

Title 33

ENVIRONMENTAL QUALITY

Part XV. Radiation Protection

Chapter 1. General Provisions

§102. Definitions and Abbreviations

As used in these regulations, these terms have the definitions set forth below. Additional definitions used only in a certain chapter may be found in that Chapter.

Agreement State—any state with which the U.S. Nuclear Regulatory Commission or the U.S. Atomic Energy Commission has entered into an effective agreement under Subsection 274.b of the Atomic Energy Act of 1954, as amended (~~73 Stat. 689~~). Non-agreement State means any other state.

Atomic Energy Act—Atomic Energy Act of 1954 (68 Stat. 919), including any amendments thereto.

Becquerel—the SI unit of measurement of radioactivity; it is equal to one ~~transformation~~ disintegration per second. One curie is equal to 3.7×10^{10} becquerels (Bq).

Commission— the U.S. Nuclear Regulatory Commission or its duly authorized representatives.

Curie— ~~a unit of quantity of activity. One curie (Ci) is that quantity~~ the amount of radioactive material that ~~decays~~ disintegrates at the rate of 37 billion atoms per second or 3.7×10^{10} disintegrations ~~or transformations~~ per second (dps ~~or tps~~). Commonly used submultiples of the curie are the millicurie and the microcurie. One millicurie (mCi) is equal to 0.001 curie, which is equal to 3.7×10^7 dps. One microcurie (μ Ci) is equal to 0.000001 curie, which is equal to 3.7×10^4 dps. One curie is equal to 3.7×10^{10} becquerels.

Government Agency—any executive department, commission, independent establishment, corporation, wholly or partly owned by the United States of America which is an instrumentality of the United States, or any board, bureau, division, service, office, officer, authority, administration, or other establishment in the executive branch of the government.

License Issuing Authority—the licensing agency that issued the license, i.e. the department, the U.S. Nuclear Regulatory Commission, or the appropriate agency of an agreement state.

Lost or Missing Licensed (or Registered) Material—licensed (or registered) material whose location is unknown. It includes material that has been shipped but has not reached its destination and whose location cannot be readily traced in the transportation system.

~~Lost or Missing Licensed (or Registered) Source of Radiation—licensed (or registered) source of radiation whose location is unknown. This definition includes but is not limited to, radioactive material that has been shipped but has not reached its planned destination and whose location cannot be readily traced in the transportation system.~~

State—a state of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

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

Unrefined and Unprocessed Ore—ore in its natural form prior to any processing, such as grinding, roasting, beneficiating, or refining. Processing does not include sieving or encapsulation of ore or preparation of samples for laboratory analysis.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), LR 19:1421 (November 1993), LR 20:650 (June 1994), LR 22:967 (October 1996), LR 24:2089 (November 1998), repromulgated LR 24:2242 (December 1998), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2563 (November 2000), LR 26:2767 (December 2000), LR 30:1171, 1188 (June 2004), amended by the Office of Environmental Assessment, LR 31:44 (January 2005), LR 31:1064 (May 2005), amended by the Office of the Secretary, Legal Affairs Division, LR 32:811 (May 2006), LR 32:1853 (October 2006), LR 33:1016 (June 2007), LR 33:2175 (October 2007), LR 34:982 (June 2008), LR 36:1771 (August 2010), amended by the Office of the Secretary, Legal Division, LR 38:2748 (November 2012), LR 40:283 (February 2014), LR 40:1338 (July 2014), LR 40:1926 (October 2014), LR 41:**.

§103. Exemptions

A. – B.4.b. ...

C. Carriers. Common and contract carriers, freight forwarders, warehousemen, and the U.S.

Postal Service are exempt from the regulations in this Part and the requirements for a license set forth in this Part to the extent that they transport or store byproduct material in the regular course of carriage for another or storage incident thereto.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of the Secretary, Legal Division, LR 41:**.

Chapter 3. Licensing of ~~Byproduct~~Radioactive Material

Subchapter A. Exemptions

§303. Unimportant Quantities of Source Material

A. – B. ...

C. Any person is exempt from the requirements for a license and from the regulations set forth in this Chapter to the extent that such person receives, possesses, uses, or transfers the following.

1. – 2. ...

a. glazed ceramic tableware manufactured before August 27, 2013, provided that the glaze contains not more than 20 percent by weight source material;

b. glassware containing not more than 2 percent by weight source material or, for glassware manufactured before August 27, 2013, 10 percent by weight source material, but not including commercially manufactured glass brick, pane glass, ~~ceramic glass~~, ceramic tile, or other glass or ceramic used in construction;

2.c. – 5. ...

a. ~~the counterweights are manufactured in accordance with a specific license issued by the U.S. Nuclear Regulatory Commission authorizing distribution by the licensee pursuant to 10 CFR 40;~~

ab. each counterweight has been impressed with the following legend, clearly legible through any plating or other covering: "DEPLETED URANIUM";

be. each counterweight is durably and legibly labeled or marked with the identification of the manufacturer and the statement: "UNAUTHORIZED ALTERATIONS PROHIBITED"; and

cd. the exemption contained in this Subsection shall not be deemed to authorize the chemical, physical, or metallurgical treatment or processing of any such counterweights other than repair or restoration of any plating or other covering.

de. ~~T~~the requirements specified in Subparagraphs LAC 33:XV.303-C.5.a and b and e of this Section need not be met by counterweights manufactured prior to December 31, 1969, provided that such counterweights ~~are impressed with the legend, "CAUTION – RADIOACTIVE MATERIAL – URANIUM," as previously required by the regulations~~ were manufactured under a specific license issued by the Atomic Energy Commission and were impressed with the legend required by 10 CFR 40.13(c)(5)(ii) in effect on June 30, 1969.

6. – 6.b. ...

7. ~~Thorium or uranium~~ contained in ~~or on~~ finished optical lenses ~~and mirrors~~, provided that each lens ~~or mirror~~ does not contain more than 10 percent by weight thorium or uranium or, for lenses manufactured before August 27, 2013, 30 percent by weight of thorium, and that the exemption contained in this Subsection ~~does~~shall not be deemed to authorize either:

a. the shaping, grinding, or polishing of such lens ~~or mirror~~ or manufacturing processes other than the assembly of such lens ~~or mirror~~ into optical systems and devices without any alteration of the lens ~~or mirror~~; or

b. the receipt, possession, use, or transfer of ~~uranium or~~ thorium contained in contact lenses, or in spectacles, or in eyepieces in binoculars or other optical instruments.

~~8. Uranium contained in detector heads for use in fire detection units, provided that each detector head contains not more than 0.005 microcurie of uranium.~~

~~89.~~ Thorium contained in any finished aircraft engine part containing nickel-thoria alloy, provided that:

a. the thorium is dispersed in the nickel-thoria alloy in the form of finely divided thoria (thorium dioxide); and

b. the thorium content in the nickel-thoria alloy does not exceed 4 percent by weight.

9. No person may initially transfer for sale or distribution a product containing source material to persons exempt under Subsection C of this Section, or equivalent regulations of an agreement state, unless authorized by a license issued under 10 CFR 40.52 to initially transfer such products for sale or distribution.

a. Persons initially distributing source material in products covered by the exemptions in Subsection C of this Section before August 27, 2013, without specific authorization may continue such distribution for one year beyond this date. Initial distribution may also be continued until the

department takes final action on a pending application for license or license amendment to specifically authorize distribution submitted no later than one year beyond this date.

b. Persons authorized to manufacture, process, or produce these materials or products containing source material by an agreement state, and persons who import finished products or parts, for sale or distribution shall be authorized by a license issued under 10 CFR 40.52 for distribution only and are exempt from the requirements of 10 CFR Parts 19 and 20 and Paragraphs 325.A.1 and 2 of this Chapter.

D. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 27:1226 (August 2001), amended by the Office of the Secretary, Legal Division, LR 41:**.

Subchapter C. General Licenses

§321. General Licenses: Source Material

A. A general license is hereby issued authorizing ~~use and transfer of not more than 15 pounds (6.8 kilograms) of source material at any one time by commercial and industrial firms, and; research, educational, and medical institutions; and federal, state, and local government agencies to receive, possess, use, and transfer uranium and thorium, in their natural isotopic concentrations and in the form of depleted uranium, for research, development, educational, operational, or commercial purposes; and provided further that no such person shall, pursuant to this general license, receive more than a total of 150 pounds of source material in any one calendar year.~~ in the following forms and quantities:

1. no more than 1.5 kg (3.3 lb) of uranium and thorium in dispersible forms (e.g., gaseous, liquid, powder, etc.) at any one time. Any material processed by the general licensee that alters the chemical or physical form of the material containing source material shall be accounted for as a dispersible form. A person authorized to possess, use, and transfer source material under this paragraph may not receive

more than a total of 7 kg (15.4 lb) of uranium and thorium in any one calendar year. Persons possessing source material in excess of these limits as of August 27, 2013, may continue to possess up to 7 kg (15.4 lb) of uranium and thorium at any one time for one year beyond this date, or until the department takes final action on a pending application submitted on or before August 27, 2014, for a specific license for such material; and receive up to 70 kg (154 lb) of uranium or thorium in any one calendar year until December 31, 2014, or until the department takes final action on a pending application submitted on or before August 27, 2014, for a specific license for such material; and

2. no more than a total of 7 kg (15.4 lb) of uranium and thorium at any one time. A person authorized to possess, use, and transfer source material under this paragraph may not receive more than a total of 70 kg (154 lb) of uranium and thorium in any one calendar year. A person may not alter the chemical or physical form of the source material possessed under this paragraph unless it is accounted for under the limits of Paragraph A.1 of this Section; or

3. no more than 7 kg (15.4 lb) of uranium, removed during the treatment of drinking water, at any one time. A person may not remove more than 70 kg (154 lb) of uranium from drinking water during a calendar year under this Paragraph; or

4. no more than 7 kg (15.4 lb) of uranium and thorium at laboratories for the purpose of determining the concentration of uranium and thorium contained within the material being analyzed at any one time. A person authorized to possess, use, and transfer source material under this Paragraph may not receive more than a total of 70 kg (154 lb) of source material in any one calendar year.

