TITLE 20 ENVIRONMENTAL PROTECTION
CHAPTER 3 RADIATION PROTECTION
PART 3 LICENSING OF RADIOACTIVE MATERIAL

20.3.3.1 ISSUING AGENCY: Environmental Improvement Board.
[20.3.3.1 NMAC - Rp, 20.3.3.1 NMAC, 04/30/2009]

20.3.3.2 SCOPE:

A. This part provides for the licensing of radioactive material. Except for persons exempt as provided in this part, no person shall manufacture, produce, receive, possess, use, own, transfer or acquire radioactive material except as authorized in a specific or general license issued pursuant to the requirements in this part.

B. In addition to the requirements of this part, all licensees are subject to the requirements of 20.3.1 NMAC, 20.3.4 NMAC, 20.3.10 NMAC and 20.3.16 NMAC.

C. The requirements of this part are in addition to, and not in substitution for, other requirements of this chapter. In any conflict between a requirement in this part and a specific requirement in another part of this chapter, the specific requirement governs.
[20.3.3.2 NMAC - Rp, 20.3.3.2 NMAC, 04/30/2009]

20.3.3.3 STATUTORY AUTHORITY: Sections 74-1-9, 74-3-5 and 74-3-9 NMSA 1978.
[20.3.3.3 NMAC - Rp, 20.3.3.3 NMAC, 04/30/2009]

20.3.3.4 DURATION: Permanent.
[20.3.3.4 NMAC - Rp, 20.3.3.4 NMAC, 04/30/2009]

20.3.3.5 EFFECTIVE DATE: April 30, 2009, unless a later date is cited at the end of a section.
[20.3.3.5 NMAC - Rp, 20.3.3.5 NMAC, 04/30/2009]

20.3.3.6 OBJECTIVE: This part sets forth rules applicable to all persons in the state of New Mexico governing licensing of radioactive material under the act, and exemptions from the licensing requirements.
[20.3.3.6 NMAC - Rp, 20.3.3.6 NMAC, 04/30/2009]

20.3.3.7 DEFINITIONS:

A. **"Alert"** means events that may occur, are in progress, or have occurred that could lead to a release of radioactive material but that the release is not expected to require a response by offsite response organizations to protect persons offsite.

B. **"Principal activities"** means activities authorized by the license which are essential to achieving the purpose(s) for which the license was issued or amended. Storage during which no licensed material is accessed for use or disposal and activities incidental to decontamination or decommissioning are not principal activities.

C. **"Site area emergency"** means events that may occur, are in progress, or have occurred that could lead to a significant release of radioactive material and that could require a response by offsite response organizations to protect persons offsite.
[20.3.3.7 NMAC - N, 04/30/2009]

20.3.3.8 to 20.3.3.300 [RESERVED]

20.3.3.301 EXEMPTIONS - UNIMPORTANT QUANTITIES OF SOURCE MATERIAL:

A. Any person is exempt from the requirements in this part to the extent that such person receives, possesses, uses, transfers or delivers source material in any chemical mixture, compound, solution or alloy in which the source material is by weight less than 0.05 percent of the mixture, compound, solution or alloy. The exemption contained in this subsection does not include *byproduct material* as defined in Paragraph (2) of Subsection F of 20.3.1.7 NMAC.

B. Any person is exempt from the requirements in this part to the extent that such person receives, possesses, uses or transfers unrefined and unprocessed ore containing source material; provided that, except as authorized in a specific license, such person shall not refine or process such ore.

C. Any person is exempt from the requirements in this part to the extent that such person receives,

possesses, uses or transfers:

(1) any quantities of thorium contained in:

(a) incandescent gas mantles;

(b) vacuum tubes;

(c) welding rods;

(d) electric lamps for illuminating purposes; provided, that each lamp does not contain more than 50 milligrams of thorium;

(e) germicidal lamps, sunlamps, and lamps for outdoor or industrial lighting; provided, that each lamp does not contain more than 2 grams of thorium;

(f) rare earth metals and compounds, mixtures and products containing not more than 0.25 percent by weight, thorium, uranium or any combination of these; or

(g) personnel neutron dosimeters; provided, that each dosimeter does not contain more than 50 milligrams of thorium;

(2) source material contained in the following products:

(a) glazed ceramic tableware, provided that the glaze does not contain more than 20 percent by weight source material;

(b) glassware, containing not more than 10 percent by weight source material, but not including commercially manufactured glass brick, pane glass, ceramic tile or other glass, glass enamel or ceramic used in construction;

(c) glass enamel or glass enamel frit containing not more than 10 percent by weight source material imported or ordered for importation into the United States, or initially distributed by manufacturers in the United States, before July 25, 1983 (On July 25, 1983, the exemption of glass enamel frit was suspended. The exemption was eliminated on September 11, 1984); or

(d) piezoelectric ceramic containing not more than 2 percent by weight source material;

(3) photographic film, negatives and prints containing uranium or thorium;

(4) any finished product or part fabricated of, or containing, tungsten or magnesium-thorium alloys, provided that the thorium content of the alloy does not exceed 4 percent by weight and that this exemption shall not be deemed to authorize the chemical, physical or metallurgical treatment or processing of any such product or part;

(5) uranium contained in counterweights installed in aircraft, rockets, projectiles and missiles, or stored or handled in connection with installation or removal of such counterweights; provided, that:

(a) the counterweights are manufactured in accordance with a specific license issued by the NRC authorizing distribution by the licensee pursuant to 10 CFR Part 40;

(b) each counterweight has been impressed with the following legend clearly legible through any plating or other covering: “depleted uranium.” (the requirements specified in Subparagraphs (b) and (c) of this paragraph 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”);

(c) each counterweight is durably and legibly labeled or marked with the identification of the manufacturer and the statement: “unauthorized alterations prohibited”; (the requirements specified in Subparagraphs (b) and (c) of this paragraph 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”); and

(d) the exemption contained in this paragraph shall not be deemed to authorize the chemical, physical or metallurgical treatment or processing of such counterweights other than repair or restoration of any plating or other covering;

(6) natural or depleted uranium metal used as shielding constituting part of any shipping container which is conspicuously and legibly impressed with the legend, “caution - radioactive shielding - uranium” and the uranium metal is encased in mild steel or equally fire resistant metal of minimum wall thickness of one-eighth of an inch (3.2 millimeters);

(7) thorium contained in finished optical lenses, provided that each lens does not contain more than 30 percent by weight of thorium and that this exemption shall not be deemed to authorize either:

(a) the shaping, grinding or polishing of such lens or manufacturing processes other than the assembly of such lens into optical systems and devices without any alternation of the lens; or

(b) the receipt, possession, use or transfer of thorium contained in contact lenses, spectacles, 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; or

(9) 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.

D. The exemptions in Subsection C of this section do not authorize the manufacture of any of the products described.

[20.3.3.301 NMAC - Rp, 20.3.3.301 NMAC, 04/30/2009]

20.3.3.302 EXEMPTIONS - RADIOACTIVE MATERIAL OTHER THAN SOURCE MATERIAL:

A. Exempt Concentrations.

(1) Except as provided in Paragraphs (3) and (4) of this subsection, any person is exempt from the license requirements in this part to the extent that such person receives, possesses, uses, transfers, owns or acquires products or materials containing radioactive material in concentrations not in excess of those listed in 20.3.3.329 NMAC.

(2) This subsection shall not be deemed to authorize the import of radioactive material or products containing radioactive material.

(3) A manufacturer, processor or producer of a product or material is exempt from the license requirements in this part to the extent that they transfer radioactive material contained in a product or material in concentrations not in excess of those specified in 20.3.3.329 NMAC and introduced into the product or material by a licensee holding a specific license issued by the NRC expressly authorizing such introduction. This exemption does not apply to the transfer of radioactive material contained in any food, beverage, cosmetic, drug or other commodity or product designed for ingestion or inhalation by, or application to, a human being.

(4) No person may introduce radioactive material into a product or material knowing or having reason to believe that it will be transferred to persons exempt under this subsection or equivalent regulations of the NRC or an agreement state, except in accordance with a specific license issued pursuant to Paragraph (1) of Subsection A of 20.3.3.315 NMAC.

B. Exempt Quantities.

(1) Except as provided in Paragraphs (3) through (5) of this subsection, any person is exempt from the license requirements in this part to the extent that such person receives, possesses, uses, transfers, owns or acquires radioactive material in individual quantities each of which does not exceed the applicable quantity set forth in 20.3.3.330 NMAC.

(2) Any person who possesses byproduct material received or acquired prior to September 25, 1971 under the general license then provided in 10 CFR 31.4 or similar general license of an agreement state, is exempt from the requirements for a license set forth in this part to the extent that such person possesses, uses, transfers or owns byproduct material.

(3) This subsection does not authorize for the purposes of commercial distribution the production, packaging, repackaging or transfer of radioactive material or the incorporation of radioactive material into products intended for commercial distribution.

(4) No person may, for purposes of commercial distribution, transfer radioactive material in the individual quantities set forth in 20.3.3.330 NMAC, knowing or having reason to believe that such quantities of radioactive material will be transferred to persons exempt under this subsection or equivalent regulations of the NRC or an agreement state, except in accordance with a specific license issued by the NRC pursuant to 10 CFR 32.18 which license states that the radioactive material may be transferred by the licensee to persons exempt under this subsection or the equivalent regulations of the NRC or an agreement state.

(5) No person may, for purposes of producing an increased radiation level, combine quantities of radioactive material covered by this exemption so that the aggregate quantity exceed the limits set forth in 20.3.3.330 NMAC, except for radioactive material combined within a device placed in use before May 3, 1999, or as otherwise permitted by the rules in this chapter.

C. Exempt Items.

(1) Certain items containing radioactive material. Any person who desires to apply byproduct material to, or to incorporate byproduct material into, the products exempted in this paragraph, or who desires to initially transfer for sale or distribution such products containing byproduct material, shall apply for a specific license to NRC pursuant to 10 CFR 32.14, which license states that the product may be distributed by the licensee to persons exempt from the regulations pursuant to this paragraph or equivalent NRC or agreement state regulations.

Except for persons who apply radioactive material to, or persons who incorporate radioactive material into, the following products, or persons who initially transfer for sale or distribution (specifically licensed by NRC pursuant to 10 CFR 32.14) the following products containing radioactive material, any person is exempt from the license requirements in this part to the extent that such person receives, possesses, uses, transfers, owns or acquires the following products:

(a) timepieces or hands or dials containing not more than the following specified quantities of radioactive material and not exceeding the following specified levels of radiation:

(i) 25 millicuries (925 megabecquerels) of tritium per timepiece;

(ii) 5 millicuries (185 megabecquerels) of tritium per hand;

(iii) 15 millicuries (555 megabecquerels) of tritium per dial (bezels when used shall be considered as part of the dial);

(iv) 100 microcuries (3.7 megabecquerels) of promethium-147 per watch hand or 200 microcuries (7.4 megabecquerels) of promethium-147 per any other timepiece;

(v) 20 microcuries (0.74 megabecquerel) of promethium-147 per watch hand or 40 microcuries (1.48 megabecquerels) of promethium-147 per other timepiece hand;

(vi) 60 microcuries (2.22 megabecquerels) of promethium-147 per watch dial or 120 microcuries (4.44 megabecquerels) of promethium-147 per other timepiece dial (bezels when used shall be considered as part of the dial);

(vii) the levels of radiation from hands and dials containing promethium-147 shall not exceed, when measured through 50 milligrams per square centimeter of absorber: *1)* for wrist watches, 0.1 millirad (1 milligray) per hour at 10 centimeters from any surface; *2)* for pocket watches, 0.1 millirad (1 milligray) per hour at 1 centimeter from any surface; or *3)* for any other timepiece, 0.2 millirad (2 milligray) per hour at 10 centimeters from any surface; or

(viii) 1 microcurie (37 kilobecquerels) of radium-226 per timepiece in intact timepieces manufactured prior to November 30, 2007;

(b) [RESERVED];

(c) precision balances containing not more than 1 millicurie (37 megabecquerels) of tritium per balance or not more than 0.5 millicurie (18.5 megabecquerels) of tritium per balance part manufactured before December 17, 2007;

(d) [RESERVED];

(e) marine compasses containing not more than 750 millicuries (27.8 gigabecquerels) of tritium gas and other marine navigational instruments containing not more than 250 millicuries (9.25 gigabecquerels) of tritium gas manufactured before December 17, 2007;

(f) ionization chamber smoke detectors containing not more than 1 microcurie (37 kilobecquerels) of americium-241 per detector in the form of a foil and designed to protect life and property from fires;

(g) electron tubes; provided, that each tube does not contain more than one of the following specified quantities of radioactive material (for purposes of this exemption, “electron tubes” include spark gap tubes, power tubes, gas tubes including glow lamps, receiving tubes, microwaves tubes, indicator tubes, pick-up tubes, radiation detection tubes and any other completely sealed tube that is designed to conduct or control electrical currents):

(i) 150 millicuries (5.55 gigabecquerels) of tritium per microwave receiver protector tube or 10 millicuries (370 megabecquerels) of tritium per any other electron tube;

(ii) 1 microcurie (37 kilobecquerels) of cobalt-60;

(iii) 5 microcuries (185 kilobecquerels) of nickel-63;

(iv) 30 microcuries (1.11 megabecquerels) of krypton-85;

(v) 5 microcuries (185 kilobecquerels) of cesium-137;

(vi) 30 microcuries (1.11 megabecquerels) of promethium-147; and provided further, that the levels of radiation from each electron tube containing radioactive materials do not exceed 1 millirad (10 milligray) per hour at 1 centimeter from any surface when measured through 7 milligrams per square centimeter of absorber; and

(h) ionizing radiation measuring instruments containing, for purposes of internal calibration or standardization, one or more sources of radioactive material; provided, that:

(i) each source contains no more than one exempt quantity set forth in 20.3.3.330 NMAC;

(ii) each instrument contains no more than ten exempt quantities; for this requirement, an instrument's source(s) may contain either one type or different types of radionuclides and an individual exempt quantity may be composed of fractional parts of one or more of the exempt quantities in 20.3.3.330 NMAC provided that the sum of such fractions shall not exceed unity; and

(iii) for purposes of this subparagraph, 0.05 microcurie (1.85 kilobecquerels) of americium-241 is considered an exempt quantity under 20.3.3.330 NMAC.

(2) Self-luminous products containing tritium, krypton-85, promethium-147 or radium-226.

