety;

(3) The requirements of subpart A of Part 51 of this chapter (to the extent applicable to the proposed import) have been satisfied; and

(4) With respect to a proposed import of radioactive waste, an appropriate facility has agreed to accept and is authorized to possess the waste for management or disposal as confirmed by NRC consultations with, as applicable, the Agreement State(s) in which the facility is located and the low-level waste compact commission(s).

\* \* \* \* \*

(d) If, after receiving the Executive Branch judgment that the issuance of a proposed export license will not be inimical to the common defense and security, the Commission does not issue the proposed license on a timely basis because it is unable to make the statutory determinations required under the Atomic Energy Act, the Commission will publicly issue a decision to that effect and will submit the license application to the President. The Commission's decision will include an explanation of the basis for the decision and any dissenting or separate views. The provisions in this paragraph do not apply to Commission decisions regarding applications for specific licenses to export byproduct material, including radioactive material listed in Table 1 of Appendix P to this Part, or radioactive waste.

\* \* \* \* \*

26. Section 110.50 is revised to read as follows:

**§ 110.50 Terms.**

(a) *General and specific licenses.*

(1) Each license is subject to all applicable provisions of the Atomic Energy Act and other applicable law and to all applicable rules, regulations, decisions and orders of the Commission.

(2) Each license is subject to amendment, suspension, revocation or incorporation of separate conditions when required by amendments of the Atomic

Energy Act or other applicable law, or by other rules, regulations, decisions or orders issued in accordance with the terms of the Atomic Energy Act or other applicable law.

(3) A licensee authorized to export or import nuclear material is responsible for compliance with applicable requirements of this chapter, unless a domestic licensee of the Commission has assumed that responsibility and the Commission has been so notified.

(4) Each license authorizes export or import only and does not authorize any person to receive title to, acquire, receive, possess, deliver, use, transport or transfer any nuclear equipment or material subject to this Part.

(5) Each license issued by the NRC for the export or import of nuclear material authorizes only the export or import of that nuclear material and accompanying packaging, fuel element, hardware, or other associated devices or products.

(6) No nuclear equipment license confers authority to export or import nuclear material.

(7) Each nuclear equipment export license authorizes the export of only those items required for use in the foreign nuclear installation for which the items are intended.

(8) A licensee shall not proceed to export or import and shall notify the Commission promptly if he knows or has reason to believe that the packaging requirements of Part 71 of this chapter have not been met.

(b) *Specific licenses.*

(1) Each specific license will have an expiration date.

(2) A licensee may export or import only for the purpose(s) and/or end-use(s) stated in the specific export or import license issued by NRC.

(3) Unless a license specifically authorizes the export of certain foreign-obligated nuclear material or equipment, a licensee may not ship such material or equipment until:

(i) The licensee has requested and the Commission has issued an amendment to the license authorizing such shipment; or

(ii) The licensee has given at least 40 days advance notice of the intended shipment in writing to the Deputy Director, Office of International Programs (OIP); and

(iii) The Deputy Director, OIP has:

(A) Obtained confirmation, through either the Department of Energy or State, that the foreign government in question has given its consent to the intended shipment pursuant to its agreement for cooperation with the United States; and

(B) Communicated this in writing to the licensee.

(c) *Advanced notification.*

(1) A licensee authorized to export or import the radioactive material listed in Appendix P to this Part is responsible for notifying NRC and, in cases of exports, the government of the importing country in advance of each shipment. A list of points of contact in importing countries is available at NRC's Office of International Programs Website, accessible on the NRC Public Website at <http://www.nrc.gov>.

(2) The NRC's office responsible for receiving advance notifications for all export and import shipments is the NRC Operations Center. Notifications are to be e-mailed to [Hoo.Hoc@nrc.gov](mailto:Hoo.Hoc@nrc.gov) (preferred method) or faxed to (301) 816-5151. In the subject line of the e-mail or on the fax cover page include "10 CFR 110.50(c) Notification." To contact the NRC Operations Center, use the same e-mail address or call (301) 816-5100. Difficulties notifying the NRC Operations Center must be promptly reported to the Office of International Programs at (301) 415-2336.

(3) Notifications may be electronic or in writing on business stationary, and must contain or be accompanied by the information which follows.

(i) For export notifications:

(A) 10 CFR Part 110 export license number and expiration date;

(B) Name of the individual and licensee making the notification, address, and telephone number;

(C) Foreign recipient name, address, and end use location(s) (if different than recipient's address);

(D) Radionuclides and activity level in TBq, both for single and aggregate shipments;

(E) Make, model and serial number, for any Category 1 and 2 sealed sources, if available;

(F) End use in the importing country, if known;

(G) Shipment date; and

(H) A copy of the foreign recipient's authorization or confirmation of that authorization from the government of the importing country as required by § 110.32(g) unless the authorization has already been provided to the NRC.