B. Any persons who receives, possesses, uses, or transfers source material pursuant to in accordance with the general license issued in Subsection A of this Section is LAC 33:XV.321.A are exempt from the provisions of Chapters 4 and 10 of these regulations to the extent that such receipt, possession, use, and transfer is are within the terms of such general license, except that such person shall comply with the provisions of Clause 332.D.1.e.iii of this Chapter and LAC 33:XV.460 to the extent necessary to meet the provisions of Paragraph C.2 and Subsection F of this Section. provided, however, that this exemption

~~shall~~ does not be deemed to apply to any ~~such~~ person who is also in possession of source material under ~~holds~~ a specific license issued ~~pursuant to~~ under this Chapter.

C. Any person who receives, possesses, uses, or transfers source material pursuant to in accordance with the general license in Subsection A of this Section: LAC 33:XV.321.A.1 are

1. _____ is prohibited from administering source material or the radiation therefrom, either externally or internally, to human beings except as may be authorized by the department in a specific license;

2. _____ shall not abandon such source material. Source material may be disposed of as follows:

a. _____ a cumulative total of 0.5 kg (1.1 lb) of source material in a solid, non-dispersible form may be transferred each calendar year, by a person authorized to receive, possess, use, and transfer source material under this general license to persons receiving the material for permanent disposal. The recipient of source material transferred under the provisions of this Subparagraph is exempt from the requirements to obtain a license under this part to the extent the source material is permanently disposed. This provision does not apply to any person who is in possession of source material under a specific license issued under this chapter; or

b. _____ in accordance with LAC 33:XV.460;

3. _____ is subject to the provisions in Chapter 3; and

4. _____ shall not export such source material except in accordance with 10 CFR Part 110.

D. – E.5. ...

F. Any person who receives, possesses, uses, or transfers source material in accordance with Subsection A of this Section shall conduct activities so as to minimize contamination of the facility and the environment. When activities involving such source material are permanently ceased at any site, if evidence of significant contamination is identified, the general licensee shall notify the Office of Environmental Compliance by telephone at (225) 765-0160 as soon as possible about such contamination and may consult

with the department as to the appropriateness of sampling and restoration activities to ensure that any contamination or residual source material remaining at the site where source material was used under this general license is not likely to result in exposures that exceed the limits in Clause 332.D.1.e.iii of this Chapter.

G. No person may initially transfer or distribute source material to persons generally licensed under Paragraphs A.1 or 2 of this Section, or equivalent regulations of an agreement state, unless authorized by a specific license issued in accordance with Subsection H of this Section or equivalent provisions of an agreement state. This prohibition does not apply to analytical laboratories returning processed samples to the client who initially provided the sample. Initial distribution of source material to persons generally licensed by Subsection A of this Section before August 27, 2013, without specific authorization may continue for one year beyond this date. Distribution may also be continued until the department takes final action on a pending application for license or license amendment to specifically authorize distribution submitted on or before August 27, 2014.

H. Requirements for License to Initially Transfer Source Material for Use Under the 'Small Quantities of Source Material' General License.

1. An application for a specific license to initially transfer source material for use under this Section, or equivalent regulations of an agreement state, will be approved if the applicant satisfies the general requirements specified in Subsection 325.A of this Chapter and the applicant submits adequate information on, and the department approves the methods to be used for, quality control, labeling, and providing safety instructions to recipients.

I. Conditions of Licenses to Initially Transfer Source Material for Use Under the 'Small Quantities of Source Material' General License: Quality Control, Labeling, Safety Instructions, and Records and Reports.

1. Each person licensed under Subsection H of this Section shall label the immediate container of each quantity of source material with the type of source material and quantity of material and the words, "radioactive material."
2. Each person licensed under Subsection H of this Section shall ensure that the quantities and concentrations of source material are as labeled and indicated in any transfer records.
3. Each person licensed under Subsection H of this Section shall provide the information specified in this Paragraph to each person to whom source material is transferred for use under this Section. This information shall be transferred before the source material is transferred for the first time in each calendar year to the particular recipient. The required information includes:
 - a. a copy of Sections 321 and 340 of this Chapter; and
 - b. appropriate radiation safety precautions and instructions relating to handling, use, storage, and disposal of the material.
4. Each person licensed under Subsection H of this Section shall report transfers as follows:
 - a. file a report with the Office of Environmental Compliance. The report shall include the following information:
 - i. the name, address, and license number of the person who transferred the source material;
 - ii. for each general licensee under this Section to whom greater than 50 grams (0.11 lb) of source material has been transferred in a single calendar quarter, the name and address of the general licensee to whom source material is distributed; a responsible agent, by name and/or position and phone number, of the general licensee to whom the material was sent; and the type, physical form, and quantity of source material transferred; and
 - iii. the total quantity of each type and physical form of source material transferred in the reporting period to all such generally licensed recipients;

b. file a report with each responsible agreement state agency that identifies all persons, operating under provisions equivalent to this Section, to whom greater than 50 grams (0.11 lb) of source material has been transferred within a single calendar quarter. The report shall include the following information specific to those transfers made to the agreement state being reported to:

i. the name, address, and license number of the person who transferred the source material;

ii. the name and address of the general licensee to whom source material was distributed; a responsible agent, by name and/or position and phone number, of the general licensee to whom the material was sent; and the type, physical form, and quantity of source material transferred; and

iii. the total quantity of each type and physical form of source material transferred in the reporting period to all such generally licensed recipients within the agreement state;

c. submit each report by January 31 of each year covering all transfers for the previous calendar year. If no transfers were made to persons generally licensed under this Section during the current period, a report shall be submitted to the department indicating so. If no transfers have been made to general licensees in a particular agreement state during the reporting period, this information shall be reported to the responsible agreement state agency upon request of the agency.

5. Each person licensed under Subsection H of this Section shall maintain all information that supports the reports required by this Section concerning each transfer to a general licensee for a period of one year after the event is included in a report to the department.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2567 (November 2000), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2524 (October 2005), LR 33:2177 (October 2007), amended by the Office of the Secretary, Legal Division, LR 41:**.

Subchapter D. Specific Licenses

§340. Transfer of Source or Byproduct Material

A. No licensee shall transfer source or byproduct~~radioactive~~ material except as authorized pursuant to this Section.

B. Except as otherwise provided in the license and subject to the provisions of LAC 33:XV.340.C and D, any licensee may transfer source or byproduct~~radioactive~~ material:

1. to the department (a licensee may transfer source or byproduct~~radioactive~~ material to the department only after receiving prior approval from the department);
2. to the ~~U.S. Department of Energy~~agency in any agreement state which regulates radioactive material according to an agreement under Section 274 of the Atomic Energy Act;
3. ...
4. to any person authorized to receive such material under terms of a general license or its equivalent, or a specific license or equivalent licensing document issued by the administrative authority, the U.S. Nuclear Regulatory Commission, any other agreement state, or any licensing state, or to any person otherwise authorized to receive such material by the federal government or any agency thereof, the administrative authority, any other agreement state, or any licensing state;~~or~~
5. to any person in an agreement state, subject to the jurisdiction of that state, who has been exempted from the licensing requirements and regulations of that state, to the extent permitted under such exemption; or
- 5~~6~~. as otherwise authorized by the department in writing.

C. Before transferring source or byproduct~~radioactive~~ material to a specific licensee of the department, the U.S. Nuclear Regulatory Commission, another agreement state, or a licensing state, or to a general licensee who is required to register with the department, the U.S. Nuclear Regulatory Commission, any other agreement state, or a licensing state, prior to receipt of the source or byproduct~~radioactive~~ material, the licensee transferring the material shall verify that the transferee's license authorizes the receipt of the type, form, and quantity of source or byproduct~~radioactive~~ material to be transferred.

D. – D.1 ...

2. The transferor may have in his or her possession a written certification by the transferee that he or she is authorized by license or registration certificate to receive the type, form, and quantity of source or byproduct~~radioactive~~ material to be transferred, specifying the license or registration certificate number, issuing agency, and expiration date.

3. For emergency shipments, the transferor may accept oral certification by the transferee that he or she is authorized by license or registration certificate to receive the type, form, and quantity of source or byproduct~~radioactive~~ material to be transferred, specifying the license or registration certificate number, issuing agency and expiration date, provided that the oral certification is confirmed in writing within 10 days.

4. ...

5. When none of the methods of verification described in Paragraphs LAC 33:XX.340.D.1-4 of this Section are readily available or when a transferor desires to verify that information received by one of such methods is correct or up-to-date, the transferor may obtain and record confirmation from the department, the U.S. Nuclear Regulatory Commission, or the licensing agency of any other agreement state or licensing state that the transferee is licensed to receive the source or byproduct~~radioactive~~ material.

E. Preparation for shipment and transport of radioactive material shall be in accordance with the provisions of Chapter 15 of these regulations.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by the Office of Air Quality and Radiation Protection, Radiation Protection Division, LR 18:34 (January 1992), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:2573 (November 2000), amended by the Office of the Secretary, Legal Division, LR 41:**.

Chapter 15. Transportation of Radioactive Material

§1519. Advance Notification of Shipment of Irradiated Reactor Fuel and Nuclear Waste

[Formerly §1516]

A. – A.1. ...

B. ~~Advance notification is required for shipments of irradiated reactor fuel in quantities less than that subject to advance notification requirements of 10 CFR 73.37(f).~~ Advance notification is also required for shipments of licensed material, other than irradiated fuel, meeting the following three conditions:

B.1. – F. ...