(a) Except for persons who manufacture, process, produce, or initially transfer for sale or distribution self-luminous products containing tritium, krypton-85, promethium-147 or radium-226, and except as provided in Subparagraph (c) of this paragraph, any person is exempt from the license requirements in this part to the extent that such person receives, possesses, uses, transfers, owns or acquires tritium, krypton-85, promethium-147 or radium-226 in self-luminous products manufactured, processed, produced or initially transferred in accordance with a specific license issued by the NRC pursuant to 10 CFR 32.22 which license authorizes the initial transfer of the product for use under this paragraph.

(b) Any person who desires to manufacture, process or produce self-luminous products containing tritium, krypton-85 or promethium-147, or to transfer such products for use pursuant to Subparagraph (a) of this paragraph, shall apply to NRC for a license pursuant to 10 CFR 32.22, which license states that the product may be transferred by the licensee to persons exempt from the regulations pursuant to Subparagraph (a) of this paragraph or equivalent regulations of the NRC or an agreement state.

(c) The exemption in this paragraph does not apply to tritium, krypton-85, promethium-147 or radium-226 used in products primarily for frivolous purposes or in toys or adornments.

(3) Radium-226 acquired previously. Any person is exempt from the licensing requirements in this part to the extent that such person possesses, uses or transfers, articles containing less than 0.1 microcurie (3.7 kilobecquerels) of radium-226 which were acquired prior to May 3, 1995 (the date when these rules were codified).

(4) Gas and aerosol detectors containing radioactive material.

(a) Except for persons who manufacture, process, produce or initially transfer for sale or distribution gas and aerosol detectors containing radioactive material, any person is exempt from the licensing requirements in this part to the extent that such person receives, possesses, uses, transfers, owns or acquires radioactive material, in gas and aerosol detectors designed to protect life or property from fires and airborne hazards, and manufactured, processed, produced or initially transferred in accordance with a specific license issued by the NRC, pursuant to 10 CFR 32.26, which license authorizes the initial transfer of the product for use under this paragraph. This exemption also covers gas and aerosol detectors manufactured or distributed before November 30, 2007 in accordance with a specific license issued by the department or agreement state under comparable provisions to 10 CFR 32.26 authorizing distribution to persons exempt from regulatory requirements.

(b) Any person who desires to manufacture, process or produce gas and aerosol detectors containing byproduct material, or to initially transfer such products for use pursuant to Subparagraph (a) of this paragraph, shall apply for a license to the NRC pursuant to 10 CFR 32.26, which license states that the product may be initially transferred by the licensee to persons exempt from the regulations pursuant to Subparagraph (a) of this paragraph or equivalent regulations of the NRC or an agreement state.

(5) [RESERVED]

D. Radioactive Drug - Capsules Containing Carbon-14 Urea for "In Vivo" Diagnostic Use for Humans.

(1) Except as provided in Paragraphs (2) and (3) of this subsection, any person is exempt from the requirements for a license set forth in this part and 20.3.7 NMAC provided that such person receives, possesses, uses, transfers, owns or acquires capsules containing 1microcurie (37 kilobecquerels) carbon-14 urea (allowing for nominal variation that may occur during the manufacturing process) each, for "in vivo" diagnostic use for humans.

(2) Any person who desires to use the capsules for research involving human subjects shall apply for and receive a specific license pursuant to 20.3.7 NMAC.

(3) Any person who desires to manufacture, prepare, process, produce, package, repackage or transfer for commercial distribution such capsules shall apply for and receive a specific license by NRC pursuant to 10 CFR 32.21.

(4) Nothing in this section relieves persons from complying with applicable FDA, other federal and state requirements governing receipt, administration and use of drugs.

[20.3.3.302 NMAC - Rp, 20.3.3.302 NMAC, 04/30/2009]

20.3.3.303 TYPES OF LICENSES: Licenses for radioactive materials are of two types: general and specific.

A. General License. A general license is provided by regulation, grants authority to a person for certain activities involving radioactive material, and is effective without the filing of an application with the department or the issuance of a licensing document to a particular person. However, registration with the department may be required by the particular general license.

B. Specific License. A specific license is issued by the department to a named person who has filed an application for the license under the specific licensing provisions of 20.3.3 NMAC, 20.3.5 NMAC, 20.3.7 NMAC, 20.3.12 NMAC, 20.3.13 NMAC, 20.3.14 NMAC and 20.3.15 NMAC.
[20.3.3.303 NMAC - Rp, 20.3.3.303 NMAC, 04/30/2009]

20.3.3.304 GENERAL LICENSES - SOURCE MATERIAL:

A. General License to Receive Title to Source Material or Byproduct Material (as defined in Paragraph (2) of Subsection F of 20.3.1.7 NMAC). A general license is hereby issued authorizing the receipt of title to source material or *byproduct material* (as defined in Paragraph (2) of Subsection F of 20.3.1.7 NMAC) without regard to quantity. This general license does not authorize any person to receive, possess, deliver, use or transfer source material or *byproduct material* (as defined in Paragraph (2) of Subsection F of 20.3.1.7 NMAC).

B. Small Quantities of Source Material.

(1) A general license is hereby issued authorizing commercial and industrial firms, research, educational and medical institutions, and state, federal and local government agencies to use and transfer not more than 15 pounds (6.82 kg) of source material at any one time for research, development, and educational, commercial or operational purposes. A person authorized to use or transfer source material, pursuant to this general license, may not receive more than a total of 150 pounds (68.2 kg) of source material in any one calendar year.

(2) Persons who receive, possess, use or transfer source material pursuant to the general license issued in Paragraph (1) of this subsection are exempt from the provision of 20.3.4 NMAC and 20.3.10 NMAC to the extent that such receipt, possession, use or transfer are within the terms of such general license; provided, however, that this exemption shall not be deemed to apply to any such person who is also in possession of source material under a specific license issued pursuant to this part.

(3) Persons who receive, possess, use or transfer source material pursuant to the general license in Paragraph (1) of this subsection are 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.

C. Depleted Uranium in Industrial Products and Devices.

(1) A general license is hereby issued to receive, acquire, possess, use or transfer, in accordance with the provisions in Paragraphs (2), (3), (5) and (6) of this subsection, depleted uranium contained in industrial products or devices for the purpose of providing a concentrated mass in a small volume of the product or device.

(2) The general license in Paragraph (1) of this subsection applies only to industrial products or devices which have been manufactured or initially transferred either in accordance with a specific license issued to the manufacturer of the products or devices pursuant to Subsection L of 20.3.3.315 NMAC or in accordance with a specific license issued by the NRC or an agreement state which authorizes manufacture of the products or devices for distribution to persons generally licensed by the NRC or an agreement state.

(3) Persons who receive, acquire, possess or use depleted uranium pursuant to the general license established by Paragraph (1) of this subsection shall file a form, *registration certificate - use of depleted uranium under general license*, with the department. The form shall be submitted within 30 days after the first receipt or acquisition of such depleted uranium. The general licensee shall furnish on the registration form the following information and such other information as may be required by that form:

(a) name and address of the general licensee;

(b) a statement that the general licensee has developed and will maintain procedures designed to establish physical control over the depleted uranium described in Paragraph (1) of this subsection and designed to prevent transfer of such depleted uranium in any form, including metal scrap, to persons not authorized to receive the depleted uranium; and

(c) name and title, address and telephone number of the individual duly authorized to act for and on behalf of the general licensee in supervising the procedures identified in Subparagraph (b) of this paragraph.

(4) The general licensee possessing or using depleted uranium under the general license established by Paragraph (1) of this subsection shall report in writing to the department any changes in information furnished by them in the form *registration certificate-use of depleted uranium under general license*. The report shall be

submitted within 30 days after the effective date of such change.

(5) A person, who receives, acquires, possesses or uses depleted uranium pursuant to the general license established by Paragraph (1) of this subsection:

(a) shall not introduce such depleted uranium, in any form, into a chemical, physical or metallurgical treatment or process, except a treatment or process for repair or restoration of any plating or other covering of the depleted uranium;

(b) shall not abandon such depleted uranium;

(c) shall transfer or dispose of such depleted uranium only by transfer in accordance with the provisions of 20.3.3.323 NMAC; in the case where the transferee receives the depleted uranium pursuant to the general license established by Paragraph (1) of this subsection, the transferor shall furnish the transferee a copy of this subsection and a copy of the registration form; in cases where the transferee receives the depleted uranium pursuant to a general license contained in the NRC or agreement state's regulation equivalent to this subsection, Subsection C of 20.3.3.304 NMAC, the transferor shall furnish the transferee a copy of this subsection and a copy of the registration form accompanied by a note explaining that use of the product or device is regulated by the NRC or agreement state under requirements substantially the same as those in this subsection;

(d) shall report in writing, within 30 days of any transfer, to the department the name and address of the person receiving the depleted uranium pursuant to such transfer; and

(e) shall not export such depleted uranium except in accordance with a license issued by the NRC pursuant to 10 CFR 110.

(6) Any person receiving, acquiring, possessing, using or transferring depleted uranium pursuant to the general license established by Paragraph (1) of this subsection is exempt from the requirements of 20.3.4 NMAC and 20.3.10 NMAC with respect to the depleted uranium covered by that general license.

[20.3.3.304 NMAC - Rp, 20.3.3.304 NMAC, 04/30/2009]

20.3.3.305 GENERAL LICENSES - RADIOACTIVE MATERIAL OTHER THAN SOURCE MATERIAL:

A. Certain Devices and Equipment. A general license is hereby issued to transfer, receive, acquire, own, possess and use radioactive material incorporated in the following devices or equipment which have been manufactured, tested and labeled by the manufacturer in accordance with the specifications in a specific license issued to the manufacturer by the NRC.

(1) Static elimination device. Devices designed for use as static eliminators which contain, as a sealed source or sources, radioactive material consisting of a total of not more than 500 microcuries (18.5 megabecquerels) of polonium-210 per device.

(2) Ion generating tube. Devices designed for ionization of air which contain, as a sealed source or sources, radioactive material consisting of a total of not more than 500 microcuries (18.5 megabecquerels) of polonium-210 per device or a total of not more than 50 millicuries (1.85 gigabecquerels) of hydrogen-3 (tritium) per device.

B. Certain Detecting, Measuring, Gauging or Controlling Devices and Certain Devices for Producing Light or an Ionized Atmosphere.

(1) A general license is hereby issued to commercial and industrial firms and research, educational and medical institutions, individuals in the conduct of their business, and federal, state or local government agencies to receive, acquire, possess, use or transfer, in accordance with the provisions of Paragraphs (2), (3), and (4) of this subsection, radioactive material contained in devices designed and manufactured for the purpose of detecting, measuring, gauging or controlling thickness, density, level, interface location, radiation, leakage, or qualitative or quantitative chemical composition, or for producing light or an ionized atmosphere.

(2) The general license in Paragraph (1) of this subsection applies only to radioactive material contained in devices which have been manufactured or initially transferred and labeled in accordance with the specifications contained in:

(a) a specific license issued by the department pursuant to Subsection E of 20.3.3.315 NMAC; or

(b) an equivalent specific license issued by the NRC or an agreement state; or

(c) an equivalent specific license issued by a state with provisions comparable to Subsection E of 20.3.3.315 NMAC The devices must have been received from one of the specific licensees described in this paragraph, or through a transfer made under Subparagraph (h) of Paragraph (3) of this subsection.

(3) Any person who receives, acquires, possesses, uses or transfers radioactive material in a device

pursuant to the general license in Paragraph (1) of this subsection shall comply with the following.

(a) The general licensee shall assure that all labels affixed to the device at the time of receipt and bearing a statement that removal of the label is prohibited are maintained thereon and shall comply with all instructions and precautions provided by such labels.

(b) The general licensee shall assure that the device is tested for leakage of radioactive material and proper operation of the on-off mechanism and indicator, if any, at no longer than six month intervals or at such other intervals as are specified in the label; however:

(i) devices containing only krypton need not be tested for leakage of radioactive material; and

(ii) devices containing only tritium or not more than 100 microcuries (3.7 megabecquerels) of other beta or gamma emitting material or 10 microcuries (0.37 megabecquerel) of alpha emitting material and devices held in storage in the original shipping container prior to initial installation need not be tested for any purpose.

(c) The general licensee shall assure that the test required by Subparagraph (b) of Paragraph (3) of this subsection and other testing, installation, servicing and removal from installation involving the radioactive materials, its shielding or containment are performed:

(i) in accordance with the instructions provided by the labels; or

(ii) by a person holding a specific license pursuant to this part from the department, the NRC, or an agreement state to perform such activities.

(d) The general licensee shall maintain records showing compliance with the requirements of Subparagraphs (b) and (c) of Paragraph (3) of this subsection. The records must show the results of tests. The records must also show the dates of performance of, and the names of persons performing, testing, installing, servicing and removing from the installation radioactive material and its shielding or containment. The licensee shall retain these records as follows:

(i) each record of a test for leakage or radioactive material required by Subparagraph (b) of Paragraph (3) of this subsection shall be retained for three years after the next required leak test is performed or until the sealed source is transferred or disposed of;

(ii) each record of a test of the on-off mechanism and indicator required by Subparagraph (b) of Paragraph (3) of this subsection shall be retained for three years after the next required test of the on-off mechanism and indicator is performed or until the sealed source is transferred or disposed of; and

(iii) each record that is required by Subparagraph (c) of Paragraph (3) of this subsection shall be retained for 3 years from the date of the recorded event or until the device is transferred or disposed of.

(e) The general licensee shall immediately suspend operation of the device if there is a failure of, or damage to, or any indication of a possible failure of or damage to, the shielding of the radioactive material or the on-off mechanism or indicator, or upon the detection of 0.005 microcuries (185 becquerels) or more removable radioactive material. The device may not be operated until it has been repaired by the manufacturer or other person holding a specific license to repair such devices that was issued pursuant to this part by the department, the NRC or an agreement state. The device and any radioactive material from the device, shall only be disposed of by transfer to a person authorized by a specific license to receive the radioactive material in the device, or as otherwise approved by the department. A report shall be furnished to the department within 30 days containing a brief description of the event and the remedial action taken. In the case of detection of 0.005 microcurie or more removable radioactive material or failure of, or damage to, a source likely to result in contamination of the premises or the environs, the report shall include a plan for ensuring that the premises and environs are acceptable for unrestricted use. Under these circumstances, the criteria set out in Subsection B of 20.3.4.426 NMAC, *radiological criteria for unrestricted use*, shall be applicable, as determined by the department on a case-by-case basis.