(ii) For import notifications:

(A) Name of individual and licensee making the notification, address, and telephone number;

(B) Recipient name, location, and address (if different than above);

(C) Name, location, address, contact name and telephone number for exporting facility;

(D) Radionuclides and activity level in TBq, both for single and aggregate shipments;

(E) Make, model and serial number, radionuclide, and activity level for any Category 1 and 2 sealed sources, if available;

(F) End use in the U.S.;

(G) Shipment date from exporting facility and estimated arrival date at the end use location; and

(H) NRC or Agreement State license number to possess the import in the U.S. and expiration date.

(4) Export notifications must be received by the NRC at least 7 days in advance of each shipment, to the extent practical, but in no case less than 24 hours in advance of each shipment. Import notifications must be received by the NRC at least 7 days in advance of each shipment.

(5) Advance notifications containing the above information must be controlled, handled, and transmitted in accordance with § 2.390 of this chapter and other applicable NRC requirements governing protection of sensitive information.

(d) A specific license may be transferred, disposed of or assigned to another person only with the approval of the Commission by license amendment.

27. Section 110.51 is revised to read as follows:

**§ 110.51 Amendment and renewal of licenses.**

(a) *Amendments.*

(1) Applications for amendment of a specific license shall be filed on NRC Form 7 in accordance with §§ 110.31 and 110.32 and shall specify the respects in which the licensee desires the license to be amended and the grounds for such amendment.

(2) An amendment is not required for:

(i) Changes in monetary value (but not amount or quantity);

(ii) Changes in the names and/or mailing addresses within the same countries of the intermediate or ultimate consignees listed on the license; or

(iii) The addition of intermediate consignees in any of the importing countries specified in the license (for a nuclear equipment license only).

(b) *Renewals.*

(1) Applications for renewal of a specific license shall be filed on NRC Form 7 in accordance with §§ 110.31 and 110.32.

(2) If an application to renew a license is submitted 30 days or more before the license expires, the license remains valid until the Commission acts on the renewal application. An expired license is not renewable.

(c) *General.* In considering an application by a licensee to renew or amend a license, the Commission will apply, as appropriate, the same procedures and criteria it uses for initial license applications.

28. In § 110.53, paragraphs (a) and (b)(1) are revised to read as follows:

**§ 110.53 United States address, records, and inspections.**

(a) Each licensee (general or specific) shall have an office in the United States where papers may be served and where records required by the Commission will be maintained.

(b)(1) Each license applicant or licensee (general or specific) shall maintain records concerning his exports or imports. The licensee shall retain these records for five years after each export or import except that byproduct material records must be retained for three years after the date of each export or import shipment.

\* \* \* \* \*

29. Section 110.54 is revised to read as follows:

**§ 110.54 Reporting requirements.**

(a)(1) Reports of exports of nuclear facilities and equipment, nuclear grade graphite for nuclear end use, and deuterium shipped during the previous quarter must be submitted by licensees making exports under the general license or specific license of this Part by January 15, April 15, July 15, and October 15 of each year on DOC/NRC Forms AP-M or AP-13, and associated forms. The reports must contain information on all nuclear facilities, equipment, and non-nuclear materials (nuclear grade graphite for nuclear end use and deuterium) listed in Annex II of the Additional Protocol.

(2) These required reports must be sent via facsimile to (202) 482-1731, emailed to [aprp@bis.doc.gov](mailto:aprp@bis.doc.gov), or hand-delivered or submitted by courier to the Bureau of Industry and Security, in hard copy, to the following address: Treaty Compliance Division, Bureau of Industry and Security, U.S. Department of Commerce, Attn: AP Reports, 14<sup>th</sup> Street and Pennsylvania Avenue, NW., Room 4515, Washington, DC 20230. Telephone: (202) 482-1001.

(b) Persons making exports under the general license established by § 110.23(a) or under a specific license shall submit by February 1 of each year one copy of a report of all americium and neptunium shipments during the previous calendar year. This report shall be submitted to the Deputy Director, Office of International Programs at the address provided in § 110.4. The report must include:

(1) A description of the material, including quantity in TBq and gram;

(2) Approximate shipment dates; and

(3) A list of recipient countries, end users, and intended use keyed to the items shipped.

(c) Persons making exports under the general license established by § 110.26(a) shall submit by February 1 of each year one copy of a report of all components shipped during the previous calendar year. This report must include:

(1) A description of the components keyed to the categories listed in Appendix A to this Part.

(2) Approximate shipment dates.

(3) A list of recipient countries and end users keyed to the items shipped.

30. Section 110.60 is revised to read as follows:

**§ 110.60 Violations.**

(a) The Commission may obtain an injunction or other court order to prevent a violation of the provisions of--

(1) The Atomic Energy Act;

(2) Title II of the Energy Reorganization Act of 1974; or

(3) A regulation or order pursuant to those Acts.