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2104.B and 2113.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Nuclear Energy Division, LR 13:569 (October 1987), amended by the Office of Environmental Assessment, Environmental Planning Division, LR 26:1269 (June 2000), LR 26:2602 (November 2000), amended by the Office of Environmental Assessment, LR 30:2029 (September 2004), amended by the Office of the Secretary, Legal Affairs Division, LR 31:2537 (October 2005), LR 33:2190 (October 2007), LR 34:2111 (October 2008), amended by the Office of the Secretary, Legal Division, LR 40:1928 (October 2014), LR 41:**.

Chapter 16. Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material

Subchapter A. General Provisions

§1601. Purpose and Scope

A. Purpose. This Chapter has been established to provide the requirements for the physical protection program for any licensee who possesses an aggregated category 1 or category 2 quantity of radioactive material listed in Appendix A of this Chapter. These requirements provide reasonable assurance of the security of category 1 or category 2 quantities of radioactive material by protecting these materials from theft or diversion. Specific requirements for access to material, use of material, transfer of material, and transport of material are included. No provision of this Chapter authorizes possession of licensed material.

B. Scope

1. Subchapters B and C of this Chapter apply to any person who, under the regulations in this Chapter, possesses or uses at any site, an aggregated category 1 or category 2 quantity of radioactive material.

2. Subchapter D of this Chapter applies to any person who, under the regulations of this Chapter:

a. transports or delivers to a carrier for transport in a single shipment, a category 1 or category 2 quantity of radioactive material; or

b. imports or exports a category 1 or category 2 quantity of radioactive material; the provisions only apply to the domestic portion of the transport.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.
 HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1603. Definitions

A. As used in this Chapter, the following definitions apply. Other definitions as used in this Chapter may be found in applicable Chapters of LAC 33:XV.

Access Control—a system for allowing only approved individuals to have unescorted access to the security zone and for ensuring that all other individuals are subject to escorted access.

Aggregated— means accessible by the breach of a single physical barrier that would allow access to radioactive material in any form, including any devices that contain the radioactive material, when the total activity equals or exceeds a category 2 quantity of radioactive material.

Approved Individual—an individual whom the licensee has determined to be trustworthy and reliable for unescorted access in accordance with Subchapter B of this Chapter and who has completed the training required by Subsection 1623.C of this Chapter.

Background Investigation—the investigation conducted by a licensee or applicant to support the determination of trustworthiness and reliability.

Carrier—a person engaged in the transportation of passengers or property by land or water as a common, contract, or private carrier, or by civil aircraft.

Category 1 Quantity of Radioactive Material—a quantity of radioactive material meeting or exceeding the category 1 threshold in Table 1 of Appendix A to this Chapter. This is determined by calculating the ratio of the total activity of each radionuclide to the category 1 threshold for that radionuclide and adding the ratios together. If the sum is equal to or exceeds 1, the quantity would be considered a

category 1 quantity. Category 1 quantities of radioactive material do not include the radioactive material contained in any fuel assembly, subassembly, fuel rod, or fuel pellet.

Category 2 Quantity of Radioactive Material—a quantity of radioactive material meeting or exceeding the category 2 threshold but less than the category 1 threshold in Table 1 of Appendix A to this Chapter. This is determined by calculating the ratio of the total activity of each radionuclide to the category 2 threshold for that radionuclide and adding the ratios together. If the sum is equal to or exceeds 1, the quantity would be considered a category 2 quantity. Category 2 quantities of radioactive material do not include the radioactive material contained in any fuel assembly, subassembly, fuel rod, or fuel pellet.

Diversion—the unauthorized movement of radioactive material subject to this Chapter to a location different from the material's authorized destination inside or outside of the site at which the material is used or stored.

Escorted Access—accompaniment while in a security zone by an approved individual who maintains continuous direct visual surveillance at all times over an individual who is not approved for unescorted access.

Fingerprint Orders—the orders issued by the U.S. Nuclear Regulatory Commission or the legally binding requirements issued by agreement states that require fingerprints and criminal history records checks for individuals with unescorted access to category 1 and category 2 quantities of radioactive material or safeguards information-modified handling.

Local Law Enforcement Agency (LLEA)—a public or private organization that has been approved by a federal, state, or local government to carry firearms and make arrests, and is authorized and has the capability to provide an armed response in the jurisdiction where the licensed category 1 or category 2 quantity of radioactive material is used, stored, or transported.

Mobile Device—a piece of equipment containing licensed radioactive material that is either mounted on wheels or casters, or otherwise equipped for moving without a need for disassembly or dismounting; or designed to be hand carried. Mobile devices do not include stationary equipment installed in a fixed location.

Movement Control Center—an operations center that is remote from transport activity and that maintains position information on the movement of radioactive material, receives reports of attempted attacks or thefts, provides a means for reporting these and other problems to appropriate agencies and can request and coordinate appropriate aid.

No-Later-Than Arrival Time—the date and time that the shipping licensee and receiving licensee have established as the time at which an investigation will be initiated if the shipment has not arrived at the receiving facility. The no-later-than arrival time may not be more than 6 hours after the estimated arrival time for shipments of category 2 quantities of radioactive material.

Reviewing Official—the individual who shall make the trustworthiness and reliability determination of an individual to determine whether the individual may have, or continue to have, unescorted access to the category 1 or category 2 quantities of radioactive materials that are possessed by the licensee.

Sabotage—deliberate damage, with malevolent intent, to a category 1 or category 2 quantity of radioactive material, a device that contains a category 1 or category 2 quantity of radioactive material, or the components of the security system.

Safe Haven—a readily recognizable and readily accessible site at which security is present or from which, in the event of an emergency, the transport crew can notify and wait for the local law enforcement authorities.

Security Zone—any temporary or permanent area determined and established by the licensee for the physical protection of category 1 or category 2 quantities of radioactive material.

Telemetric Position Monitoring System—a data transfer system that captures information by instrumentation and/or measuring devices about the location and status of a transport vehicle or package between the departure and destination locations.

Trustworthiness and Reliability—characteristics of an individual considered dependable in judgment, character, and performance, such that unescorted access to category 1 or category 2 quantities of radioactive material by that individual does not constitute an unreasonable risk to the public health and safety or

security. A determination of trustworthiness and reliability for this purpose is based upon the results from a background investigation.

Unescorted Access—solitary access to an aggregated category 1 or category 2 quantity of radioactive material or the devices that contain the material.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.
HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1605. Specific Exemptions

A. The department may, upon application of any interested person or upon its own initiative, grant such exemptions from the requirements of the regulations in this Chapter as it determines are authorized by law and will not endanger life or property or the common defense and security, and are otherwise in the public interest.

B. Any licensee's NRC-licensed activities are exempt from the requirements of Subchapters B and C of this Chapter to the extent that its activities are included in a security plan required by 10 CFR Part 73.

C. A licensee who possesses radioactive waste that contains category 1 or category 2 quantities of radioactive material is exempt from the requirements of Subchapters B, C, and D of this Chapter. Except that any radioactive waste that contains discrete sources, ion-exchange resins, or activated material that weighs less than 2,000 kg (4,409 lbs) is not exempt from the requirements of this Chapter. The licensee shall implement the following requirements to secure the radioactive waste:

1. use continuous physical barriers that allow access to the radioactive waste only through established access control points;

2. use a locked door or gate with monitored alarm at the access control point;

3. assess and respond to each actual or attempted unauthorized access to determine whether an actual or attempted theft, sabotage, or diversion occurred; and

4. immediately notify the LLEA and request an armed response from the LLEA upon determination that there was an actual or attempted theft, sabotage, or diversion of the radioactive waste that contains category 1 or category 2 quantities of radioactive material.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

Subchapter B. Background Investigations and Access Control Program

§1607. Personnel Access Authorization Requirements for Category 1 or Category 2 Quantities of Radioactive Material

A. General

1. Each licensee who possesses an aggregated quantity of radioactive material at or above the category 2 threshold shall establish, implement, and maintain its access authorization program in accordance with the requirements of this Subchapter.

2. An applicant for a new license and each licensee who would become newly subject to the requirements of this Subchapter upon application for modification of its license shall implement the requirements of this Subchapter, as appropriate, before taking possession of an aggregated category 1 or category 2 quantity of radioactive material.

3. Any licensee who has not previously implemented the Security Orders or been subject to the provisions of this Subchapter B shall implement the provisions of this Subchapter B before aggregating radioactive material to a quantity that equals or exceeds the category 2 threshold.

B. General Performance Objective. The licensee's access authorization program shall ensure that the individuals specified in Paragraph C.1 of this Section are trustworthy and reliable.

C. Applicability

1. Licensees shall subject the following individuals to an access authorization program:
a. any individual whose assigned duties require unescorted access to category 1 or category 2 quantities of radioactive material or to any device that contains the radioactive material; and

b. reviewing officials.

2. Licensees need not subject the categories of individuals listed in Paragraphs 1615.A.1-13 of this Chapter to the investigation elements of the access authorization program.

3. Licensees shall approve for unescorted access to category 1 or category 2 quantities of radioactive material only those individuals with job duties that require unescorted access to category 1 or category 2 quantities of radioactive material.

4. Licensees may include individuals needing access to safeguards information-modified handling under 10 CFR Part 73 in the access authorization program under Subpart B.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1609. Access Authorization Program Requirements

A. Granting Unescorted Access Authorization

1. Licensees shall implement the requirements of this Subchapter for granting initial or reinstated unescorted access authorization.

2. Individuals who have been determined to be trustworthy and reliable shall also complete the security training required by Subsection 1623.C of this Chapter before being allowed unescorted access to category 1 or category 2 quantities of radioactive material.

B. Reviewing Officials

1. Reviewing officials are the only individuals who may make trustworthiness and reliability determinations that allow individuals to have unescorted access to category 1 or category 2 quantities of radioactive materials possessed by the licensee.