(f) The general licensee shall not abandon the device containing radioactive material.

(g) The general licensee shall not export the device containing radioactive material except in accordance with 10 CFR 110.

(h) Device transfer requirements.

(i) The general licensee shall transfer or dispose of the device containing radioactive material only by export as provided by Subparagraph (g) of this paragraph, by transfer to another general licensee as authorized in Subparagraph (i) of this paragraph , or to a person authorized to receive the device by a specific license issued by the department pursuant under this part, or by a specific license issued by the department authorizing waste collection pursuant to this part, or equivalent provisions of the NRC or an agreement state, or as otherwise approved under Item (iii) of this subparagraph.

(ii) The general licensee shall within 30 days after the transfer of a device to a specific licensee or export, furnish a report to the department at the address indicated in 20.3.1.116 NMAC. The report shall contain the identification of the device by manufacturer's (or initial transferor's) name, model number and serial number; the name, address and license number of the person receiving the device (license number not applicable if exported); and the date of the transfer.

(iii) The general licensee shall obtain written department approval before transferring the device to any other specific licensee not specifically identified in Item (i) of this subparagraph. However, a holder of a specific license may transfer a device for possession and use under its own specific license without prior approval, if, the holder: verifies that the specific license authorizes the possession and use, or applies for and obtains amendment to the license authorizing the possession and use; removes, alters, covers, or clearly and unambiguously augments the existing label (otherwise required by Subparagraph (a) of this paragraph) so that the device is labeled in compliance with 20.3.4.430 NMAC, however, the manufacturer, model number, and serial number must be retained; obtains the manufacturer's or initial transferor's information concerning maintenance that would be applicable under the specific license (such as leak testing procedures); and reports the transfer under Item (ii) of this subparagraph.

(i) The general licensee shall transfer the device to another general licensee only if:

(i) the device remains in use at a particular location, in which case: ***1)*** the transferor shall give the transferee a copy of this subsection (Subsection B of 20.3.3.305 NMAC), a copy of Subsection F of 20.3.3.317 NMAC, a copy of 20.3.3.326 NMAC, a copy of 20.3.4.451 NMAC, a copy of 20.3.4.452 NMAC and any safety documents identified in the label of the device; ***2)*** within 30 days of the transfer, the transferor shall report to the department at the address indicated in 20.3.1.116 NMAC, stating the manufacturer's (or initial transferor's) name, the model number and the serial number of the device transferred, the transferee's name and mailing address for the location of use, and the name, title and phone number of the responsible individual identified by the transferee in accordance with Subparagraph (l) of this paragraph to have knowledge of and authority to take actions to ensure compliance with the appropriate regulations and requirements; or

(ii) the device is held in storage by an intermediate person in the original shipping container at its intended location of use prior to initial use by a general licensee.

(j) The general licensee shall comply with the provisions of 20.3.4.451 NMAC and 20.3.4.452 NMAC for reporting radiation incidents, theft or loss of licensed material, but shall be exempt from the other requirements of 20.3.4 NMAC and 20.3.10 NMAC.

(k) The general licensee shall respond to written requests from the department to provide information relating to the general license within 30 calendar days of the date of the request, or other time specified in the request. If the general licensee cannot provide the requested information within the allotted time, it shall, within that same time period, request a longer period to supply the information by providing the department with a written justification for the request.

(l) The general licensee shall appoint an individual responsible for having knowledge of the appropriate regulations and requirements and the authority for taking required actions to comply with appropriate regulations and requirements. The general licensee, through this individual, shall ensure the day-to-day compliance with appropriate regulations and requirements. This appointment does not relieve the general licensee of any of its responsibility in this regard.

(m) Registration requirements.

(i) The general licensee shall register on a department registration form, in accordance with Items (ii) and (iii) of this subparagraph, devices containing at least 10 millicuries (370 megabecquerels) of cesium-137, 0.1 millicuries (3.7 megabecquerels) of strontium-90, 1 millicurie (37 megabecquerels) of cobalt-60, 0.1 millicurie (3.7 megabecquerels) of radium-226, 1 millicurie (37 megabecquerels) of americium-241 or any other transuranic (i.e., element with atomic number greater than uranium (92)), based on the activity indicated on the label. Each address of a location of use, as described under Item (iii) of this subparagraph, represents a separate general licensee and requires a separate registration.

(ii) If in possession of a device meeting the criteria of Item (i) of this subparagraph, the general licensee shall register these devices annually with the department. Registration shall be done by verifying, correcting or adding to the information provided in a request for registration received from the department. The registration information shall be submitted to the department within 30 days of the date of the request for registration or as otherwise indicated in the request. In addition, a general licensee holding devices meeting the criteria of Item (i) of this subparagraph is subject to the bankruptcy notification requirement in Subsection E of 20.3.3.317 NMAC.

(iii) In registering devices, the general licensee shall furnish the following information and any other information specifically requested by the department: ***1)*** name and mailing address of the general licensee; ***2)*** information about each device: the manufacturer (or initial transferor), model number, serial number, the radioisotope and activity (as indicated on the label); ***3)*** name, title and telephone number of the responsible person designated as a representative of the general licensee under Subparagraph (l) of this paragraph; ***4)*** address or location at which the device(s) are used or stored; for portable devices, the address of the primary place of storage; ***5)*** certification by the responsible representative of the general licensee that the information concerning the device(s) has been verified through a physical inventory and checking of label information; and ***6)*** certification by the responsible representative of the general licensee that they are aware of the requirements of the general license.

(iv) Persons generally licensed by the NRC and an agreement state with respect to devices meeting the criteria in Item (i) of this subparagraph are not subject to registration requirements if the devices are used in areas subject to department jurisdiction for a period less than 180 days in any calendar year. The department will not request registration information from such licensees.

(n) The general licensee shall report changes to the mailing address for the location of use (including change in name of general licensee) to the department at the address indicated in 20.3.1.116 NMAC, within 30 days of the effective date of the change. For a portable device, a report of address change is only required for a change in the device's primary place of storage.

(o) The general licensee shall not hold devices that are not in use for longer than 2 years. If devices with shutters are not being used, the shutter shall be locked in the closed position. The testing required by Subparagraph (b) of Paragraph (3) of this subsection need not be performed during the period of storage only. However, when devices are put back into service or transferred to another person, and have not been tested within the required test interval, they shall be tested for leakage before use or transfer and the shutter tested before use. Devices kept in standby for future use are excluded from the two-year time limit if the general licensee performs quarterly physical inventories of these devices while they are in standby.

(4) The general license in Paragraph (1) of this subsection does not authorize the manufacture or import of devices containing radioactive material.

C. Luminous Safety Devices for Aircraft.

(1) A general license is hereby issued to own, receive, acquire, possess and use tritium or promethium-147 contained in luminous safety devices for use in aircraft, provided:

(a) each device contains not more than 10 curies (370 gigabecquerels) of tritium or 300 millicuries (11.1 gigabecquerels) of promethium-147; and

(b) each device has been manufactured, assembled or initially transferred in accordance with a license issued under the provisions in Subsection F of 20.3.3.315 NMAC, or manufactured or assembled in accordance with a specific license issued by the NRC or an agreement state which authorizes manufacture or assembly of the device for distribution to persons generally licensed by the NRC or an agreement state.

(2) Persons who own, receive, acquire, possess or use luminous safety devices pursuant to this general license are exempt from the requirements of 20.3.4 NMAC and 20.3.10 NMAC except that they shall comply with the reporting and notification provisions of 20.3.4.451 NMAC and 20.3.4.452 NMAC.

(3) This general license does not authorize the manufacture, assembly, repair or import of luminous safety devices containing tritium or promethium-147.

(4) This general license does not authorize the export of luminous safety devices containing tritium or promethium-147.

(5) This general license does not authorize the ownership, receipt, acquisition, possession or use of promethium-147 contained in instrument dials.

D. Calibration and Reference Sources.

(1) A general license is hereby issued to those persons listed in this paragraph to own, receive, acquire, possess, use and transfer, in accordance with the provisions of Paragraphs (4) and (5) of this subsection americium-241 in the form of calibration or reference sources.

(a) Any person who holds a specific license issued by the department which authorizes them to receive, possess, use and transfer radioactive material.

(b) Any government agency, as defined in 20.3.1.7 NMAC, which holds a specific license issued pursuant to this chapter which authorizes it to receive, possess, use and transfer radioactive material.

(2) A general license is hereby issued to those persons listed below to receive title to, own, acquire, deliver, receive, possess, use and transfer in accordance with the provisions of Paragraph (4) and (5) plutonium in the form of calibration or reference sources.

(a) Any person who holds a specific license issued by the department which authorizes them to receive, possess, use and transfer radioactive material.

(b) Any government agency, as defined in 20.3.1.7 NMAC, which holds a specific license issued pursuant to 20.3 NMAC which authorizes it to receive, possess, use and transfer radioactive material.

(c) Any person who holds a specific license issued by the NRC or an agreement state which authorizes them to receive, possess, use and transfer special nuclear material.

(3) A general license is hereby issued to receive, possess, use and transfer radium-226 in the form of calibration or reference sources in accordance with Paragraphs (4) and (5) of this subsection to any person who holds a specific license issued by the department which authorizes them to receive, possess, use and transfer radioactive material.

(4) The general licenses in Paragraphs (1), (2) and (3) of this subsection apply only to calibration or reference sources which have been manufactured or initially transferred in accordance with the specifications contained in a specific license issued the department pursuant to Subsection G of 20.3.3.315 NMAC or in accordance with the specifications contained in a specific license issued by the NRC or an agreement state pursuant to equivalent licensing requirements which authorizes the manufacturer of the sources for distribution to persons generally licensed by the NRC or an agreement state.

(5) The general licenses provided in Paragraphs (1), (2) and (3) of this subsection are subject to the provisions of Subsection F of 20.3.3.317 NMAC. In addition, persons who receive, acquire, possess, use or transfer one or more calibration or reference sources pursuant to these general licenses:

(a) shall not possess at any one time, at any one location of storage or use, more than 5 microcuries (185 kilobecquerels) of americium-241, 5 microcuries (185 kilobecquerels) of plutonium and 5 microcuries (185 kilobecquerels) of radium-226 in such sources;

(b) shall not receive, possess, use or transfer such source unless the source, or the storage container, bears a label which includes the following statement or a substantially similar statement which contains the information called for in the following statement:

The receipt, possession, use and transfer of this source, model _____, serial number _____, are subject to a general license and the regulations of the United States nuclear regulatory commission or of a state with which the commission has entered into an agreement for the exercise of regulatory authority. Do not remove this label. Caution - radioactive material - this source contains [describe one of the following radioactive materials americium-241, plutonium or radium-226 as appropriate]. Do not touch radioactive portion of this source.

_____

(name of manufacturer or initial transferor)

(c) shall not transfer, abandon or dispose of such source except by transfer to a person authorized by a license issued by the department, the NRC or an agreement state to receive the source;

(d) shall store such source, except when the source is being used, in a closed container adequately designated and constructed to contain americium-241, plutonium or radium-226 which might otherwise escape during storage; and

(e) shall not use such source for any purpose other than the calibration of radiation detectors or the standardization of other sources.

(6) These general licenses do not authorize the manufacture or import of calibration or reference sources containing americium-241, plutonium or radium-226.

E. General License to Install Devices Generally Licensed in Subsection B of 20.3.3.305 NMAC. Any person who holds a specific license issued by the NRC or an agreement state authorizing the holder to manufacture, install or service a device described in Subsection B of this section within such agreement state issuing the specific license or within a location subject to NRC jurisdiction, is hereby granted a general license to install and service such device in this state; provided, that:

(1) the device has been manufactured, labeled, installed and serviced in accordance with applicable provisions of the specific license issued to such person by the NRC or an agreement state; and

(2) such person assures that any labels required to be affixed to the device under regulations of the NRC or agreement state which licensed manufacture of the device bear a statement that removal of the label is prohibited.

F. General License for Use of Radioactive Material for Certain In-Vitro Clinical or Laboratory Testing.

(1) A general license is hereby issued to any physician, veterinarian in the practice of veterinary medicine, clinical laboratory or hospital to receive, acquire, possess, transfer or use, for any of the following stated

tests, in accordance with the provisions of Paragraphs (2) through (6) of this subsection, the following radioactive materials in prepackaged units, each for use for in-vitro clinical or laboratory tests not involving internal or external administration of radioactive material, or the radiation therefrom, to human beings or animals:

(a) iodine-125, in units not exceeding 10 microcuries (370 kilobecquerels) each;

(b) iodine-131, in units not exceeding 10 microcuries (370 kilobecquerels) each;

(c) carbon-14, in units not exceeding 10 microcuries (370 kilobecquerels) each;

(d) hydrogen-3, in units not exceeding 50 microcuries (1.85 megabecquerels) each;

(e) iron-59, in units not exceeding 20 microcuries (740 kilobecquerels) each;

(f) cobalt-57, in units not exceeding 10 microcuries (370 kilobecquerels) each;

(g) selenium-75, in units not exceeding 10 microcuries (370 kilobecquerels) each; and

(h) mock iodine-125 for use as reference or calibration sources not to exceed 0.05 microcurie (1.85 kilobecquerels) of iodine-129 and 0.005 microcurie (1.85 becquerels) of americium-241 each.

(2) No person shall receive, acquire, possess, use or transfer radioactive material pursuant to the general license established by Paragraph (1) of this subsection unless that person

(a) has filed a form, *registration certificate-in vitro testing with radioactive material under general license*, with the department and received from the department a validated copy of the registration certificate with a registration number assigned. The physician, clinical laboratory or hospital shall furnish on the registration certificate the following information and such other information as may be required by the form:

(i) name and address of the physician, clinical laboratory or hospital;

(ii) the location of use; and

(iii) a statement that the physician, veterinarian, clinical laboratory or hospital has appropriate radiation measuring instruments to carry out in vitro clinical or laboratory tests with radioactive material as authorized under the general license in Paragraph (1) of this subsection and that such tests will be performed only by personnel competent in the use of such instruments and in the handling of the radioactive material; or

(b) has a license that authorizes the medical use of radioactive material that was issued under 20.3.7 NMAC.