(b) The Commission may obtain a court order for the payment of a civil penalty imposed under section 234 of the Atomic Energy Act:

(1) For violations of:

(i) Sections 53, 57, 62, 63, 81, 82, 101, 103, 104, 107, or 109 of the Atomic Energy Act;

(ii) Section 206 of the Energy Reorganization Act;

(iii) Any rule, regulation, or order issued pursuant to the sections specified in paragraph (b)(1)(i) of this section;

(iv) Any term, condition, or limitation of any license issued under the sections specified in paragraph (b)(1)(i) of this section.

(2) For any violation for which a license may be revoked under section 186 of the Atomic Energy Act.

31. In § 110.66, paragraph (b) is revised to read as follows:

**§ 110.66 Enforcement hearing.**

\* \* \* \* \*

(b) A hearing pursuant to this subpart will be conducted under the procedures in subpart G of Part 2 of this chapter.

32. In § 110.67, paragraph (a) is revised to read as follows:

**§ 110.67 Criminal penalties.**

(a) Section 223 of the Atomic Energy Act provides for criminal sanctions for willful violation of, attempted violation of, or conspiracy to violate, any regulation issued under sections 161b., 161i., or 161o. of the Atomic Energy Act. For purposes of section 223, all the regulations in 10 CFR Part 110 are issued under one or more of sections 161b, 161i, or 161o, except for the sections listed in paragraph (b) of this section.

\* \* \* \* \*

33. Section 110.70 is revised to read as follows:

**§ 110.70 Public notice of receipt of an application.**

(a) The Commission will notice the receipt of each license application, including applications for amendment or renewal, for an export or import for which a specific license is required by making a copy available at the NRC Website, <http://www.nrc.gov>.

(b) The Commission will also publish in the *Federal Register* a notice of receipt of each license application, including applications for amendment or renewal, to export the following:

(1) A production or utilization facility.

(2) Five effective kilograms or more of plutonium, high-enriched uranium or uranium-233.

(3) 10,000 kilograms or more of heavy water. (Note: Does not apply to exports of heavy water to Canada.)

(4) Nuclear grade graphite for nuclear end use.

(5) Radioactive waste.

(c) The Commission will also publish in the *Federal Register* a notice of receipt of a license application, including applications for amendment or renewal, for an import of radioactive waste for which a specific license is required.

34. Section 110.80 is revised to read as follows:

**§ 110.80 Basis for hearings.**

The procedures in this Part will constitute the exclusive basis for hearings on export and import license applications.

35. In § 110.81, paragraph (b) is revised to read as follows:

**§ 110.81 Written comments.**

\* \* \* \* \*

(b) These comments should be submitted within 30 days after public notice of receipt of the application on the NRC Website or in the *Federal Register* and addressed

to the Secretary, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001,  
Attention: Rulemakings and Adjudications Staff.

\* \* \* \* \*

36. In § 110.82, paragraph (c) is revised to read as follows:

**§ 110.82 Hearing request or intervention petition.**

\* \* \* \* \*

(c) Hearing requests and intervention petitions will be considered timely only if  
filed not later than:

(1) 30 days after notice of receipt in the *Federal Register*, for those applications  
published in the *Federal Register*;

(2) 30 days after publication of notice on the NRC Website at <http://www.nrc.gov>;

(3) 30 days after notice of receipt in the Public Document Room; or

(4) Such other time as may be provided by the Commission.

37. In § 110.112, paragraph (b) is revised to read as follows:

**§ 110.112 Reporter and transcript for an oral hearing.**

\* \* \* \* \*

(b) Except for any portions containing classified information, Restricted Data,  
Safeguards Information, proprietary information, or other sensitive unclassified  
information, transcripts will be made available at the NRC Website, <http://www.nrc.gov>,  
and/or at the NRC Public Document Room.

\* \* \* \* \*

Appendix L – [Amended]

38. Appendix L to 10 CFR Part 110 is amended by adding “Carbon 11 (C 11),” “Cesium 129 (Cs 129),” “Cobalt 57 (Co 57),” “Gallium 67 (Ga 67),” “Gold 195 (Au 195),” “Indium 111 (In 111),” “Iodine 123 (I 123),” “Iron 52 (Fe 52),” “Nitrogen 13 (N 13),” “Oxygen 15 (O 15),” “Potassium 43 (K 43),” “Rubidium 81 (Rb 81),” “Yttrium 87 (Y 87),” and “Yttrium 88 (Y 88)” in alphabetical order.

Dated at Rockville, Maryland, this 19<sup>th</sup> day of July, 2010.

For the Nuclear Regulatory Commission.

/RA/

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Annette Vietti-Cook,  
Secretary of the Commission.