2. Each licensee shall name one or more individuals to be reviewing officials. After completing the background investigation on the reviewing official, the licensee shall provide under oath or affirmation, a certification that the reviewing official is deemed trustworthy and reliable by the licensee. The fingerprints of the named reviewing official shall be taken by a law enforcement agency, federal or state

agencies that provide fingerprinting services to the public, or commercial fingerprinting services authorized by a state to take fingerprints. The licensee shall recertify that the reviewing official is deemed trustworthy and reliable every ten years in accordance with Subsection 1611.B of this Chapter.

3. Reviewing officials shall be permitted to have unescorted access to category 1 or category 2 quantities of radioactive materials or access to safeguards information or safeguards information-modified handling, if the licensee possesses safeguards information or safeguards information-modified handling.

4. Reviewing officials cannot approve other individuals to act as reviewing officials.

5. A reviewing official does not need to undergo a new background investigation before being named by the licensee as the reviewing official if:

a. the individual has undergone a background investigation that included fingerprinting and a Federal Bureau of Investigation (FBI) criminal history records check and has been determined to be trustworthy and reliable by the licensee; or

b. the individual is subject to a category listed in Subsection 1615.A of this Chapter.

C. Informed Consent

1. Licensees may not initiate a background investigation without the informed and signed consent of the subject individual. This consent shall include authorization to share personal information with other individuals or organizations as necessary to complete the background investigation. Before a final adverse determination, the licensee shall provide the individual with an opportunity to correct any inaccurate or incomplete information that is developed during the background investigation. Licensees do not need to obtain signed consent from those individuals that meet the requirements of Subsection 1611.B of this Chapter. A signed consent shall be obtained prior to any reinvestigation.

2. The subject individual may withdraw his or her consent at any time. Licensees shall inform the individual that:

a. if an individual withdraws his or her consent, the licensee may not initiate any elements of the background investigation that were not in progress at the time the individual withdrew his or her consent; and

b. the withdrawal of consent for the background investigation is sufficient cause for denial or termination of unescorted access authorization.

D. Personal History Disclosure. Any individual who is applying for unescorted access authorization shall disclose the personal history information that is required by the licensee's access authorization program for the reviewing official to make a determination of the individual's trustworthiness and reliability. Refusal to provide, or the falsification of, any personal history information required by this Subchapter is sufficient cause for denial or termination of unescorted access.

E. Determination Basis

1. The reviewing official shall determine whether to permit, deny, unfavorably terminate, maintain, or administratively withdraw an individual's unescorted access authorization based on an evaluation of all of the information collected to meet the requirements of this Subchapter.

2. The reviewing official may not permit any individual to have unescorted access until the reviewing official has evaluated all of the information collected to meet the requirements of this Subchapter and determined that the individual is trustworthy and reliable. The reviewing official may deny unescorted access to any individual based on information obtained at any time during the background investigation.

3. The licensee shall document the basis for concluding whether or not there is reasonable assurance that an individual is trustworthy and reliable.

4. The reviewing official may terminate or administratively withdraw an individual's unescorted access authorization based on information obtained after the background investigation has been completed and the individual granted unescorted access authorization.

5. Licensees shall maintain a list of persons currently approved for unescorted access authorization. When a licensee determines that a person no longer requires unescorted access or meets the access authorization requirement, the licensee shall remove the person from the approved list as soon as possible, but no later than 7 working days, and take prompt measures to ensure that the individual is unable to have unescorted access to the material.

F. Procedures. Licensees shall develop, implement, and maintain written procedures for implementing the access authorization program. The procedures shall include provisions for the notification of individuals who are denied unescorted access. The procedures shall include provisions for the review, at the request of the affected individual, of a denial or termination of unescorted access authorization. The procedures shall contain a provision to ensure that the individual is informed of the grounds for the denial or termination of unescorted access authorization and allow the individual an opportunity to provide additional relevant information.

G. Right to Correct and Complete Information

1. Prior to any final adverse determination, licensees shall provide each individual subject to this Subchapter with the right to complete, correct, and explain information obtained as a result of the licensee's background investigation. Confirmation of receipt by the individual of this notification shall be maintained by the licensee for a period of one year from the date of the notification.

2. If, after reviewing his or her criminal history record, an individual believes that it is incorrect or incomplete in any respect and wishes to change, correct, update, or explain anything in the record, the individual may initiate challenge procedures. These procedures include direct application by the individual challenging the record to the law enforcement agency that contributed the questioned information or a direct challenge as to the accuracy or completeness of any entry on the criminal history record to the Federal Bureau of Investigation, Criminal Justice Information Services (CJIS) Division, ATTN: SCU, Mod. D-2, 1000 Custer Hollow Road, Clarksburg, WV 26306 as set forth in 28 CFR 16.30 through 16.34. In the latter case, the Federal Bureau of Investigation (FBI) shall forward the challenge to the agency that submitted

the data, and shall request that the agency verify or correct the challenged entry. Upon receipt of an official communication directly from the agency that contributed the original information, the FBI Identification Division makes any changes necessary in accordance with the information supplied by that agency.

Licensees shall provide at least 10 days for an individual to initiate action to challenge the results of an FBI criminal history records check after the record being made available for his or her review. The licensee may make a final adverse determination based upon the criminal history records only after receipt of the FBI's confirmation or correction of the record.

H. Records

1. The licensee shall retain documentation regarding the trustworthiness and reliability of individual employees for three years from the date the individual no longer requires unescorted access to category 1 or category 2 quantities of radioactive material.

2. The licensee shall retain a copy of the current access authorization program procedures as a record for three years after the procedure is no longer needed. If any portion of the procedure is superseded, the licensee shall retain the superseded material for three years after the record is superseded.

3. The licensee shall retain the list of persons approved for unescorted access authorization for three years after the list is superseded or replaced.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1611. Background Investigations

A. Initial Investigation. Before allowing an individual unescorted access to category 1 or category 2 quantities of radioactive material or to the devices that contain the material, licensees shall complete a background investigation of the individual seeking unescorted access authorization. The scope of the investigation shall encompass at least the seven years preceding the date of the background investigation or since the individual's eighteenth birthday, whichever is shorter. The background investigation shall include at a minimum:

1. fingerprinting and an FBI identification and criminal history records check in accordance with Section 1613 of this Chapter;
2. verification of true identity. Licensees shall verify the true identity of the individual who is applying for unescorted access authorization to ensure that the applicant is who he or she claims to be. A licensee shall review official identification documents (e.g., driver's license; passport; government identification; certificate of birth issued by the state, province, or country of birth) and compare the documents to personal information data provided by the individual to identify any discrepancy in the information. Licensees shall document the type, expiration, and identification number of the identification document, or maintain a photocopy of identifying documents on file in accordance with Section 1617 of this Chapter. Licensees shall certify in writing that the identification was properly reviewed, and shall maintain the certification and all related documents for review upon inspection;
3. employment history verification. Licensees shall complete an employment history verification, including military history. Licensees shall verify the individual's employment with each previous employer for the most recent seven years before the date of application;
4. verification of education. Licensees shall verify that the individual participated in the education process during the claimed period;
5. character and reputation determination. Licensees shall complete reference checks to determine the character and reputation of the individual who has applied for unescorted access authorization. Unless other references are not available, reference checks may not be conducted with any person who is known to be a close member of the individual's family, including but not limited to the individual's spouse, parents, siblings, or children, or any individual who resides in the individual's permanent household. Reference checks under this Subchapter shall be limited to whether the individual has been and continues to be trustworthy and reliable;
6. the licensee shall also, to the extent possible, obtain independent information to corroborate that provided by the individual (e.g., seek references not supplied by the individual); and

7. if a previous employer, educational institution, or any other entity with which the individual claims to have been engaged fails to provide information or indicates an inability or unwillingness to provide information within a time frame deemed appropriate by the licensee but at least after 10 business days of the request or if the licensee is unable to reach the entity, the licensee shall document the refusal, unwillingness, or inability in the record of investigation; and attempt to obtain the information from an alternate source.

B. Grandfathering

1. Individuals who have been determined to be trustworthy and reliable for unescorted access to category 1 or category 2 quantities of radioactive material under the Fingerprint Orders may continue to have unescorted access to category 1 and category 2 quantities of radioactive material without further investigation. These individuals shall be subject to the reinvestigation requirement.

2. Individuals who have been determined to be trustworthy and reliable under the provisions of 10 CFR Part 73 or the security orders for access to safeguards information, safeguards information-modified handling, or risk-significant material may have unescorted access to category 1 and category 2 quantities of radioactive material without further investigation. The licensee shall document that the individual was determined to be trustworthy and reliable under the provisions of 10 CFR Part 73 or a security order. Security order, in this context, refers to any order that was issued by the NRC that required fingerprints and an FBI criminal history records check for access to safeguards information, safeguards information-modified handling, or risk significant material such as special nuclear material or large quantities of uranium hexafluoride. These individuals shall be subject to the reinvestigation requirement.

C. Reinvestigations. Licensees shall conduct a reinvestigation every ten years for any individual with unescorted access to category 1 or category 2 quantities of radioactive material. The reinvestigation shall consist of fingerprinting and an FBI identification and criminal history records check in accordance with Section 1613 of this Chapter. The reinvestigations shall be completed within ten years of the date on which these elements were last completed.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1613. Requirements for Criminal History Records Checks of Individuals Granted Unescorted Access to Category 1 or Category 2 Quantities of Radioactive Material

A. General Performance Objective and Requirements

1. Except for those individuals listed in Section 1615 of this Chapter and those individuals grandfathered under Subsection 1611.B of this Chapter, each licensee subject to the provisions of this Subchapter shall fingerprint each individual who is to be permitted unescorted access to category 1 or category 2 quantities of radioactive material. Licensees shall transmit all collected fingerprints to the NRC for transmission to the FBI. The licensee shall use the information received from the FBI as part of the required background investigation to determine whether to grant or deny further unescorted access to category 1 or category 2 quantities of radioactive materials for that individual.

2. The licensee shall notify each affected individual that his or her fingerprints will be used to secure a review of his or her criminal history record, and shall inform him or her of the procedures for revising the record or adding explanations to the record.