(3) A person who receives, acquires, possesses or uses radioactive material pursuant to the general license established by Paragraph (1) of this subsection shall comply with the following:

(a) the general licensee shall not possess at any one time, pursuant to the general license in Paragraph (1) of this subsection at any one location of storage or use, a total amount of iodine-125, iodine-131, iron-59, cobalt-57 or selenium-75 in excess of 200 microcuries (7.4 megabecquerels);

(b) the general licensee shall store the radioactive material, until used, in the original shipping container or in a container providing equivalent radiation protection;

(c) the general licensee shall use the radioactive material only for the uses authorized by Paragraph (1) of this subsection;

(d) the general licensee shall neither transfer the radioactive material except by transfer to a person authorized to receive it pursuant to a license issued by the department, the NRC or an agreement state, nor transfer the radioactive material in any manner other than in the unopened, labeled shipping container as received from the supplier; and

(e) the general licensee shall dispose of mock iodine reference or calibration sources in accordance with 20.3.4.433 NMAC.

(4) The general licensee shall not receive, acquire, possess or use radioactive material pursuant to Paragraph (1) of this subsection:

(a) except as prepackaged units which are labeled in accordance with the provisions of a specific license issued under Subsection H of 20.3.3.315 NMAC, or in accordance with the provisions of a specific license issued by the NRC or an agreement state, or labeled before November 30, 2007 in accordance with the provisions of a specific license issued by a state with comparable provisions to Subsection H of 20.3.3.315 NMAC, which authorizes the manufacture and distribution of iodine-125, iodine-131, carbon-14, hydrogen-3 (tritium), iron-59, cobalt-57, selenium-75, or mock iodine-125 for distribution to persons generally licensed by the NRC, the agreement state or the state with comparable provisions to Subsection H of 20.3.3.315 NMAC; and

(b) unless the following statement, or a substantially similar statement, which contains the information called for in the following statement appears on a label affixed to each prepackaged unit or appears in a leaflet or brochure which accompanies the package:

This radioactive material shall be received, acquired, possessed and used only by physicians, veterinarians in the practice of veterinary medicine, clinical laboratories or hospitals and only for in-vitro clinical or laboratory tests

not involving internal or external administration of the material, or the radiation therefrom, to human beings or animals. Its receipt, acquisition, possession, use and transfer are subject to the regulations and a general license of the U.S. nuclear regulatory commission or of a State with which the commission has entered into an agreement for the exercise of regulatory authority.

_____

(name of manufacturer)

(5) The general licensee possessing or using radioactive material under the general license of Paragraph (1) of this subsection shall report in writing to the department, any changes in the information furnished by them in the *certificate-in-vitro testing with radioactive material under general license* form. The report shall be furnished within 30 days after the effective date of such change.

(6) Any person using radioactive material pursuant to the general license of Paragraph (1) of this subsection is exempt from the requirements of 20.3.4 NMAC and 20.3.10 NMAC with respect to radioactive material covered by that general license except that such person using a mock iodine-125 shall comply with the provisions of 20.3.4.433 NMAC, 20.3.4.451 NMAC and 20.3.4.452 NMAC.

G. General License for Strontium 90 in Ice Detection Devices.

(1) A general license is hereby issued to own, receive, acquire, possess, use and transfer strontium-90 contained in ice detection devices, provided each device contains not more than 50 microcuries (1.85 megabecquerels) of strontium-90 and each device has been manufactured or initially transferred in accordance with a specific license issued by the department, the NRC or an agreement state, which authorizes manufacture of the ice detection devices for distribution to persons generally licensed by the department, NRC or an agreement state.

(2) Persons who own, receive, acquire, possess, use or transfer strontium-90 contained in ice detection devices pursuant to the general license in Paragraph (1) of this subsection:

(a) shall, upon occurrence of visually observable damage, such as a bend or crack or discoloration from overheating, to the device, discontinue use of the device until it has been inspected, tested for leakage and repaired by a person holding a specific license from the department, the NRC or an agreement state to manufacture or service such devices; or shall dispose of the device pursuant to the provisions of 20.3.4.433 NMAC;

(b) shall assure that all labels affixed to the device at the time of receipt, and which bear a statement which prohibits removal of the labels, are maintained thereof; and

(c) are exempt from the requirement of 20.3.4 NMAC and 20.3.10 NMAC except that such persons shall comply with the provisions of 20.3.4.433 NMAC, 20.3.4.451 NMAC and 20.3.4.452 NMAC.

(3) This general license does not authorize the manufacture, assembly, disassembly, repair or import of strontium-90 in ice detection devices.

H. General License for Certain Items and Self-Luminous Products Containing Radium-226.

(1) A general license is hereby issued to any person to acquire, receive, possess, use or transfer, in accordance with the provisions of Paragraphs (2), (3) and (4) of this subsection, radium-226 contained in the following products manufactured prior to November 30, 2007.

(a) Antiquities originally intended for use by the general public. For the purposes of this paragraph, antiquities mean products originally intended for use by the general public and distributed in the late 19th and early 20th centuries, such as radium emanator jars, revigators, radium water jars, radon generators, refrigerator cards, radium bath salts and healing pads.

(b) Intact timepieces containing greater than 0.037 megabecquerel (1 microcurie), non-intact timepieces, and timepiece hands and dials no longer installed in timepieces.

(c) Luminous items installed in air, marine or land vehicles.

(d) All other luminous products, provided that no more than 100 items are used or stored at the same location at any one time.

(e) Small radium sources containing no more than 1 microcurie (0.037 megabecquerel) of radium-226. For the purposes of this paragraph, ‘‘small radium sources’’ means discrete survey instrument check sources, sources contained in radiation measuring instruments, sources used in educational demonstrations (such as cloud chambers and spinthariscopes), electron tubes, lightning rods, ionization sources, static eliminators or as designated by the department or NRC.

(2) Persons who acquire, receive, possess, use or transfer byproduct material under the general license issued in Paragraph (1) of this subsection are exempt from the provisions of 20.3.3.325 NMAC, 20.3.3.326 NMAC, 20.3.4 NMAC and 20.3.10 NMAC to the extent that the receipt, possession, use or transfer of radioactive material is within the terms of the general license; provided, however, that this exemption shall not be deemed to apply to any such person specifically licensed under this chapter.

(3) Any person who acquires, receives, possesses, uses or transfers radioactive material in accordance with the general license in Paragraph (1) of this section shall:

(a) notify the department should there be any indication of possible damage to the product so that it appears it could result in a loss of the radioactive material. A report containing a brief description of the event, and the remedial action taken, must be furnished to the department at the address specified in 20.3.1.116 NMAC within 30 days of the event;

(b) not abandon products containing radium-226; the product, and any radioactive material from the product, may only be disposed of according to 20.3.4.437 NMAC or by transfer to a person authorized by a specific license to receive the radium-226 in the product or as otherwise approved by the department;

(c) not export products containing radium-226 except in accordance with 10 CFR 110;

(d) dispose of products containing radium-226 at a disposal facility authorized to dispose of radioactive material in accordance with any federal or state solid or hazardous waste law, including the Solid Waste Disposal Act, as authorized under the Energy Policy Act, by transfer to a person authorized to receive radium-226 by a specific license issued under this part, or equivalent regulations of the NRC, an agreement state or as otherwise approved by the department or NRC;

(e) respond to written requests from the department to provide information relating to the general license within 30 calendar days of the date of the request, or other time specified in the request. If the general licensee cannot provide the requested information within the allotted time, it shall, within that same time period, request a longer period to supply the information by providing the department a written justification for the request.

(4) The general license in Paragraph (1) of this section does not authorize the manufacture, assembly, disassembly, repair or import of products containing radium-226, except when timepieces may be disassembled and repaired.

I. General License to Own Radioactive Material. A general license is hereby issued to receive title to and own radioactive material without regard to quantity. Notwithstanding any other provision of this chapter, a general licensee under this subsection is not authorized to acquire, deliver, manufacture, produce, transfer, receive, possess, use, import or export radioactive material, except as authorized in a specific license.

[20.3.3.305 NMAC - Rp, 20.3.3.305 NMAC, 04/30/2009]

20.3.3.306 TRANSPORTATION OF RADIOACTIVE MATERIAL:

A. Except as specified in Subsection D of this section, the regulations of the United States NRC set forth in 10 CFR 71 are hereby incorporated by reference.

B. Shipment and transport of radioactive material shall be in accordance with the provisions of Subsection A of this section.

C. The following modifications are made to the incorporated federal regulations in this section.

(a) **"Commission"** means the department or NRC;

(b) **"Act"** means the Radiation Protection Act, Sections 74-3-1 through 74-3-16 NMSA 1978; and

(c) **"Byproduct material"** means radioactive material as defined in 20.3.1.7 NMAC.

D. The following provisions contained in 10 CFR 71 are not incorporated in this section: 71.14(b), 71.19, 71.31, 71.33, 71.35, 71.37, 71.38, 71.39, 71.41, 71.43, 71.45, 71.51, 71.55, 71.59, 71.61, 71.63, 71.64, 71.65, 71.71, 71.73, 71.75, 71.77, 71.101(c)(2), (d), and (e), 71.107, 71.109, 71.111, 71.113, 71.115, 71.117, 71.119, 71.121, 71.123, and 71.125.

[20.3.3.306 NMAC - Rp, 20.3.3.306 NMAC & 20.3.3.325 NMAC, 04/30/2009]

20.3.3.307 FILING APPLICATION FOR SPECIFIC LICENSES:

A. Except where otherwise determined by the department, applications for specific licenses shall be filed in duplicate on a form prescribed by the department (*application for a radioactive material license*) in accordance with the instructions to the form. Additional copies of the application may be required by the department. Information contained in previous application, statements or reports filed with the department may be incorporated by reference, provided that the reference is clear and specific.

B. The department may at any time after the filing of the original application, and before the expiration of the license, require further statements in order to enable the department to determine whether the application shall be granted or denied or whether a license shall be modified or revoked.

C. Each application shall be signed by the applicant or licensee or a person duly authorized to act for and on their behalf.

D. An application for a license may include a request for a license authorizing more than one activity, provided that the application specifies the additional activities for which licenses are requested and complies with the requirements in this chapter as to applications for such licenses. In such cases, annual fees for all types of activities authorized by the license may be charged as determined by 20.3.16 NMAC.

E. An application for a specific license to use radioactive material in the form of a sealed source or in a device that contains the sealed source must identify the source and (or) the device by manufacturer name and model number as registered with the *sealed source and device registry*.

F. As provided by 20.3.3.311 NMAC, certain applications for a new or renewal specific license must contain a proposed decommissioning funding plan or a certification of financial assurance for decommissioning.

G. An application for a license to receive and possess radioactive material for the conduct of any activity which the department has determined pursuant to Subpart A of 10 CFR 51 will significantly affect the quality of the environment shall be filed at least 9 months prior to commencement of construction of the plant or facility in which the activity will be conducted and shall be accompanied by an environmental impact report required pursuant to Subpart A of 10 CFR 51.

H. None of the following applications shall be accepted for review unless it is accompanied by an environmental impact report, submitted by the applicant, that specifically addresses the short-term and long-term environmental, radiological and public health and safety aspects of the applications and alternatives to the proposed action:

(1) an initial application for a radioactive material license for a commercial radioactive waste disposal site license;

(2) the first renewal of any such license not previously accompanied by an environmental impact report;

(3) an application for an amendment to an existing license that may result in additional significant impacts from radiation on the environment or public health or safety beyond those impacts addressed in the existing license and accompanying documents; and

(4) any other application that the secretary determines may have significant impacts from radiation on the environment or public health or safety.

I. The application for a radioactive material license for a commercial radioactive waste disposal site, or for any renewal thereof, or for an amendment thereto as described in Paragraph (3) of Subsection H of this section, shall demonstrate that the activity for which such license is requested will comply with all laws and regulations enforceable by the department.

J. An application from a medical facility or educational institution to produce PET radioactive drugs for noncommercial transfer to licensees in its consortium authorized for medical use under 20.3.7 NMAC shall include:

(1) a request for authorization for the production of PET radionuclides or evidence of an existing license issued under 20.3.3 NMAC or under equivalent NRC or agreement state requirements for a PET radionuclide production facility within its consortium from which it receives PET radionuclides;

(2) evidence that the applicant is qualified to produce radioactive drugs for medical use by meeting one of the criteria in Subparagraph (b) of Paragraph (1) of Subsection J of 20.3.3.315 NMAC;

(3) identification of individual(s) authorized to prepare the PET radioactive drugs if the applicant is a pharmacy, and documentation that each individual meets the requirements of an authorized nuclear pharmacist as specified in Subparagraph (b) of Paragraph (2) of Subsection J of 20.3.3.315 NMAC; and

(4) information identified in Subparagraph (c) of Paragraph (1) of Subsection J of 20.3.3.315 NMAC on the PET drugs to be non-commercially transferred to members of its consortium.

[20.3.3.307 NMAC - Rp, 20.3.3.307 NMAC, 04/30/2009]

20.3.3.308 GENERAL REQUIREMENTS FOR THE ISSUANCE OF SPECIFIC LICENSES:

A. An application for a specific license shall be approved if all of the following requirements are met.

(1) The application is for a purpose authorized by the act.

(2) The applicant is qualified by training and experience to use the material for the purpose requested in accordance with the provisions in this chapter and in such a manner as to minimize the danger to public health and safety or property.

(3) The applicant's proposed equipment, facilities and procedures are adequate to minimize danger to public health and safety or property.

(4) The applicant satisfies the requirements in this section, and any special requirements in

20.3.3.309 NMAC, 20.3.3.313 NMAC, 20.3.3.314 NMAC or 20.3.3.315 NMAC.

B. Upon a determination that an application meets the requirements of the act and the 20.3 NMAC, the department will issue a specific license authorizing the possession and use of radioactive material.

C. The secretary may deny an application if an applicant:

(1) fails to demonstrate that the requirements of the act and 20.3 NMAC have been addressed;

(2) fails to meet the requirements for completeness and accuracy of information in 20.3.1.123 NMAC;

(3) has demonstrated deliberate misconduct as described in 20.3.1.122 NMAC; and

(4) fails to respond to a request for additional information within 30 days from the date of the request, or within such other time as may be specified in the request for information.

[20.3.3.308 NMAC - Rp, 20.3.3.308 NMAC, 04/30/2009]

20.3.3.309 REQUIREMENTS FOR EMERGENCY RESPONSE PLANS FOR CERTAIN LICENSEES:

A. Each application to possess radioactive materials in unsealed forms, on foils or plated sources, or sealed in glass in excess of the quantities in 20.3.3.333 NMAC (Schedule E - Quantities of Radioactive Materials Requiring Consideration of the Need for an Emergency Plan for Responding to a Release), must contain either:

(1) an evaluation showing that the maximum dose to a person offsite due to a release of radioactive materials would not exceed 1 rem effective dose equivalent or 5 rems (50 millisieverts) to the thyroid; or

(2) an emergency plan for responding to a release of radioactive material.

B. One or more of the following factors may be used to support an evaluation submitted under Paragraph (1) of Subsection A of this section:

(1) the radioactive material is physically separated so that only a portion could be involved in an accident;

(2) all or part of the radioactive material is not subject to release during an accident because of the way it is stored or packaged;

(3) the release fraction in the respirable size range would be lower than the release fraction shown in 20.3.3.333 NMAC of this part due to the chemical or physical form of the material;

(4) the solubility of the radioactive material would reduce the dose received;

(5) facility design or engineered safety features in the facility would cause the release fraction to be lower than shown in 20.3.3.333 NMAC;

(6) other factors appropriate for the specific facility; or

(7) operating restrictions or procedures would prevent a release fraction as large as that shown in 20.3.3.333 NMAC.

C. An emergency plan for responding to a release of radioactive material submitted under Paragraph (2) of Subsection A of this section must include the following information.

(1) **Facility description:** a brief description of the licensee's facility and area near the site.

(2) **Types of accidents:** an identification of each type of radioactive materials accident for which protective actions may be needed.

(3) **Classification of accidents:** a system for classifying each accident as “alert” or “site area emergencies”.

(4) **Detection of accidents:** identification of the means of detecting each type of accident in a timely manner.

(5) **Mitigation of consequences:** a brief description of the means and equipment for mitigating the consequences of each type of accident, including those provided to protect workers onsite, and a description of the program for maintaining the equipment.

(6) **Assessment of releases:** a brief description of the methods and equipment to assess releases of radioactive materials.

(7) **Responsibilities:** a brief description of the responsibilities of licensee personnel should an accident occur, including identification of personnel responsible for promptly notifying offsite response organizations and the secretary; also responsibilities for developing, maintaining, and updating the plan.

(8) **Notification and coordination:** a commitment to and a brief description of the means to promptly notify offsite response organizations and request offsite assistance, including medical assistance for the treatment of contaminated injured onsite workers when appropriate. A control point must be established. The

notification and coordination must be planned so that unavailability of some personnel, parts of the facility, and some equipment will not prevent the notification and coordination. The licensee shall also commit to notify the secretary immediately and ensure notification of other appropriate offsite response organizations "and not later than one hour after the licensee declares an emergency".

(9) Information to be communicated: a brief description of the types of information regarding facility status, radioactive releases and, if necessary, recommended protective actions.

(10) Training: a brief description of the frequency, performance objectives and plans for the training that the licensee will provide workers on how to respond to an emergency including any special instructions and orientation tours the licensee would offer to fire, police, medical and other emergency personnel. The training shall familiarize personnel with site-specific emergency procedures. Also, the training shall thoroughly prepare site personnel for their responsibilities in the event of accident scenarios postulated as most probable for the specific site, including the use of team training for such scenarios.

(11) Safe shutdown: a brief description of the means of restoring the facility to a safe condition after an accident.

(12) Exercises: provisions for conducting quarterly communications checks with offsite response organizations and biennial onsite exercises to test response to simulated emergencies. Quarterly communications checks with offsite response organizations must include the check and update of all necessary telephone numbers. The licensee shall invite offsite response organizations to participate in the biennial exercises. Participation of offsite response organizations in biennial exercises, although recommended, is not required. Exercises must use accident scenarios postulated as most probable for the specific site and the scenarios shall not be known to most exercise participants. The licensee shall critique each exercise using individuals not having direct implementation responsibility for the plan. Critiques of exercises must evaluate the appropriateness of the plan, emergency procedures, facilities, equipment and training of personnel and overall effectiveness of the response. Deficiencies found by the critiques must be corrected.

(13) Hazardous chemicals: a certification that the applicant has met its responsibilities under the Emergency Planning and Community Right-to-Know Act (title III, pub. l. 99-499), if applicable to the applicant's activities at the proposed place of use of the radioactive material.

D. The licensee shall allow the offsite response organizations expected to respond in case of an accident 60 days to comment on the licensee's emergency plan before submitting it in final form to the department. The licensee shall provide any comments received within the 60 days to the department with the emergency plan.
[20.3.3.309 NMAC - Rp, 20.3.3.309 NMAC, 04/30/2009]

20.3.3.310 PUBLIC NOTICE, PARTICIPATION AND HEARING:

A. Within 60 days following:

(1) initial receipt of a new license application, or each additional submission of information by the applicant, the secretary will either accept the application for a new license for a review and give notice pursuant to Subsection B of this section, or notify the applicant in writing of any deficiencies in the application that must be corrected in order for the application to be accepted for review;

(2) a license amendment or license renewal application requesting a change of the location where radioactive material will be stored or used, the secretary will issue notices pursuant to Subsection B of this section;

(3) a license amendment or license renewal application requesting a change of principal activity, the secretary will issue notices pursuant to Subsection B of this section.

B. Notices. The secretary shall give a notice of acceptance of a new application, license amendment or renewal license application described in of Subsection A of this section:

(1) to the applicant, by certified mail; and

(2) to the public, by the publication of a notice in at least one newspaper of general circulation in the area of the proposed activity in the license application, and in other newspapers as deemed appropriate by the secretary;

(3) the secretary shall make a good faith effort to notify of acceptance of a new application, license amendment or renewal license application described in of Subsection A of this section by first-class mail:

(a) any local, state, Indian tribal government or federal government agency that the secretary determines may be significantly affected or interested; and

(b) any other person who, prior to such notice, has requested in writing such notices.

C. The notice specified in Paragraph (2) of Subsection B of this section shall include:

(1) the name and address of the applicant;

(2) the location of the proposed activity;

(3) a brief description of the procedures to be followed by the secretary in making a final determination;

(4) a brief description of the proposed activity;

(5) the time within which written comments and requests for public hearings will be accepted; and

(6) the means by which interested persons may obtain further information;

(7) the following sample notice satisfies the requirements of this section:

PUBLIC NOTICE

The New Mexico Environment Department (the Department) has received an application for a Radioactive Material License from_____(company name and address) for _____(proposed activity) to be located at _____(location).

During the early part of the evaluation period, the Department will review and comment upon the application. The NMED may, at its discretion, retain consultants to assist it in its evaluation of the application. Relevant comments and questions received by the NMED from various agencies and interested parties will be forwarded to the applicant for its response. Correspondence associated with the application will be on file with the Radiation Control Bureau and will be available for inspection by the applicant and any other interested parties.

The Department has required the applicant to provide complete plans and other materials addressing, among other things, the public health, safety and environmental aspects of the proposed activity.

The Department will analyze the license application carefully. During this analysis, the application will be reviewed to ensure that there are no deficiencies, that the application meets all applicable requirements and that there is no reason to believe that the operation will violate any laws or regulations. If the Department is so satisfied, it will issue a Radioactive Material License, to expire in five years.

The activities of all licensees are inspected periodically to assure compliance with regulations and license conditions.

The application is available for review at NMED's offices of the Radiation Control Bureau in Santa Fe, New Mexico.

It is anticipated that the review period will require about _____ months. Written comments and requests for public hearing will be accepted for _____ days after publication of this notice.

Written comments regarding this license application should be directed to Radiation Control Bureau, Environment Department, P.O. Box 26110, Santa Fe, New Mexico 87502-6110.

D. The department shall maintain all licensees' administrative record, which shall be available for public inspection at the department office in Santa Fe.

E. Public Comment Period.

(1) Following the notice pursuant to Subsections B and C of this section and prior to ruling on any new application, or amendment request or renewal license application of the type described in Subsection A of this section, the secretary shall allow for a period of at least 30 days during which written comments or questions about the license application may be submitted by any interested person. If the secretary determines that the questions are relevant to the requirements in 20.3.3.307 NMAC, 20.3.3.308 NMAC and any specific requirements for the type of license requested, the secretary shall require the applicant to answer them.

(2) Following the notice of acceptance of the license application pursuant to Subsections A through C of this section and prior to ruling on any application required to be accompanied by an environmental report pursuant to Subsection H of 20.3.3.307 NMAC, the secretary shall allow a period of at least 60 days during which written comments or questions may be submitted by any interested person.. If the secretary determines that the questions are relevant to the considerations enumerated in Subsection H of 20.3.3.307 NMAC or 20.3.3.308 NMAC, the secretary shall require the applicant to answer them.

The secretary may allow an additional written comment period upon submission of additional information to the license application, amendment request or renewal license application described by Subsection A of this section by the applicant, or upon request by members of the public. A written request for a hearing may be made by the members of the public within the time period specified in the public notice described in Subsection C of this section.

F. If the secretary determines that there is significant public interest, or that there is a need to resolve issues not resolvable in writing, the secretary shall order a public hearing be held to provide guidance on any issue relevant to the license proceeding. Notice of the public hearing shall be given at least 30 days prior to the hearing to the persons and in the manner specified in Subsection C of 20.1.4.200 NMAC. Any such public hearing shall be conducted pursuant to the hearing procedures in 20.1.4 NMAC.

[20.3.3.310 NMAC - Rp, 20.3.3.310 NMAC, 04/30/2009]

20.3.3.311 FINANCIAL ASSURANCE AND RECORD KEEPING FOR DECOMMISSIONING:

A. Decommissioning Funding Plan Required.

(1) Each applicant for a specific license authorizing the possession and use of unsealed radioactive material (except source material which is subject to Paragraph (3) of this subsection) of half-life greater than 120 days in quantities exceeding 100,000 (1E+5) times the applicable quantities set forth in 20.3.3.338 NMAC, shall submit a decommissioning funding plan as described in Subsection E of this section. The decommissioning funding plan must also be submitted when a combination of radioisotopes is involved if R divided by 100,000 (1E+5) is greater than 1 (unity rule), where R is defined here as the sum of the ratios of the quantity of each radioisotope to the applicable value in 20.3.3.338 NMAC.

(2) Each applicant for a specific license authorizing the possession and use of sealed sources or plated foils of half-life greater than 120 days and in quantities exceeding 10^{12} (1E+12) times the applicable quantities set forth in 20.3.3.338 NMAC (or when a combination of radioisotopes is involved if R, as defined in Paragraph (1) of this subsection, divided by 10^{12} is greater than 1), shall submit a decommissioning funding plan as described in Subsection E of this section.

(3) Each applicant for a specific license authorizing the possession and use of more than 100 (1E+2) millicuries of source material in a readily dispersible form shall submit a decommissioning funding plan as described in Subsection E of this section.

B. Each applicant for a specific license authorizing possession and use of radioactive material of half-life greater than 120 days and in quantities specified in Subsection D of this section shall either:

(1) submit a decommissioning funding plan as described in Subsection E of this section; or

(2) submit a certification that financial assurance for decommissioning has been provided in the amount prescribed by Subsection D of this section using one of the methods described in Subsection F of this section; for an applicant, this certification may state that the appropriate assurance will be obtained after the application has been approved and the license issued but prior to the receipt of licensed material; if the applicant defers execution of the financial instrument until after the license has been issued, a signed original of the financial instrument obtained to satisfy the requirements of Subsection F of this section must be submitted to the department before receipt of licensed material; if the applicant does not defer execution of the financial instrument, the applicant shall submit to the department, as part of the certification, a signed original of the financial instrument obtained to satisfy the requirements of Subsection F of this section.

C. Financial Assurance for Holders of Specific License. Each holder of a specific license issued before the effective date of these regulations which is of a type described in Subsection A or B of this section shall provide financial assurance for decommissioning in accordance with the criteria set forth in this section.

(1) Each holder of a specific license issued before the effective date of these regulations, and of a type described in Subsection A of this section shall submit a decommissioning funding plan as described in Subsection E of this section.

(2) Each holder of a specific license issued before the effective date of these regulations, and of a type described in Subsection B of this section shall submit a decommissioning funding plan as described in Subsection E of this section, or a certification of financial assurance for decommissioning in accordance with the criteria set forth in Subsection D of this section.

(3) Any licensee who has submitted an application before the effective date of these regulations for renewal of license in accordance with 20.3.3.319 NMAC shall provide financial assurance for decommissioning in accordance with Subsections A and B of this section.

(4) Waste collectors and waste processors, as defined in 20.3.4.466 NMAC, must provide financial assurance in an amount based on a decommissioning funding plan as described in Subsection E of this section. The decommissioning funding plan must include the cost of disposal of the maximum amount (in curies) of radioactive material permitted by license, and the cost of disposal of the maximum quantity, by volume, of radioactive material which could be present at the licensee's facility at any time, in addition to the cost to remediate the licensee's site to meet the license termination criteria of 20.3.4.426 NMAC.

D. Required Amounts of Financial Assurance for Decommissioning by Quantity of Material. Licensees exceeding the upper bounds of this subsection must base financial assurance on a decommissioning funding plan as described in Subsection E of this section.

(1) Greater than 10,000 (1E+4) but less than or equal to 100,000 (1E+5) times the applicable quantities of 20.3.3.338 NMAC, in unsealed form. (For a combination of radioisotopes, if R as defined in

Subsection A of this section, divided by 10,000 (1E+4) is greater than 1 but R divided by 100,000 (1E+5) is less than or equal to 1): at least equal to $1,125,000.

(2) Greater than 1,000 (1E+3) but less than or equal to 10,000 (1E+4) times the applicable quantities of 20.3.3.338 NMAC, in unsealed form. (For a combination of radioisotopes, if R, as defined in Subsection A of this section, divided by 1,000 (1E+3) is greater than 1 but R divided by 10,000 (1E+4) is less than or equal to 1): at least equal to $225,000.

(3) Greater than 10^{10} (1E+10) but less than or equal to 10^{12} (1E+12) times the applicable quantities of 20.3.3.338 NMAC, in sealed sources or plated foils. (For a combination of radioisotopes, if R, as defined in Subsection A of this section, divided by 10^{10} is greater than 1, but R divided by 10^{12} is less than or equal to 1): at least equal to $113,000.

(4) For source material, greater than 10 millicuries but less than or equal to 100 millicuries: at least equal to $225,000.

E. Decommissioning Funding Plan. Each decommissioning funding plan must contain a cost estimate for decommissioning and a description of the method of assuring funds for decommissioning from Subsection F of 20.3.3.311 NMAC including means for adjusting cost estimates and associated funding levels periodically over the life of the facility. Cost estimates must be adjusted at intervals not to exceed 3 years. The decommissioning funding plan must also contain a certification by the licensee that financial assurance for decommissioning has been provided in the amount of the cost estimate for decommissioning and a signed original of the financial instrument obtained to satisfy the requirement of Subsection F of this section.