3. Fingerprinting is not required if a licensee is reinstating an individual's unescorted access authorization to category 1 or category 2 quantities of radioactive materials if:

a. the individual returns to the same facility that granted unescorted access authorization within 365 days of the termination of his or her unescorted access authorization; and

b. the previous access was terminated under favorable conditions.

4. Fingerprints do not need to be taken if an individual who is an employee of a licensee, contractor, manufacturer, or supplier has been granted unescorted access to category 1 or category 2 quantities of radioactive material, access to safeguards information, or safeguards information-modified handling by another licensee, based upon a background investigation conducted under this Subchapter, the Fingerprint Orders, or 10 CFR Part 73. An existing criminal history records check file may be transferred to

the licensee asked to grant unescorted access in accordance with the provisions of Subsection 1617.C of this Chapter.

5. Licensees shall use the information obtained as part of a criminal history records check solely for the purpose of determining an individual's suitability for unescorted access authorization to category 1 or category 2 quantities of radioactive materials, access to safeguards information, or safeguards information-modified handling.

B. Prohibitions

1. Licensees may not base a final determination to deny an individual unescorted access authorization to category 1 or category 2 quantities of radioactive material solely on the basis of information received from the FBI involving:

a. an arrest more than one year old for which there is no information of the disposition of the case; or

b. an arrest that resulted in dismissal of the charge or an acquittal.

2. Licensees may not use information received from a criminal history records check obtained under this Subchapter in a manner that would infringe upon the rights of any individual under the First Amendment to the Constitution of the United States, nor shall licensees use the information in any way that would discriminate among individuals on the basis of race, religion, national origin, gender, or age.

C. Procedures for Processing of Fingerprint Checks

1. For the purpose of complying with this Subchapter, licensees shall use an appropriate method listed in 10 CFR 37.7 to submit all information and fees regarding fingerprinting to the U.S. Nuclear Regulatory Commission.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1615. Relief From Fingerprinting, Identification, and Criminal History Records Checks and Other Elements of Background Investigations for Designated Categories of Individuals Permitted Unescorted Access to Certain Radioactive Materials

A. Fingerprinting, and the identification and criminal history records checks required by Section 149 of the Atomic Energy Act of 1954, as amended, and other elements of the background investigation are not required for the following individuals prior to granting unescorted access to category 1 or category 2 quantities of radioactive materials:

1. an employee of the Nuclear Regulatory Commission or of the Executive Branch of the U.S. Government who has undergone fingerprinting for a prior U.S. Government criminal history records check;

2. a member of Congress;

3. an employee of a member of Congress or Congressional committee who has undergone fingerprinting for a prior U.S. Government criminal history records check;

4. the governor of a state or his or her designated state employee representative;

5. federal, state, or local law enforcement personnel;

6. State Radiation Control Program Directors and State Homeland Security Advisors or their designated state employee representatives;

7. agreement state employees conducting security inspections on behalf of the NRC under an agreement executed under Section 274.i. of the Atomic Energy Act;

8. representatives of the International Atomic Energy Agency (IAEA) engaged in activities associated with the U.S./IAEA Safeguards Agreement who have been certified by the NRC;

9. emergency response personnel who are responding to an emergency;

10. commercial vehicle drivers for road shipments of category 2 quantities of radioactive material;

11. package handlers at transportation facilities such as freight terminals and railroad yards;

12. any individual who has an active federal security clearance, provided that he or she makes available the appropriate documentation. Written confirmation from the agency/employer that granted the federal security clearance or reviewed the criminal history records check shall be provided to the licensee. The licensee shall retain this documentation for a period of three years from the date the individual no longer requires unescorted access to category 1 or category 2 quantities of radioactive material; and

13. any individual employed by a service provider licensee for which the service provider licensee has conducted the background investigation for the individual and approved the individual for unescorted access to category 1 or category 2 quantities of radioactive material. Written verification from the service provider shall be provided to the licensee. The licensee shall retain the documentation for a period of three years from the date the individual no longer requires unescorted access to category 1 or category 2 quantities of radioactive material.

B. Fingerprinting, and the identification and criminal history records checks required by Section 149 of the Atomic Energy Act of 1954, as amended, are not required for an individual who has had a favorably adjudicated U.S. Government criminal history records check within the last five years, under a comparable U.S. Government program involving fingerprinting and an FBI identification and criminal history records check provided that he or she makes available the appropriate documentation. Written confirmation from the agency/employer that reviewed the criminal history records check shall be provided to the licensee. The licensee shall retain this documentation for a period of three years from the date the individual no longer requires unescorted access to category 1 or category 2 quantities of radioactive material. These programs include, but are not limited to:

1. National Agency Check;
2. Transportation Worker Identification Credentials (TWIC) under 49 CFR Part 1572;

3. Bureau of Alcohol, Tobacco, Firearms, and Explosives background check and clearances under 27 CFR Part 555;

4. Health and Human Services security risk assessments for possession and use of select agents and toxins under 42 CFR Part 73;

5. hazardous material security threat assessment for hazardous material endorsement to commercial drivers license under 49 CFR Part 1572; and

6. Customs and Border Protection's Free and Secure Trade (FAST) Program.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1617. Protection of Information

A. Each licensee who obtains background information on an individual under this Subchapter shall establish and maintain a system of files and written procedures for protection of the record and the personal information from unauthorized disclosure.

B. The licensee may not disclose the record or personal information collected and maintained to persons other than the subject individual, his or her representative, or to those who have a need to have access to the information in performing assigned duties in the process of granting or denying unescorted access to category 1 or category 2 quantities of radioactive material, safeguards information, or safeguards information-modified handling. No individual authorized to have access to the information may disseminate the information to any other individual who does not have a need to know.

C. The personal information obtained on an individual from a background investigation may be provided to another licensee:

1. upon the individual's written request to the licensee holding the data to disseminate the information contained in his or her file; and

2. the recipient licensee verifies information such as name, date of birth, social security number, gender, and other applicable physical characteristics.

D. The licensee shall make background investigation records obtained under this Subchapter available for examination by an authorized representative of the department to determine compliance with the regulations and laws.

E. The licensee shall retain all fingerprint and criminal history records (including data indicating no record) received from the FBI, or a copy of these records if the individual's file has been transferred, on an individual for three years from the date the individual no longer requires unescorted access to category 1 or category 2 quantities of radioactive material.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1619. Access Authorization Program Review

A. Each licensee shall be responsible for the continuing effectiveness of the access authorization program. Each licensee shall ensure that access authorization programs are reviewed to confirm compliance with the requirements of this Subchapter and that comprehensive actions are taken to correct any noncompliance that is identified. The review program shall evaluate all program performance objectives and requirements. Each licensee shall periodically (at least annually) review the access program content and implementation.

B. The results of the reviews, along with any recommendations, shall be documented. Each review report shall identify conditions that are adverse to the proper performance of the access authorization program, the cause of the condition(s), and, when appropriate, recommend corrective actions, and corrective actions taken. The licensee shall review the findings and take any additional corrective actions necessary to preclude repetition of the condition, including reassessment of the deficient areas where indicated.

C. Review records shall be maintained for three years.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

Subchapter C. Physical Protection Requirements During Use

§1621. Security Program**A. Applicability**

1. Each licensee who possesses an aggregated category 1 or category 2 quantity of radioactive material shall establish, implement, and maintain a security program in accordance with the requirements of this Subchapter.

2. An applicant for a new license and each licensee who would become newly subject to the requirements of this Subchapter upon application for modification of its license shall implement the requirements of this Subchapter, as appropriate, before taking possession of an aggregated category 1 or category 2 quantity of radioactive material.

3. Any licensee who has not previously implemented the Security Orders or been subject to the provisions of Subchapter C shall provide written notification to the Office of Environmental Compliance at least 90 days before aggregating radioactive material to a quantity that equals or exceeds the category 2 threshold.

B. General Performance Objective. Each licensee shall establish, implement, and maintain a security program that is designed to monitor and, without delay, detect, assess, and respond to an actual or attempted unauthorized access to category 1 or category 2 quantities of radioactive material.

C. Program Features. Each licensee's security program shall include the program features, as appropriate, described in Sections 1623, 1625, 1627, 1629, 1631, 1633, and 1635 of this Chapter.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1623. General Security Program Requirements**A. Security Plan**

1. Each licensee identified in Subsection 1621.A of this Chapter shall develop a written security plan specific to its facilities and operations. The purpose of the security plan is to establish the

licensee's overall security strategy to ensure the integrated and effective functioning of the security program required by this Subchapter. The security plan shall, at a minimum:

- a. describe the measures and strategies used to implement the requirements of this Subchapter; and
 - b. identify the security resources, equipment, and technology used to satisfy the requirements of this Subchapter.
2. The security plan shall be reviewed and approved by the individual with overall responsibility for the security program.
 3. A licensee shall revise its security plan as necessary to ensure the effective implementation of department requirements. The licensee shall ensure that:
 - a. the revision has been reviewed and approved by the individual with overall responsibility for the security program; and
 - b. the affected individuals are instructed on the revised plan before the changes are implemented.
 4. The licensee shall retain a copy of the current security plan as a record for three years after the security plan is no longer required. If any portion of the plan is superseded, the licensee shall retain the superseded material for three years after the record is superseded.

B. Implementing Procedures

1. The licensee shall develop and maintain written procedures that document how the requirements of this Subchapter and the security plan will be met.
2. The implementing procedures and revisions to these procedures shall be approved in writing by the individual with overall responsibility for the security program.
3. The licensee shall retain a copy of the current procedure as a record for three years after the procedure is no longer needed. Superseded portions of the procedure shall be retained for three years after the record is superseded.

C. Training

1. Each licensee shall conduct training to ensure that those individuals implementing the security program possess and maintain the knowledge, skills, and abilities to carry out their assigned duties and responsibilities effectively. The training shall include instruction in:

a. the licensee's security program and procedures to secure category 1 or category 2 quantities of radioactive material, and in the purposes and functions of the security measures employed;

b. the responsibility to report promptly to the licensee any condition that causes or may cause a violation of department requirements;

c. the responsibility of the licensee to report promptly to the local law enforcement agency and licensee any actual or attempted theft, sabotage, or diversion of category 1 or category 2 quantities of radioactive material; and

d. the appropriate response to security alarms.

2. In determining those individuals who shall be trained on the security program, the licensee shall consider each individual's assigned activities during authorized use and response to potential situations involving actual or attempted theft, diversion, or sabotage of category 1 or category 2 quantities of radioactive material. The extent of the training shall be commensurate with the individual's potential involvement in the security of category 1 or category 2 quantities of radioactive material.

3. Refresher training shall be provided at a frequency not to exceed 12 months and when significant changes have been made to the security program. This training shall include:

a. review of the training requirements of Subsection C of this Section and any changes made to the security program since the last training;

b. reports on any relevant security issues, problems, and lessons learned;

c. relevant results of department inspections; and

d. relevant results of the licensee's program review and testing and maintenance.

4. The licensee shall maintain records of the initial and refresher training for three years from the date of the training. The training records shall include dates of the training, topics covered, a list of licensee personnel in attendance, and related information.

D. Protection of Information

1. Licensees authorized to possess category 1 or category 2 quantities of radioactive material shall limit access to and unauthorized disclosure of their security plan, implementing procedures, and the list of individuals that have been approved for unescorted access.

2. Efforts to limit access shall include the development, implementation, and maintenance of written policies and procedures for controlling access to, and for proper handling and protection against unauthorized disclosure of, the security plan and implementing procedures.

3. Before granting an individual access to the security plan or implementing procedures, licensees shall:

a. evaluate an individual's need to know the security plan or implementing procedures; and

b. if the individual has not been authorized for unescorted access to category 1 or category 2 quantities of radioactive material, safeguards information, or safeguards information-modified handling, the licensee shall complete a background investigation to determine the individual's trustworthiness and reliability. A trustworthiness and reliability determination shall be conducted by the reviewing official and shall include the background investigation elements contained in Paragraphs 1611.A.2-7 of this Chapter.

4. Licensees need not subject the following individuals to the background investigation elements for protection of information:

a. the categories of individuals listed in Paragraphs 1615.A.1-13 of this Chapter;

or

b. security service provider employees, provided written verification that the employee has been determined to be trustworthy and reliable, by the required background investigation in Paragraphs 1611.A.2-7 of this Chapter, has been provided by the security service provider.

5. The licensee shall document the basis for concluding that an individual is trustworthy and reliable and should be granted access to the security plan or implementing procedures.

6. Licensees shall maintain a list of persons currently approved for access to the security plan or implementing procedures. When a licensee determines that a person no longer needs access to the security plan or implementing procedures or no longer meets the access authorization requirements for access to the information, the licensee shall remove the person from the approved list as soon as possible, but no later than seven working days, and take prompt measures to ensure that the individual is unable to obtain the security plan or implementing procedures.

7. When not in use, the licensee shall store its security plan and implementing procedures in a manner to prevent unauthorized access. Information stored in nonremovable electronic form shall be password protected.

8. The licensee shall retain as a record for three years after the document is no longer needed:

a. a copy of the information protection procedures; and

b. the list of individuals approved for access to the security plan or implementing procedures.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1625. Local Law Enforcement Agency (LLEA) Coordination

A. A licensee subject to this Subchapter shall coordinate, to the extent practicable, with an LLEA for responding to threats to the licensee's facility, including any necessary armed response. The information provided to the LLEA shall include:

1. a description of the facilities and the category 1 and category 2 quantities of radioactive materials along with a description of the licensee's security measures that have been implemented to comply with this Subchapter; and

2. a notification that the licensee will request a timely armed response by the LLEA to any actual or attempted theft, sabotage, or diversion of category 1 or category 2 quantities of material.

B. The licensee shall notify the Office of Environmental Compliance by telephone at (225) 765-0160 within three business days if:

1. the LLEA has not responded to the request for coordination within 60 days of the coordination request; or

2. the LLEA notifies the licensee that the LLEA does not plan to participate in coordination activities.

C. The licensee shall document its efforts to coordinate with the LLEA. The documentation shall be kept for three years.

D. The licensee shall coordinate with the LLEA at least every 12 months, or when changes to the facility design or operation adversely affect the potential vulnerability of the licensee's material to theft, sabotage, or diversion.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1627. Security Zones

A. Licensees shall ensure that all aggregated category 1 and category 2 quantities of radioactive material are used or stored within licensee established security zones. Security zones may be permanent or temporary.

B. Temporary security zones shall be established as necessary to meet the licensee's transitory or intermittent business activities, such as periods of maintenance, source delivery, and source replacement.

C. Security zones shall, at a minimum, allow unescorted access only to approved individuals through:

1. isolation of category 1 and category 2 quantities of radioactive materials by the use of continuous physical barriers that allow access to the security zone only through established access control points. A physical barrier is a natural or man-made structure or formation sufficient for the isolation of the category 1 or category 2 quantities of radioactive material within a security zone; or
2. direct control of the security zone by approved individuals at all times; or
3. a combination of continuous physical barriers and direct control.

D. For category 1 quantities of radioactive material during periods of maintenance, source receipt, preparation for shipment, installation, or source removal or exchange, the licensee shall, at a minimum, provide sufficient individuals approved for unescorted access to maintain continuous surveillance of sources in temporary security zones and in any security zone in which physical barriers or intrusion detection systems have been disabled to allow such activities.

E. Individuals not approved for unescorted access to category 1 or category 2 quantities of radioactive material shall be escorted by an approved individual when in a security zone.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1629. Monitoring, Detection, and Assessment

A. Monitoring and Detection

1. Licensees shall establish and maintain the capability to continuously monitor and detect without delay all unauthorized entries into its security zones. Licensees shall provide the means to maintain continuous monitoring and detection capability in the event of a loss of the primary power source, or provide for an alarm and response in the event of a loss of this capability to continuously monitor and detect unauthorized entries.

2. Monitoring and detection shall be performed by:

- a. a monitored intrusion detection system that is linked to an onsite or offsite central monitoring facility;
- b. electronic devices for intrusion detection alarms that will alert nearby facility personnel;
- c. a monitored video surveillance system;
- d. direct visual surveillance by approved individuals located within the security zone; or
- e. direct visual surveillance by a licensee designated individual located outside the security zone.

3. A licensee subject to this Subchapter shall also have a means to detect unauthorized removal of the radioactive material from the security zone. This detection capability shall provide:

- a. for category 1 quantities of radioactive material, immediate detection of any attempted unauthorized removal of the radioactive material from the security zone. Such immediate detection capability shall be provided by: electronic sensors linked to an alarm; continuous monitored video surveillance; or direct visual surveillance; or
- b. for category 2 quantities of radioactive material, weekly verification through physical checks, tamper indicating devices, use, or other means to ensure that the radioactive material is present.

B. Assessment. Licensees shall immediately assess each actual or attempted unauthorized entry into the security zone to determine whether the unauthorized access was an actual or attempted theft, sabotage, or diversion.

C. Personnel Communications and Data Transmission. For personnel and automated or electronic systems supporting the licensee's monitoring, detection, and assessment systems, licensees shall:

- 1. maintain continuous capability for personnel communication and electronic data transmission and processing among site security systems; and

2. provide an alternative communication capability for personnel, and an alternative data transmission and processing capability, in the event of a loss of the primary means of communication or data transmission and processing. Alternative communications and data transmission systems may not be subject to the same failure modes as the primary systems.

D. Response. Licensees shall immediately respond to any actual or attempted unauthorized access to the security zones, or actual or attempted theft, sabotage, or diversion of category 1 or category 2 quantities of radioactive material at licensee facilities or temporary job sites. For any unauthorized access involving an actual or attempted theft, sabotage, or diversion of category 1 or category 2 quantities of radioactive material, the licensee's response shall include requesting, without delay, an armed response from the LLEA.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1631. Maintenance and Testing

A. Each licensee subject to this Subchapter shall implement a maintenance and testing program to ensure that intrusion alarms, associated communication systems, and other physical components of the systems used to secure or detect unauthorized access to radioactive material are maintained in operable condition and are capable of performing their intended function when needed. The equipment relied on to meet the security requirements of this Chapter shall be inspected and tested for operability and performance at the manufacturer's suggested frequency. If there is no suggested manufacturer's suggested frequency, the testing shall be performed at least annually, not to exceed 12 months.

B. The licensee shall maintain records on the maintenance and testing activities for three years.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1633. Requirements for Mobile Devices

A. Each licensee who possesses mobile devices containing category 1 or category 2 quantities of radioactive material shall:

1. have two independent physical controls that form tangible barriers to secure the material from unauthorized removal when the device is not under direct control and constant surveillance by the licensee; and

2. for devices in or on a vehicle or trailer, unless the health and safety requirements for a site prohibit the disabling of the vehicle, the licensee shall utilize a method to disable the vehicle or trailer when not under direct control and constant surveillance by the licensee. Licensees shall not rely on the removal of an ignition key to meet this requirement.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.
 HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1635. Security Program Review

A. Each licensee shall be responsible for the continuing effectiveness of the security program. Each licensee shall ensure that the security program is reviewed to confirm compliance with the requirements of this Subchapter and that comprehensive actions are taken to correct any noncompliance that is identified. The review shall include the radioactive material security program content and implementation. Each licensee shall periodically (at least annually) review the security program content and implementation.

B. The results of the review, along with any recommendations, shall be documented. Each review report shall identify conditions that are adverse to the proper performance of the security program, the cause of the condition(s), and, when appropriate, recommend corrective actions, and corrective actions taken. The licensee shall review the findings and take any additional corrective actions necessary to preclude repetition of the condition, including reassessment of the deficient areas where indicated.