F. Methods of Financial Assurance. Financial assurance for decommissioning must be provided by one or more of the following methods.

(1) Prepayment. Prepayment is the deposit prior to the start of operation into an account segregated from licensee assets and outside the licensee's administrative control of cash or liquid assets such that the amount of funds would be sufficient to pay decommissioning costs. Prepayment may be in the form of a trust, escrow account, government fund, certificate of deposit or deposit of government securities.

(2) A surety method, insurance or other guarantee method. These methods guarantee that decommissioning costs will be paid. A surety method may be in the form of a surety bond, letter of credit or line of credit. A parent company guarantee of funds for decommissioning costs based on a financial test may be used if the guarantee and test are as contained in 20.3.3.334 NMAC. A parent company guarantee may not be used in combination with other financial methods to satisfy the requirements of this section. For commercial corporations that issue bonds, a guarantee of funds by the applicant or licensee for decommissioning costs based on a financial test may be used if the guarantee and test are as contained in 20.3.3.335 NMAC. For commercial companies that do not issue bonds, a guarantee of funds by the applicant or licensee for decommissioning costs may be used if the guarantee and test are as contained in 20.3.3.336 NMAC. For nonprofit entities, such as colleges, universities and nonprofit hospitals, a guarantee of funds by the applicant or licensee may be used if the guarantee and test are as contained in 20.3.3.337 NMAC. A guarantee by the applicant or licensee may not be used in combination with any other financial methods to satisfy the requirements of this section or in any situation where the applicant or licensee has a parent company holding majority control of the voting stock of the company. Any surety method or insurance used to provide financial assurance for decommissioning must contain the following conditions.

(a) The surety method or insurance must be open-ended or, if written for a specified term, such as five years, must be renewed automatically unless 90 days or more prior to the renewal date, the issuer notifies the department, the beneficiary, and the licensee of its intention not to renew. The surety method or insurance must also provide that the full face amount be paid to the beneficiary automatically prior to the expiration without proof of forfeiture if the licensee fails to provide a replacement acceptable to the department within 30 days after receipt of notification of cancellation.

(b) The surety method or insurance must be payable to a trust established for decommissioning costs. The trustee and trust must be acceptable to the department. An acceptable trustee includes an appropriate state or federal government agency or an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

(c) The surety method or insurance must remain in effect until the department has terminated the license.

(3) An external sinking fund in which deposits are made at least annually, coupled with a surety method or insurance, the value of which may decrease by the amount being accumulated in the sinking fund. An external sinking fund is a fund established and maintained by setting aside funds periodically in an account segregated from licensee assets and outside the licensee's administrative control in which the total

amount of funds would be sufficient to pay decommissioning costs at the time termination of operation is expected. An external sinking fund may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities. The surety or insurance provisions must be as stated in Paragraph (2) of this subsection.

(4) In the case of federal, state or local government licensees, a statement of intent containing a cost estimate for decommissioning or an amount based on Subsection D of this section, and indicating that funds for decommissioning will be obtained when necessary.

(5) When a governmental entity is assuming custody and ownership of a site, an arrangement that is deemed acceptable by such governmental entity.

G. Record Keeping Requirements. Each person licensed under this part or Parts 5, 7, 12, 13 and 15 of this chapter shall keep records of information important to the decommissioning of the facility in an identified location until the site is released for unrestricted use. Before licensed activities are transferred or assigned in accordance with 20.3.3.317 NMAC, licensees shall transfer all records described in this paragraph to the new licensee. In this case, the new licensee will be responsible for maintaining these records until the license is terminated. If records important to the decommissioning of a facility are kept for other purposes, reference to these records and their locations may be used. Information the department considers important to decommissioning consists of:

(1) records of spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment or site; these records may be limited to instances when contamination remains after any cleanup procedures or when there is reasonable likelihood that contaminants may have spread to inaccessible areas as in the case of possible seepage into porous materials such as concrete; these records must include any known information on identification of involved nuclides, quantities, forms and concentrations;

(2) as-built drawings and modifications of structures and equipment in restricted areas where radioactive materials are used or stored, and of locations of possible inaccessible contamination such as buried pipes which may be subject to contamination; if required drawings are referenced, each relevant document need not be indexed individually; if drawings are not available, the licensee shall substitute appropriate records of available information concerning these areas and locations;

(3) except for areas containing only sealed sources (provided the sources have not leaked or no contamination remains after any leak) or radioactive materials having only half-lives of less than 65 days, a list contained in a single document and updated every two years, of the following:

(a) all areas designated and formerly designated restricted areas as defined in 20.3.4.7 NMAC;

(b) all areas outside of restricted areas that require documentation under Paragraph (1) of this subsection;

(c) all areas outside of restricted areas where current and previous wastes have been buried as documented under 20.3.4.448 NMAC; and

(d) all areas outside of restricted areas that contain material such that, if the license expired, the licensee would be required to either decontaminate the area to meet the criteria for decommissioning in 20.3.4.426 NMAC, or apply for approval for disposal under 20.3.4.434 NMAC; and

(4) records of the cost estimate performed for the decommissioning funding plan or of the amount certified for decommissioning, and records of the funding method used for assuring funds if either a funding plan or certification is used.

[20.3.3.311 NMAC - Rp, 20.3.3.311 NMAC, 04/30/2009]

20.3.3.312 [RESERVED]

20.3.3.313 SPECIAL REQUIREMENTS FOR ISSUANCE OF CERTAIN SPECIFIC LICENSES FOR RADIOACTIVE MATERIAL:

A. Industrial Radiographic Operations. In addition to the requirements set forth in 20.3.3.308 NMAC, a specific license for use of sealed sources in industrial radiography will be issued if the applicant or licensee meets the specific requirements in 20.3.5 NMAC.

B. Medical Use of Radioactive Materials. In addition to the requirements set forth in 20.3.3.308 NMAC, a specific license for use of sealed sources and unsealed radioactive materials for medical use will be issued if the applicant or licensee meets the specific requirements in 20.3.7 NMAC.

C. Well Logging Operations and Subsurface Tracer Studies. In addition to the requirements set forth in 20.3.3.308 NMAC, a specific license for use of sealed sources in wireline service operations, including

mineral-logging, radioactive markers or subsurface tracer studies will be issued if the applicant or licensee meets the specific requirements in 20.3.12 NMAC.

D. Land Disposal of Radioactive Waste. In addition to the requirements set forth in 20.3.3.308 NMAC, a specific license for any method of land disposal of low-level radioactive waste will be issued if the applicant or licensee meets the specific requirements in 20.3.13 NMAC.

E. Naturally Occurring Radioactive Materials in the Oil and Gas Industry. In addition to the requirements set forth in 20.3.3.308 NMAC, a specific license for use of naturally occurring radioactive materials (NORM) in the gas and oil industry will be issued if the applicant or licensee meets the specific requirements in 20.3.14 NMAC.

F. Irradiators. In addition to the requirements set forth in 20.3.3.308 NMAC, a specific license for use of sealed sources in irradiators will be issued if the applicant or licensee meets the specific requirements in 20.3.15 NMAC.

[20.3.3.313 NMAC - Rp, 20.3.3.313 NMAC, 04/30/2009]

20.3.3.314 SPECIAL REQUIREMENTS FOR SPECIFIC LICENSES OF BROAD SCOPE: This section prescribes requirements for the issuance of specific licenses of broad scope for radioactive material ("broad licenses") and certain regulations governing holders of such licenses.

A. Types of Specific Licenses of Broad Scope.

(1) A **"***type A specific license of broad scope***"** is a specific license authorizing receipt, acquisition, ownership, possession, use and transfer of any chemical or physical form of the radioactive material specified in the license, but not exceeding quantities specified in the license, for purposes authorized by the act. The quantities specified are usually in the multicurie range.

(2) A *"type B specific license of broad scope"* is a specific license authorizing receipt, acquisition, ownership, possession, use and transfer of any chemical or physical form of radioactive material specified in 20.3.3.332 NMAC, for purposes authorized by the act. The possession limit for a type B broad license, if only one radionuclide is possessed thereunder, is the quantity specified for that radionuclide in Column I of 20.3.3.332 NMAC. If two or more radionuclides are possessed thereunder, the possession limit for each is determined as follows: for each radionuclide determine the ratio of the quantity possessed to the applicable quantity specified in Column I of 20.3.3.332 NMAC, for that radionuclide. The sum of the ratios for all radionuclides possessed under the license shall not exceed unity.

(3) A *"type C specific license of broad scope"* is a specific license authorizing receipt, acquisition, ownership, possession, use and transfer of any chemical or physical form of radioactive material specified in 20.3.3.332 NMAC, for any purposes authorized by the act. The possession limit for a type C broad license, if only one radionuclide is possessed thereunder, is the quantity specified for that radionuclide in Column II of 20.3.3.332 NMAC. If two or more radionuclides are possessed thereunder, the possession limit is determined for each as follows: *1)* for each radionuclide determine the ratio of the quantity possessed to the applicable quantity specified in Column II of 20.3.3.332 NMAC, for the radionuclide; *2)* the sum of the ratios for all radionuclides possessed under the license shall not exceed unity.

B. Requirements for the Issuance of a Type a Specific License of Broad Scope. An application for a type A specific license of broad scope will be approved if the following requirements are met.

(1) The applicant satisfies the general requirements specified in 20.3.3.308 NMAC.

(2) The applicant has engaged in a reasonable number of activities involving the use of radioactive materials.

(3) The applicant has established administrative controls and provisions relating to organization and management, procedures, record keeping, material control, material accounting and management review that are necessary to assure safe operations, including:

(a) the establishment of a radiation safety committee composed of such persons as a radiation safety officer, a representative of management, and persons trained and experienced in the safe use of radioactive material;

(b) the appointment of a radiation safety officer who is qualified by training and experience in radiation protection and who is available for advice and assistance on radiation safety matters; and

(c) the establishment of appropriate administrative procedures to assure:

(i) control of procurement and use of radioactive material;

(ii) completion of safety evaluations of proposed uses of radioactive material which take into consideration such matters as the adequacy of facilities and equipment, training and experience of the user and

the operating or handling procedures; and

(iii) review, approval and recording by the radiation safety committee of safety evaluation of proposed uses prepared in accordance with Item (ii) of this subparagraph prior to use of the radioactive material.

C. Requirements for the Issuance of a Type B Specific License of Broad Scope. An application for a type B specific license of broad scope will be approved if the following requirements are met.

(1) The applicant satisfies the general requirements specified in 20.3.3.308 NMAC.

(2) The applicant has established administrative controls and provisions relating to organization and management, procedures, record keeping, material control, material accounting and management review that are necessary to assure safe operations, including:

(a) the appointment of a radiation safety officer who is qualified by training and experience in radiation protection and who is available for advice and assistance on radiation safety matters; and

(b) the establishment of appropriate administrative procedures to assure:

(i) control of procurement and use of radioactive material;

(ii) completion of safety evaluations of proposed uses of radioactive materials which take into consideration such matters as the adequacy of facilities and equipment, training and experience of the user, and the operating or handling procedures; and

(iii) review, approval and recording by the radiation safety officer of safety evaluations of proposed uses prepared in accordance with Item (ii) of this subparagraph.

D. Requirements for the Issuance of a Type C Specific License of Broad Scope. An application for a type C specific license of broad scope will be approved if the following requirements are met.

(1) The applicant satisfies the general requirements specified in 20.3.3.308 NMAC.

(2) The applicant submits a statement that radioactive material will be used only by, or under the direct supervision of, individuals who have received:

(a) a college degree at the bachelor level, or equivalent training and experience, in the physical or biological sciences or in engineering; and

(b) at least 40 hours of training and experience in the safe handling of radioactive materials, and in the characteristics of ionizing radiation, units of radiation dose and quantities, radiation detection instrumentation and biological hazards of exposure to radiation appropriate to the type and forms of radioactive material to be used.

(3) The applicant has established administrative controls and provisions relating to procurement of radioactive material, procedures, record keeping, material control, material accounting and management review necessary to assure safe operations.

E. Conditions of Specific Licenses of Broad Scope.

(1) Unless specifically authorized pursuant to other parts of this chapter, persons licensed under this section shall not:

(a) conduct tracer studies in the environment involving direct release of radioactive material;

(b) receive, acquire, own, possess, use, transfer or import devices containing 100,000 curies or more of radioactive material in sealed sources used for irradiation of material;

(c) conduct activities for which a specific license issued by the department under 20.3.5 NMAC, 20.3.7 NMAC or 20.3.3.315 NMAC is required; or

(d) add or cause the addition of radioactive material to any food, beverage, cosmetic, drug or other product designed for ingestion or inhalation by, or application to, a human being.

(2) Each type A specific license of broad scope issued under this section shall be subject to the condition that radioactive material possessed under the license shall only be used by, or under the direct supervision of, individuals approved by the licensee's radiation safety committee.

(3) Each type B specific license of broad scope issued under this section shall be subject to the condition that radioactive material possessed under the license shall only be used by, or under the direct supervision of, individuals approved by the licensee's radiation safety officer.

(4) Each type C specific license of broad scope issued under this section shall be subject to the condition that radioactive material possessed under the license shall only be used by, or under the direct supervision of, individuals who satisfy the requirements of Paragraph (2) of Subsection D of this section.

[20.3.3.314 NMAC - Rp, 20.3.3.314 NMAC, 04/30/2009]

20.3.3.315 SPECIAL REQUIREMENTS FOR A SPECIFIC LICENSE TO MANUFACTURE,

ASSEMBLE, REPAIR OR DISTRIBUTE COMMODITIES, PRODUCTS OR DEVICES WHICH CONTAIN RADIOACTIVE MATERIAL:

A. Introduction of Radioactive Material in Exempt Concentrations into Products or Materials.

(1) Licensing. A specific license authorizing the introduction of radioactive material into a product or material owned by or in the possession of the licensee or another and the transfer of ownership or possession of the product or material containing the radioactive material to be transferred to persons exempt under Paragraph (1) of Subsection A of 20.3.3.302 NMAC will be issued by NRC pursuant to 10 CFR 32.11.

(2) Prohibition of introduction. No person may introduce radioactive material into a product or material knowing or having reason to believe that it will be transferred to persons exempt under Subsection A of 20.3.3.302 NMAC or equivalent regulations of the NRC or an agreement state, except in accordance with a license issued by NRC pursuant to 10 CFR 32.11.

B. Radioactive Material in Exempt Quantities or in Certain Items.

(1) Manufacture, distribution and transfer of exempt quantities of byproduct material. An application for a specific license to manufacture, process, produce, package, repackage or transfer exempt quantities of byproduct material for commercial distribution to persons exempt pursuant to Subsection B of 20.3.3.302 NMAC or the equivalent regulations of the NRC or an agreement state shall be issued by NRC pursuant to 10 CFR 32.18.

(2) Certain items containing byproduct material. An application for a specific license to apply byproduct material to, or to incorporate byproduct material into, the products specified in Paragraph (1) of Subsection C of 20.3.3.302 NMAC or to initially transfer for sale or distribution such products containing byproduct material for use pursuant to Paragraph (1) of Subsection C of 20.3.3.302 NMAC to persons exempt from 20.3 NMAC shall be submitted to NRC pursuant to 10 CFR 32.14.

(3) Except as specified in Paragraphs (1) and (2) of this subsection, in addition to the requirements set forth in 20.3.3.308 NMAC, an application for a specific license to manufacture, process, produce, package, repackage or initially transfer naturally occurring or accelerator produced radioactive material (NARM) in exempt quantities as specified in 20.3.3.330 NMAC of this part to persons exempt from licensing pursuant to Subsection B of 20.3.3.302 NMAC will be approved if:

(a) the radioactive material is not contained in any food, beverage, cosmetic, drug or other commodity designed for ingestion or inhalation by, or application to, a human being;

(b) the radioactive material is in the form of processed chemical elements, compounds, mixtures, tissue samples, bioassay samples, counting standards, plated or encapsulated sources, or similar substances, identified as radioactive and to be used for its radioactive properties, but is not incorporated into any manufactured or assembled commodity, product or device intended for commercial distribution; and

(c) the applicant submits copies of prototype labels and brochures and the department approves such labels and brochures.

(4) The license issued under Paragraph (3) of Subsection B of this subsection is subject to the following conditions:

(a) no more than 10 exempt quantities shall be sold or transferred in any single transaction; however, an exempt quantity may be composed of fractional parts of one or more of the exempt quantity provided the sum of the fractions shall not exceed unity;

(b) each exempt quantity shall be separately and individually packaged; no more than 10 such packaged exempt quantities shall be contained in any outer package for transfer to persons exempt pursuant to Subsection B of 20.3.3.302 NMAC; the outer package shall be such that the dose rate at the external surface of the package does not exceed 0.5 millirem per hour;

(c) the immediate container of each quantity or separately packaged fractional quantity of radioactive material shall bear a durable and legible label which:

(i) identifies the radionuclide and the quantity of radioactivity; and

(ii) bears the words "*radioactive material*"; and

(d) in addition to the labeling information required by Subparagraph (c) of this paragraph, the label affixed to the immediate container, or an accompanying brochure shall

(i) state that the contents are exempt from these regulations;

(ii) bear the words "*radioactive material - not for human use - introduction into foods, beverages, cosmetics, drugs or medicinal product, or into products manufactured for commercial distribution is prohibited - exempt quantities shall not be combined*"; and

(iii) set forth appropriate additional radiation safety precautions and instructions relating to the handling, use, storage and disposal of the radioactive material.

(5) Each person licensed under Subsection B of 20.3.3.315 NMAC shall maintain records identifying, by name and address, each person to whom radioactive material is transferred for use under Subsection B of 20.3.3.302 NMAC and stating the kinds and quantities of radioactive material transferred. An annual summary report stating the total quantity of each radionuclide transferred under the specific license shall be filed with the department. Each report shall cover the year ending June 30 and shall be filed within 30 days thereafter. If no transfers of radioactive material have been made pursuant to Subsection B of 20.3.3.315 NMAC, during the report period, the report shall so indicate.

C. Licensing of Byproduct Material by NRC.

(1) Gas and aerosol detectors. An application for a specific license to manufacture, process or produce gas and aerosol detectors containing byproduct material and designed to protect life or property from fires and airborne hazards, or to initially transfer such products for use pursuant to Paragraph (4) of Subsection C of 20.3.3.302 NMAC or equivalent regulations of the NRC or an agreement state, shall be submitted to NRC pursuant to 10 CFR 32.26.

(2) Self-luminous products. An application for a specific license to manufacture, process or produce self-luminous products containing tritium, krypton-85, promethium-147 or radium-226, or to initially transfer such products for use pursuant to Paragraph (2) of Subsection C of 20.3.3.302 NMAC or equivalent regulations of the NRC or an agreement state, shall be submitted to NRC pursuant to 10 CFR 32.22.

(3) Capsules containing carbon-14. An application for a specific license to manufacture, prepare, process, produce, package, repackage or transfer for commercial distribution capsules containing 1 microcurie (37 kilobecquerels) carbon-14 urea (allowing for nominal variation that may occur during the manufacturing process) each for *in vivo* diagnostic use, to persons exempt from licensing under Subsection D of 20.3.3.302 NMAC or the equivalent regulations of the NRC or an agreement state shall be submitted to NRC pursuant to 10 CFR 32.21.

D. [RESERVED]

E. Licensing the Manufacture and Distribution of Devices to Persons Generally Licensed Under Subsection B of 20.3.3.305 NMAC.

(1) Requirements for approval of a license application. An application for a specific license to manufacture or initially transfer devices containing radioactive material to persons generally licensed under Subsection B of 20.3.3.305 NMAC or equivalent regulations of the NRC or an agreement state will be approved if:

(a) the applicant satisfies the general requirements of 20.3.3.308 NMAC;

(b) the applicant submits sufficient information relating to the design, manufacture, prototype testing, quality control, labels, proposed uses, installation, servicing, leak testing, operating and safety instructions and potential hazards of the device to provide reasonable assurance that:

(i) the device can be safely operated by persons not having training in radiological protection;

(ii) under ordinary conditions of handling, storage and use of the device, the radioactive material contained in the device will not be released or inadvertently removed from the device, and it is unlikely that any person will receive in one year a dose in excess of ten percent of the limits specified in Subsection A of 20.3.4.405 NMAC; and

(iii) under accident conditions (such as fire and explosion) associated with handling, storage and use of the device, it is unlikely that any person would receive an external radiation dose or dose commitment in excess of the following organ doses: ***1)*** whole body, head and trunk, active blood-forming organs, gonads or lens of eye: 15 rems (150 millisieverts); ***2)*** hands and forearms, feet and ankles, and localized areas of skin averaged over areas no larger than 1 square centimeter: 200 rems (2 sieverts); and ***3)*** other organs: 50 rems (500 millisieverts);

(c) each device bears a durable, legible, clearly visible label or labels approved by the department, which contain in a clearly identified and separate statement:

(i) instructions and precautions necessary to assure safe installation, operation and servicing of the device (documents such as operating and service manuals may be identified in the label and used to provide this information);

(ii) the requirement, or lack of requirement, for leak testing, or for testing any on-off mechanism and indicator, including the maximum time interval for such testing, and the identification of radioactive material by isotope, quantity of radioactivity; and date of determination of the quantity; and

(iii) the information called for in the following statement in the same or substantially similar form:

The receipt, possession, use and transfer of this device model _____, serial number _____, are

subject to general license or the equivalent and the regulations of the United States nuclear regulatory commission or a state with which the nuclear regulatory commission has entered into an agreement for the exercise of regulatory authority. This label shall be maintained on the device in a legible condition. Removal of this label is prohibited. The model, serial number, and name of manufacturer or distributor may be omitted from this label provided this information is specified elsewhere in labeling affixed.
Caution-radioactive material
_____;
(name of manufacturer or distributor)

(d) each device having a separable source housing that provides the primary shielding for the source also bears, on the source housing, a durable label containing the device model number and serial number, the isotope and quantity, the words, "*caution-radioactive material*," the radiation symbol described in 20.3.4.427 NMAC, and the name of the manufacturer or initial distributor; and

(e) each device meeting the criteria of Item (i) in Subparagraph (m) of Paragraph (3) of Subsection B of 20.3.3.305 NMAC, bears a permanent (e.g., embossed, etched, stamped or engraved) label affixed to the source housing if separable, or the device if the source housing is not separable, that includes the words, "*caution-radioactive material*," and, if practicable, the radiation symbol described in 20.3.4.427 NMAC.

(2) Requests for lengthening of test intervals: In the event the applicant desires that the device be required to be tested at longer intervals than six months, either for proper operation of the on-off mechanism and indicator, if any, or for leakage of radioactive material or for both, the applicant shall include in its application sufficient information to demonstrate that such longer interval is justified by performance characteristics of the device or similar devices and by design features which have a significant bearing on the probability or consequences of leakage of radioactive material from the device or failure of the on-off mechanism and indicator. In determining the acceptable interval for the test for leakage of radioactive material, the department will consider information which includes, but is not limited to:

(a) primary containment (source capsule);
(b) protection of primary containment;
(c) method of sealing containment;
(d) containment construction materials;
(e) form of contained radioactive material;
(f) maximum temperature withstood during prototype test;
(g) maximum pressure withstood during prototype test;
(h) maximum quantity of contained radioactive material;
(i) radiotoxicity of contained radioactive material; and
(j) operating experience with identical devices or similarly designed and constructed devices.

(3) Authorizations for general licensees to perform certain activities. In the event the applicant desires that the general licensee under Subsection B of 20.3.3.305 NMAC, or under equivalent regulations of the NRC or an agreement state, be authorized to install the device, collect the sample to be analyzed by a specific licensee for leakage of radioactive material, service the device, test the on-off mechanism and indicator or remove the device from installation, the applicant shall include in its application written instructions to be followed by the general licensee, estimated calendar quarter doses associated with such activity or activities and the bases for such estimates. The submitted information must demonstrate that performance of such activity or activities by an individual untrained in radiological protection, in addition to other handling, storage and use of devices under the general license, is unlikely to cause that individual to receive a yearly dose in excess of ten percent of the limits specified in Subsection A of 20.3.4.405 NMAC.

(4) Transfer provisions:

(a) If a device containing radioactive material is to be transferred for use under the general license contained in Subsection B of 20.3.3.305 NMAC, each person that is licensed under Paragraph (1) of Subsection D of 20.3.3.315 NMAC shall provide the information specified in this paragraph to each person to whom a device is to be transferred. This information shall be provided before the device may be transferred. In the case of a transfer through an intermediate person, the information shall also be provided to the intended user prior to initial transfer to the intermediate person. The required information includes:

(i) a copy of the general license contained in Paragraph (1) of Subsection D of 20.3.3.315 NMAC; if Subparagraphs (b) through (d) of Paragraph (3) of Subsection B of 20.3.3.305 NMAC or Subparagraph (m) of Paragraph (3) of Subsection B of 20.3.3.305 NMAC do not apply to the particular device, those paragraphs may be omitted;

(ii) a copy of Subsection F of 20.3.3.317 NMAC, 20.3.3.326 NMAC, 20.3.4.451 NMAC and 20.3.4.452 NMAC;

(iii) a list of the services that can only be performed by a specific licensee;

(iv) information on acceptable disposal options including estimated costs of disposal; and

(v) a statement indicating that improper disposal of radioactive material is subject to civil and criminal penalties pursuant to 20.3.1 NMAC.

(b) If radioactive material is to be transferred in a device for use under an equivalent general license of the NRC or an agreement state, each person that is licensed under this subsection shall provide the information specified in this subparagraph to each person to whom a device is to be transferred. This information shall be provided before the device may be transferred. In the case of a transfer through an intermediate person, the information shall also be provided to the intended user prior to initial transfer to the intermediate person. The required information includes:

(i) a copy of the NRC's or agreement state's regulations equivalent to Subsection B of 20.3.3.305 NMAC, Subsection F of 20.3.3.317 NMAC, 20.3.3.326 NMAC, 20.3.4.451 NMAC, and 20.3.4.452 NMAC or a copy of 10 CFR Sections 31.5, 31.2, 30.51, 20.2201 and 20.2202; if a copy of the NRC regulations is provided to a prospective general licensee in lieu of the agreement state's regulations, it shall be accompanied by a note explaining that use of the device is regulated by the agreement state; if certain paragraphs of the regulations do not apply to the particular device, those paragraphs may be omitted;

(ii) a list of the services that can only be performed by a specific licensee;

(iii) information on acceptable disposal options including estimated costs of disposal; and

(iv) the name or title, address and phone number of the contact at the agreement state regulatory agency from which additional information may be obtained.

(c) An alternative approach to informing customers may be proposed by the licensee for approval by the department.

(d) Each device shall meet the labeling requirements in Subparagraphs (c) through (e) of Paragraph (1) of this subsection.

(e) If a notification of bankruptcy has been made under Subsection E of 20.3.3.317 NMAC or the license is to be terminated, each person licensed under Paragraph (1) of this subsection shall provide, upon request, to the department, NRC and any agreement state, records of final disposition required under Subparagraph (c) of Paragraph (5) of Subsection D of 20.3.3.315 NMAC.

(5) Material transfer reports and records: Each person licensed under Paragraph (1) of this subsection to initially transfer devices to generally licensed persons shall comply with the requirements of this section.

(a) The person shall report to the department in accordance with 20.3.1.116 NMAC, all transfers of such devices to persons for use under the general license in Subsection B of 20.3.3.305 NMAC and all receipts of devices from persons licensed under Subsection B of 20.3.3.305 NMAC. The report shall be clear and legible, submitted on a quarterly basis containing all of the following data.

(i) The required information for transfers to general licensees includes: ***1)*** the identity of each general licensee by name and mailing address for the location of use; if there is no mailing address for the location of use, an alternate address for the general licensee shall be submitted along with information on the actual location of use; ***2)*** the name, title and phone number of the person identified by the general licensee as having knowledge of and authority to take required actions to ensure compliance with the appropriate regulations and requirements; ***3)*** the date of transfer; ***4)*** the type, model number, and serial number of the device transferred; and ***5)*** the quantity and type of radioactive material contained in the device.

(ii) If one or more intermediate persons will temporarily possess the device at the intended place of use before its possession by the user, the report shall include the same information for both the intended user and each intermediate person, and clearly designate the intermediate person(s).

(iii) For devices received from a person licensed pursuant to Subsection B of 20.3.3.305 NMAC, the report shall include the identity of the general licensee by name and address, the type, model number, and serial number of the device received, the date of receipt, and, in the case of devices not initially transferred by the reporting licensee, the name of the manufacturer or initial transferor.