C. The licensee shall maintain the review documentation for three years.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.
 HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1637. Reporting of Events

A. The licensee shall immediately notify the LLEA after determining that an unauthorized entry resulted in an actual or attempted theft, sabotage, or diversion of a category 1 or category 2 quantity of radioactive material. As soon as possible after initiating a response, but not at the expense of causing delay or interfering with the LLEA response to the event, the licensee shall notify the Office of Environmental Compliance by telephone at (225) 765-0160 as soon as possible. In no case shall the notification to the department be later than four hours after the discovery of any attempted or actual theft, sabotage, or diversion.

B. The licensee shall assess any suspicious activity related to possible theft, sabotage, or diversion of category 1 or category 2 quantities of radioactive material and notify the LLEA as appropriate. As soon as possible but not later than four hours after notifying the LLEA, the licensee shall notify the Office of Environmental Compliance by telephone at (225) 765-0160 as soon as possible.

C. The initial telephonic notification required by Subsection A of this Section shall be followed within a period of 30 days by a written report submitted to the Office of Environmental Compliance. The report shall include sufficient information for departmental analysis and evaluation, including identification of any necessary corrective actions to prevent future instances.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

Subchapter D. Physical Protection in Transit**§1641. Additional Requirements for Transfer of Category 1 and Category 2 Quantities of Radioactive Material**

A. A licensee transferring a category 1 or category 2 quantity of radioactive material to a licensee of the Nuclear Regulatory Commission or an agreement state shall meet the license verification provisions listed below instead of those listed in LAC 33:XV.340.D.

1. Any licensee transferring category 1 quantities of radioactive material to a licensee of the Nuclear Regulatory Commission or an agreement state, prior to conducting such transfer, shall verify with the NRC's license verification system or the license issuing authority that the transferee's license authorizes the receipt of the type, form, and quantity of radioactive material to be transferred and that the licensee is authorized to receive radioactive material at the location requested for delivery. If the verification is conducted by contacting the license issuing authority, the transferor shall document the verification. For transfers within the same organization, the licensee does not need to verify the transfer.

2. Any licensee transferring category 2 quantities of radioactive material to a licensee of the Nuclear Regulatory Commission or an agreement state, prior to conducting such transfer, shall verify with the NRC's license verification system or the license issuing authority that the transferee's license authorizes the receipt of the type, form, and quantity of radioactive material to be transferred. If the verification is conducted by contacting the license issuing authority, the transferor shall document the verification. For transfers within the same organization, the licensee does not need to verify the transfer.

3. In an emergency where the licensee cannot reach the license issuing authority and the license verification system is nonfunctional, the licensee may accept a written certification by the transferee that it is authorized by license to receive the type, form, and quantity of radioactive material to be transferred. The certification shall include the license number, current revision number, issuing agency, expiration date, and for a category 1 shipment the authorized address. The licensee shall keep a copy of the certification. The certification shall be confirmed by use of the NRC's license verification system or by contacting the license issuing authority by the end of the next business day.

4. The transferor shall keep a copy of the verification documentation as a record for three years.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.
HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1643. Applicability of Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material During Transport

A. For shipments of category 1 quantities of radioactive material, each shipping licensee shall comply with the requirements for physical protection contained in Subsections 1645.A and E, Section 1647, Paragraphs 1649.A.1 and B.1, Subsection 1649.C, and Subsections 1651.A, C, E, G, and H of this Chapter.

B. For shipments of category 2 quantities of radioactive material, each shipping licensee shall comply with the requirements for physical protection contained in Subsections 1645.B-E, Paragraphs 1649.A.2, A.3, B.2, and Subsection 1649.C, and Subsections 1651.B, D, and F-H of this Chapter. For those shipments of category 2 quantities of radioactive material that meet the criteria of LAC 33:XV.1519.B, the shipping licensee shall also comply with the advance notification provisions of LAC 33:XV.1519.

C. The shipping licensee shall be responsible for meeting the requirements of this Subchapter unless the receiving licensee has agreed in writing to arrange for the in-transit physical protection required under this Subchapter.

D. Each licensee who imports or exports category 1 quantities of radioactive material shall comply with the requirements for physical protection during transit contained in Paragraph 1645.A.2, Subsection 1645.E, Section 1647, Paragraphs 1649.A.1 and B.1, Subsection 1649.C, and Subsections 1651.A, C, E, G, and H of this Chapter for the domestic portion of the shipment.

E. Each licensee who imports or exports category 2 quantities of radioactive material shall comply with the requirements for physical protection during transit contained in Paragraphs 1649.A.2, A.3, and B.2, and Subsections 1651.B, D, and F-H of this Chapter for the domestic portion of the shipment.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1645. Preplanning and Coordination of Shipment of Category 1 or Category 2 Quantities of Radioactive Material

A. Each licensee who plans to transport, or deliver to a carrier for transport, licensed material that is a category 1 quantity of radioactive material outside the confines of the licensee's facility or other place of use or storage shall:

1. preplan and coordinate shipment arrival and departure times with the receiving licensee;

2. preplan and coordinate shipment information with the governor or the governor's designee of any state through which the shipment will pass to discuss the state's intention to provide law enforcement escorts; and identify safe havens; and

3. document the preplanning and coordination activities.

B. Each licensee who plans to transport, or deliver to a carrier for transport, licensed material that is a category 2 quantity of radioactive material outside the confines of the licensee's facility or other place of use or storage shall coordinate the shipment no-later-than arrival time and the expected shipment arrival with the receiving licensee. The licensee shall document the coordination activities.

C. Each licensee who receives a shipment of a category 2 quantity of radioactive material shall confirm receipt of the shipment with the originator. If the shipment has not arrived by the no-later-than arrival time, the receiving licensee shall notify the originator.

D. Each licensee, who transports or plans to transport a shipment of a category 2 quantity of radioactive material, and determines that the shipment will arrive after the no-later-than arrival time provided in accordance with Subsection B of this Section, shall promptly notify the receiving licensee of the new no-later-than arrival time.

E. The licensee shall retain a copy of the documentation for preplanning and coordination and any revision thereof, as a record for three years.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1647. Advance Notification of Shipment of Category 1 Quantities of Radioactive Material

A. As specified in Paragraphs A.1 and A.2 of this Section, each licensee shall provide advance notification to the Office of Environmental Compliance by telephone at (225) 765-0160, of the shipment of licensed material in a category 1 quantity, through or across the boundary of the state, before the transport, or delivery to a carrier for transport of the licensed material outside the confines of the licensee's facility or other place of use or storage.

1. Procedures for Submitting Advance Notification

a. The notification shall be made to the Office of Environmental Compliance by telephone at (225) 765-0160.

b. A notification delivered by mail shall be postmarked at least seven days before transport of the shipment commences at the shipping facility.

c. A notification delivered by any means other than mail shall reach the Office of Environmental Compliance at least four days before the transport of the shipment commences and shall reach the Office of Environmental Compliance at least four days before transport of a shipment within or through the state.

2. Information to be Furnished in Advance Notification of Shipment. Each advance notification of shipment of category 1 quantities of radioactive material shall contain the following information, if available at the time of notification:

a. the name, address, and telephone number of the shipper, carrier, and receiver of the category 1 radioactive material;

b. the license numbers of the shipper and receiver;

c. a description of the radioactive material contained in the shipment, including the radionuclides and quantity;

d. the point of origin of the shipment and the estimated time and date that shipment will commence;

e. the estimated time and date that the shipment is expected to enter each state along the route;

f. the estimated time and date of arrival of the shipment at the destination; and

g. a point of contact, with a telephone number, for current shipment information.

3. Revision Notice

a. The licensee shall provide any information not previously available at the time of the initial notification, as soon as the information becomes available but not later than commencement of the shipment, to the Office of Environmental Compliance by telephone at (225) 765-0160.

b. A licensee shall promptly notify the Office of Environmental Compliance by telephone at (225) 765-0160 of any changes to the information provided in accordance with Paragraph A.2 and Subparagraph A.3.a of this Section.

4. Cancellation Notice. Each licensee who cancels a shipment for which advance notification has been sent shall send a cancellation notice to the Office of Environmental Compliance by telephone at (225) 765-0160. The licensee shall send the cancellation notice before the shipment would have commenced or as soon thereafter as possible. The licensee shall state in the notice that it is a cancellation and identify the advance notification that is being cancelled.

5. Records. The licensee shall retain a copy of the advance notification and any revision and cancellation notices as a record for three years.

6. Protection of Information. State officials, state employees, and other individuals, whether or not licensees of the Nuclear Regulatory Commission or an agreement state, who receive schedule information of the kind specified in Paragraph 1647.A.2 of this Chapter shall protect that information against unauthorized disclosure as specified in Subsection 1623.D of this Chapter.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1649. Requirements for Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material During Shipment

A. Shipments by Road

1. Each licensee who transports, or delivers to a carrier for transport, in a single shipment, a category 1 quantity of radioactive material shall:

a. ensure that movement control centers are established that maintain position information from a remote location. These control centers shall monitor shipments 24 hours a day, seven days a week, and have the ability to communicate immediately, in an emergency, with the appropriate law enforcement agencies;

b. ensure that redundant communications are established that allow the transport to contact the escort vehicle (when used) and movement control center at all times. Redundant communications may not be subject to the same interference factors as the primary communication;

c. ensure that shipments are continuously and actively monitored by a telemetric position monitoring system or an alternative tracking system reporting to a movement control center. A movement control center shall provide positive confirmation of the location, status, and control over the shipment. The movement control center shall be prepared to promptly implement preplanned procedures in response to deviations from the authorized route or a notification of actual, attempted, or suspicious activities related to the theft, loss, or diversion of a shipment. These procedures will include, but not be limited to, the identification of and contact information for the appropriate LLEA along the shipment route;

d. provide an individual to accompany the driver for those highway shipments with a driving time period greater than the maximum number of allowable hours of service in a 24-hour duty day as established by the Department of Transportation Federal Motor Carrier Safety Administration. The accompanying individual may be another driver;

e. develop written normal and contingency procedures to address:

i. notifications to the communication center and law enforcement agencies;

ii. communication protocols that shall include a strategy for the use of authentication codes and duress codes and provisions for refueling or other stops, detours, and locations where communication is expected to be temporarily lost;

iii. loss of communications; and

iv. responses to an actual or attempted theft or diversion of a shipment;
and

f. ensure that drivers, accompanying personnel, and movement control center personnel have access to the normal and contingency procedures.

2. Each licensee who transports category 2 quantities of radioactive material shall maintain constant control and/or surveillance during transit and have the capability for immediate communication to summon appropriate response or assistance.

3. Each licensee who delivers to a carrier for transport, in a single shipment, a category 2 quantity of radioactive material shall:

a. use carriers that have established package tracking systems. An established package tracking system is a documented, proven, and reliable system routinely used to transport objects of value. In order for a package tracking system to maintain constant control and/or surveillance, the package tracking system shall allow the shipper or transporter to identify when and where the package was last and when it should arrive at the next point of control;

b. use carriers that maintain constant control and/or surveillance during transit and have the capability for immediate communication to summon appropriate response or assistance; and

c. use carriers that have established tracking systems that require an authorized signature prior to releasing the package for delivery or return.

B. Shipments by Rail

1. Each licensee who transports, or delivers to a carrier for transport, in a single shipment, a category 1 quantity of radioactive material shall:

a. ensure that rail shipments are monitored by a telemetric position monitoring system or an alternative tracking system reporting to the licensee, third-party, or railroad communications center. The communications center shall provide positive confirmation of the location of the shipment and its status. The communications center shall implement preplanned procedures in response to deviations from the authorized route or to a notification of actual, attempted, or suspicious activities related to the theft or diversion of a shipment. These procedures will include, but not be limited to, the identification of and contact information for the appropriate LLEA along the shipment route; and

b. ensure that periodic reports to the communications center are made at preset intervals.

2. Each licensee who transports, or delivers to a carrier for transport, in a single shipment, a category 2 quantity of radioactive material shall:

a. use carriers that have established package tracking systems. An established package tracking system is a documented, proven, and reliable system routinely used to transport objects of value. In order for a package tracking system to maintain constant control and/or surveillance, the package tracking system shall allow the shipper or transporter to identify when and where the package was last and when it should arrive at the next point of control;

b. use carriers that maintain constant control and/or surveillance during transit and have the capability for immediate communication to summon appropriate response or assistance; and

c. use carriers that have established tracking systems that require an authorized signature prior to releasing the package for delivery or return.

C. Investigations. Each licensee who makes arrangements for the shipment of category 1 quantities of radioactive material shall immediately conduct an investigation upon the discovery that a category 1 shipment is lost or missing. Each licensee who makes arrangements for the shipment of category

2 quantities of radioactive material shall immediately conduct an investigation, in coordination with the receiving licensee, of any shipment that has not arrived by the designated no-later-than arrival time.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1651. Reporting of Events

A. The shipping licensee shall notify the appropriate LLEA and the Office of Environmental Compliance by telephone at (225) 765-0160 within one hour of its determination that a shipment of category 1 quantities of radioactive material is lost or missing. The appropriate LLEA would be the law enforcement agency in the area of the shipment's last confirmed location. During the investigation required by Subsection 1649.C of this Chapter, the shipping licensee will provide agreed upon updates to the Office of Environmental Compliance by telephone at (225) 765-0160 on the status of the investigation.

B. The shipping licensee shall notify the Office of Environmental Compliance by telephone at (225) 765-0160 within four hours of its determination that a shipment of category 2 quantities of radioactive material is lost or missing. If, after 24 hours of its determination that the shipment is lost or missing, the radioactive material has not been located and secured, the licensee shall immediately notify the Office of Environmental Compliance by telephone at (225) 765-0160.

C. The shipping licensee shall notify the designated LLEA along the shipment route as soon as possible upon discovery of any actual or attempted theft or diversion of a shipment or suspicious activities related to the theft or diversion of a shipment of a category 1 quantity of radioactive material. As soon as possible after notifying the LLEA, the licensee shall notify the Office of Environmental Compliance by telephone at (225) 765-0160 upon discovery of any actual or attempted theft or diversion of a shipment, or any suspicious activity related to the shipment of category 1 radioactive material.

D. The shipping licensee shall notify the Office of Environmental Compliance by telephone at (225) 765-0160 as soon as possible upon discovery of any actual or attempted theft or diversion of a shipment, or any suspicious activity related to the shipment, of a category 2 quantity of radioactive material.

E. The shipping licensee shall notify the Office of Environmental Compliance by telephone at (225) 765-0160 and the LLEA as soon as possible upon recovery of any lost or missing category 1 quantities of radioactive material.

F. The shipping licensee shall notify the Office of Environmental Compliance by telephone at (225) 765-0160 as soon as possible upon recovery of any lost or missing category 2 quantities of radioactive material.

G. The initial telephonic notification required by Subsections A-D of this Section shall be followed within a period of 30 days by a written report submitted to the Office of Environmental Compliance. A written report is not required for notifications on suspicious activities required by Subsections C and D of this Section. The report shall set forth the following information:

1. a description of the licensed material involved, including kind, quantity, and chemical and physical form;
2. a description of the circumstances under which the loss or theft occurred;
3. a statement of disposition, or probable disposition, of the licensed material involved;
4. actions that have been taken, or will be taken, to recover the material; and
5. procedures or measures that have been, or will be, adopted to ensure against a recurrence of the loss or theft of licensed material.

H. Subsequent to filing the written report, the licensee shall also report any additional substantive information on the loss or theft within 30 days after the licensee learns of such information.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

Subchapter E. Reserved

Subchapter F. Records and Inspections

§1661. Form of Records

A. Each record required by this Chapter shall be legible throughout the retention period specified by each department regulation. The record may be the original or a reproduced copy or a microform, provided that the copy or microform is authenticated by authorized personnel and that the microform is capable of producing a clear copy throughout the required retention period. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Records such as letters, drawings, and specifications, shall include all pertinent information such as stamps, initials, and signatures. The licensee shall maintain adequate safeguards against tampering with and loss of records.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1663. Record Retention

A. Licensees shall maintain the records that are required by the regulations in this Chapter for the period specified by the appropriate regulation. If a retention period is not otherwise specified, these records shall be retained until the department terminates the facility's license. All records related to this Chapter may be destroyed upon department termination of the facility license.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

§1665. Inspections

A. Each licensee shall afford to the department at all reasonable times opportunity to inspect category 1 or category 2 quantities of radioactive material and the premises and facilities wherein the nuclear material is used, produced, or stored.

B. Each licensee shall make available to the department for inspection, upon reasonable notice, records kept by the licensee pertaining to its receipt, possession, use, acquisition, import, export, or transfer of category 1 or category 2 quantities of radioactive material.

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.

Subchapter Z. Appendices

§1699. Appendices

Appendix A—Category 1 and Category 2 Threshold

The terabecquerel (TBq) values are the regulatory standard. The curie (Ci) values specified are obtained by converting from the TBq value. The curie values are provided for practical usefulness only.

Radioactive material	Category 1 (TBq)	Category 1 (Ci)	Category 2 (TBq)	Category 2 (Ci)
Americium-241	60	1,620	0.6	16.2
Americium-241/Be	60	1,620	0.6	16.2
Californium-252	20	540	0.2	5.40
Cobalt-60	30	810	0.3	8.10
Curium-244	50	1,350	0.5	13.5
Cesium-137	100	2,700	1	27.0
Gadolinium-153	1,000	27,000	10	270
Iridium-192	80	2,160	0.8	21.6
Plutonium-238	60	1,620	0.6	16.2
Plutonium-239/Be	60	1,620	0.6	16.2
Promethium-147	40,000	1,080,000	400	10,800
Radium-226	40	1,080	0.4	10.8
Selenium-75	200	5,400	2	54.0
Strontium-90	1,000	27,000	10	270
Thulium-170	20,000	540,000	200	5,400
Ytterbium-169	300	8,100	3	81.0

Note: Calculations Concerning Multiple Sources or Multiple Radionuclides

The "sum of fractions" methodology for evaluating combinations of multiple sources or multiple radionuclides is to be used in determining whether a location meets or exceeds the threshold and is thus subject to the requirements of this Chapter.

I. If multiple sources of the same radionuclide and/or multiple radionuclides are aggregated at a location, the sum of the ratios of the total activity of each of the radionuclides shall be determined to verify whether the

activity at the location is less than the category 1 or category 2 thresholds of Table 1, as appropriate. If the calculated sum of the ratios, using the equation below, is greater than or equal to 1.0, then the applicable requirements of this Chapter apply.

II. First determine the total activity for each radionuclide from Table 1. This is done by adding the activity of each individual source, material in any device, and any loose or bulk material that contains the radionuclide. Then use the equation below to calculate the sum of the ratios by inserting the total activity of the applicable radionuclides from Table 1 in the numerator of the equation and the corresponding threshold activity from Table 1 in the denominator of the equation.

Calculations shall be performed in metric values (i.e., TBq) and the numerator and denominator values shall be in the same units.

R_1 = total activity for radionuclide 1

R_2 = total activity for radionuclide 2

R_N = total activity for radionuclide n

AR_1 = activity threshold for radionuclide 1

AR_2 = activity threshold for radionuclide 2

AR_N = activity threshold for radionuclide n

$$\sum_1^n \left[\frac{R_1}{AR_1} + \frac{R_2}{AR_2} + \frac{R_n}{AR_n} \right] \geq 1.0$$

AUTHORITY NOTE: Promulgated in accordance with R.S. 30:2001 et seq. and 2104.B.

HISTORICAL NOTE: Promulgated by the Department of Environmental Quality, Office of the Secretary, Legal Division, LR 41:**.