(iv) If the licensee makes changes to a device possessed by a person licensed pursuant to Subsection B of 20.3.3.305 NMAC, such that the label must be changed to update required information, the report

shall identify the general licensee, the device and the changes to information on the device label.

(v) The report shall cover each calendar quarter, shall be filed within 30 days of the end of the calendar quarter, and shall clearly indicate the period covered by the report.

(vi) The report shall clearly identify the specific licensee submitting the report and include the license number of the specific licensee.

(vii) If no transfers have been made to or from persons generally licensed under Subsection B of 20.3.3.305 NMAC during the reporting period, the report shall so indicate.

(b) The person shall report all transfers of devices to persons for use under a general license under NRC's or an agreement state's regulations that are equivalent to Subsection B of 20.3.3.305 NMAC, and all receipts of devices from general licensees in the NRC's or agreement state's jurisdiction, to the responsible NRC or agreement state agency. The report shall be clear and legible, containing all of the data required as described below.

(i) The required information for transfers to general licensees includes: ***1)*** the identity of each general licensee by name and mailing address for the location of use; if there is no mailing address for the location of use, an alternate address for the general licensee shall be submitted along with information on the actual location of use; ***2)*** the name, title and phone number of the person identified by the general licensee as having knowledge of and authority to take required actions to ensure compliance with the appropriate regulations and requirements; ***3)*** the date of transfer; ***4)*** the type, model number and serial number of the device transferred; and ***5)*** the quantity and type of radioactive material contained in the device.

(ii) If one or more intermediate persons will temporarily possess the device at the intended place of use before its possession by the user, the report shall include the same information for both the intended user and each intermediate person, and clearly designate the intermediate person(s).

(iii) For devices received from a general licensee, the report shall include the identity of the general licensee by name and address, the type, model number, serial number of the device received, the date of receipt, and, in the case of devices not initially transferred by the reporting licensee, the name of the manufacturer or initial transferor.

(iv) If the licensee makes changes to a device possessed by a general licensee, such that the label must be changed to update required information, the report shall identify the general licensee, the device and the changes to information on the device label.

(v) The report shall cover each calendar quarter, shall be filed within 30 days of the end of the calendar quarter, and shall clearly indicate the period covered by the report.

(vi) The report shall clearly identify the specific licensee submitting the report and must include the license number of the specific licensee.

(vii) If no transfers have been made to or from NRC or a particular agreement state during the reporting period, this information shall be reported to NRC or the responsible agreement state agency upon request of the agency.

(c) The person shall maintain all information concerning transfers and receipts of devices that supports the reports required by Subparagraphs (a) and (b) of this paragraph. Records required by this paragraph shall be maintained for a period of 3 years following the date of the recorded event.

F. Special Requirements for the Manufacture, Assembly, Repair or Initial Transfer of Luminous Safety Devices for Use in Aircraft. An application for a specific license to manufacture, assemble, repair or initially transfer luminous safety devices containing tritium or promethium-147 for use in aircraft, for distribution to persons generally licensed under Subsection C of 20.3.3.305 NMAC will be approved subject to the following conditions:

(1) the applicant satisfies the general requirements specified in 20.3.3.308 NMAC; and

(2) the applicant satisfies the requirements of 10 CFR 32.53, 10 CFR 32.54, 10 CFR 32.55 and 10 CFR 32.56 or their equivalent.

G. Special Requirements for License to Manufacture or Initially Transfer Calibration or Reference Sources Containing Americium-241, Plutonium or Radium-226 for Distribution to Persons Generally Licensed under Subsection D of 20.3.3.305 NMAC. An application for a specific license to manufacture or initially transfer calibration or reference sources containing americium-241, plutonium or radium-226 for distribution to persons generally licensed under Subsection D of 20.3.3.305 NMAC will be approved subject to the following conditions:

(1) the applicant satisfies the general requirements of 20.3.3.308 NMAC, and

(2) the applicant satisfies the requirements of 10 CFR 32.57, 10 CFR 32.58, 10 CFR 32.59 and 10 CFR 70.39 or their equivalent.

H. Manufacture and Distribution of Radioactive Material for Certain In-Vitro Clinical or Laboratory Testing under General License. An application for a specific license to manufacture or distribute radioactive material for use under the general license of Subsection F of 20.3.3.305 NMAC will be approved if:

(1) the applicant satisfies the general requirements specified in 20.3.3.308 NMAC;

(2) the radioactive material is to be prepared for distribution in prepackaged units of:

(a) iodine-125 in units not exceeding 10 microcuries (370 kilobecquerels) each;

(b) iodine-131 in units not exceeding 10 microcuries (370 kilobecquerels) each;

(c) carbon-14 in units not exceeding 10 microcuries (370 kilobecquerels) each;

(d) hydrogen-3 (tritium) in units not exceeding 50 microcuries (1.85 megabecquerels) each;

(e) iron-59 in units not exceeding 20 microcuries (740 kilobecquerels) each;

(f) cobalt-57 in units not exceeding 10 microcuries (370 kilobecquerels) each;

(g) selenium-75 in units not exceeding 10 microcuries (370 kilobecquerels) each; or

(h) mock iodine-125 reference or calibration sources in units not exceeding 0.05 microcurie (1.85 kilobecquerels) of iodine-129 and 0.005 microcurie (185 becquerels) of americium-241 each;

(3) each prepackaged unit bears a durable, clearly visible label:

(a) identifying the radioactive contents as to chemical form and radionuclide, and indicating that the amount of radioactivity does not exceed 10 microcuries (370 kilobecquerels) of iodine-125, iodine-131, carbon-14, cobalt-57 or selenium-75; 50 microcuries (1.85 megabecquerels) of hydrogen-3 (tritium); 20 microcuries (740 kilobecquerels) of iron-59; or 0.05 microcurie (1.85 kilobecquerels) of iodine-129 and 0.005 microcurie (185 becquerels) of americium-241; and

(b) displaying the radiation caution symbol described in Paragraph (1) of Subsection A of 20.3.4.427 NMAC and the words, "*caution, radioactive material*" and "*not for internal or external use in humans or animals*";

(4) the following statement, or a substantially similar statement which contains the information called for in the following statement, appears on a label affixed to each prepackaged unit or appears in a leaflet or brochure which accompanies the package:

This radioactive material may be received, acquired, possessed, and used only by physicians, veterinarians, clinical laboratories or hospitals and only for in-vitro clinical or laboratory tests not involving internal or external administration of the material, or the radiation therefrom, to human beings or animals. Its receipt, acquisition, possession, use, and transfer are subject to the regulations and a general license of the United States nuclear regulatory commission or of a state with which the NRC has entered into an agreement for the exercise of regulatory authority.

_____

(name of manufacturer); and

(5) the label affixed to the unit, or the leaflet or brochure which accompanies the package, contains adequate information as to the precautions to be observed in handling, storing and disposal of such radioactive material; in the case of the mock iodine-125 reference or calibration source, the information accompanying the source must also contain directions to the licensee regarding the waste disposal requirements set out in 20.3.4.433 NMAC.

I. Licensing the Manufacture and Distribution of Ice Detection Devices. An application for a specific license to manufacture and distribute ice detection devices to persons generally licensed under Subsection G of 20.3.3.305 NMAC will be approved subject to the following conditions:

(1) the applicant satisfies the general requirements of 20.3.3.308 NMAC; and

(2) the criteria of 10 CFR 32.61 and 32.62 are met.

J. Manufacture, Preparation or Transfer for Commercial Distribution of Radioactive Drugs Containing Radioactive Material for Medical Use under 20.3.7 NMAC.

(1) An application for a specific license to manufacture, prepare or transfer for commercial distribution, radioactive material for use by persons authorized pursuant to 20.3.7 NMAC will be approved if the following conditions are met.

(a) The applicant satisfies the general requirements specified in 20.3.3.308 NMAC;

(b) The applicant submits evidence that the applicant is at least one of the following:

(i) registered with the FDA as the owner or operator of a drug establishment that engages in the manufacture, preparation, propagation, compounding or processing of a drug under 21 CFR 207.20(a);

(ii) registered or licensed with a state agency as a drug manufacturer;

(iii) licensed as a pharmacy by a state board of pharmacy;

(iv) operating as a nuclear pharmacy within a federal medical institution; or

(v) a PET drug production facility registered with a state agency.

(c) The applicant submits information on the radionuclide; the chemical and physical form; the maximum activity per vial, syringe, generator, or other container of the radioactive drug; and the shielding provided by the packaging to show it is appropriate for the safe handling and storage of the radioactive drugs by medical use licensees.

(d) The applicant satisfies the following labeling requirements.

(i) A label is affixed to each transport radiation shield, whether it is constructed of lead, glass, plastic or other material, of a radioactive drug to be transferred for commercial distribution; the label must include the radiation symbol and the words "*caution, radioactive material*" or "*danger, radioactive material*"; the name of the radioactive drug or its abbreviation; and the quantity of radioactivity at a specified date and time. For radioactive drugs with a half life greater than 100 days, the time may be omitted; and

(ii) A label is affixed to each syringe, vial or other container used to hold a radioactive drug to be transferred for commercial distribution; the label must include the radiation symbol and the words "*caution, radioactive material*" or "*danger, radioactive material*" and an identifier that ensures that the syringe, vial or other container can be correlated with the information on the transport radiation shield label.

(2) A licensee described by Items (iii) or (iv) of Subparagraph (b) of Paragraph (1) of this subsection:

(a) may prepare radioactive drugs for medical use, as defined in 20.3.7.7 NMAC, provided that the radioactive drug is prepared by either an authorized nuclear pharmacist, as specified in Subparagraphs (b) and (d) of this paragraph, or an individual under the supervision of an authorized nuclear pharmacist as specified in Subsection F of 20.3.7.702 NMAC;

(b) may allow a pharmacist to work as an authorized nuclear pharmacist if:

(i) the individual qualifies as an authorized nuclear pharmacist as defined in 20.3.7.7 NMAC;

(ii) the individual meets the requirements specified in Subsection C of 20.3.7.714 NMAC, incorporating 10 CFR 35.55(b) and Subsection E of 20.3.7.714 NMAC, incorporating 10 CFR 35.59, and the licensee has received an approved license amendment identifying this individual as an authorized nuclear pharmacist; or

(iii) the individual is designated as an authorized nuclear pharmacist in accordance with Subparagraph (d) of this paragraph;

(c) may conduct the actions authorized in Subparagraphs (a) and (b) of this paragraph in spite of more restrictive language in license conditions;

(d) may designate a pharmacist (as defined in 20.3.7.7 NMAC) as an authorized nuclear pharmacist if:

(i) the individual was a nuclear pharmacist preparing only radioactive drugs containing accelerator-produced radioactive material, and

(ii) the individual practiced at a pharmacy at a government agency or federally recognized Indian tribe before November 30, 2007, or at all other pharmacies in non-licensing states, as defined in 20.3.1.7 NMAC, before August 8, 2009, or an earlier date as noticed by the NRC;

(e) may designate a pharmacist (as defined in 20.3.7.7 NMAC) as an authorized nuclear pharmacist if the individual is identified as of May 3, 1995, as an "authorized user" in a nuclear pharmacy license issued by the department under this part; and

(f) shall provide to the department a copy of

(i) each individual's certification by a specialty board whose certification process has been recognized by the department, NRC or agreement state as specified in Subsection C of 20.3.7.714 NMAC, incorporating 10 CFR 35.55(a), with the written attestation signed by a preceptor as required by Subsection C of 20.3.7.714 NMAC, incorporating 10 CFR 35.55(b)(2); or

(ii) the department, NRC or agreement state license, or

(iii) the permit issued by a NRC master material licensee, or

(iv) the permit issued by a department, NRC or agreement state licensee, or NRC master materials permitee of broad scope, or the authorization from a commercial nuclear pharmacy authorized to list its own authorized nuclear pharmacist, or

(v) documentation that only accelerator-produced radioactive materials were used in the practice of nuclear pharmacy at a government agency or federally recognized Indian tribe before November 30,

2007, or at all other pharmacies in non-licensing states, as defined in 20.3.1.7 NMAC, before August 8, 2009, or an earlier date as noticed by the NRC; and

(vi) the state pharmacy licensure or registration, no later than 30 days after the date that the licensee allows, under Items (i) and (iii) of Subparagraph (b) of this paragraph, the individual to work as an authorized nuclear pharmacist.

(3) A licensee shall possess and use instrumentation to measure the radioactivity of radioactive drugs. The licensee shall have procedures for use of the instrumentation. The licensee shall measure, by direct measurement or by combination of measurements and calculations, the amount of radioactivity in dosages of alpha, beta or photon emitting radioactive drugs prior to transfer for commercial distribution. In addition, the licensee shall:

(a) perform tests before initial use, periodically and following repair, on each instrument for accuracy, linearity and geometry dependence, as appropriate for the use of the instrument; and make adjustments when necessary; and

(b) check each instrument for constancy and proper operation at the beginning of each day of use.

(4) Nothing in this section relieves the licensee from complying with applicable FDA, or other federal and state requirements governing radioactive drugs.

K. Manufacture and Distribution of Sources or Devices Containing Radioactive Material for Medical Use. An application for a specific license to manufacture and distribute sources and devices containing radioactive material to persons licensed pursuant to 20.3.7 NMAC for use as a calibration, transmission or reference source or for the uses listed in 20.3.7.710 NMAC, 20.3.7.711 NMAC and 20.3.7.712 NMAC will be approved if:

(1) the applicant satisfies the general requirements in 20.3.3.308 NMAC; and

(2) the applicant satisfies the requirements in 10 CFR 32.74.

L. Requirements for License to Manufacture and Distribute Industrial Products Containing Depleted Uranium for Mass-Volume Applications.

(1) An application for a specific license to manufacture industrial products and devices containing depleted uranium for use pursuant to Subsection E of 20.3.3.304 NMAC or equivalent regulations of the NRC or an agreement state will be approved if:

(a) the applicant satisfies the general requirements specified in 20.3.3.308 NMAC;

(b) the applicant submits sufficient information relating to the design, manufacture, prototype testing, quality control procedures, labeling and marking, proposed uses, and potential hazards of the industrial product or device to provide reasonable assurance that possession, use, or transfer of the depleted uranium in the product or device is not likely to cause any individual to receive in one year a radiation dose in excess of ten percent of the limits specified in Subsection A of 20.3.4.405 NMAC; and

(c) the applicant submits sufficient information regarding the industrial product or device and the presence of depleted uranium for a mass-volume application in the product or device to provide reasonable assurance that unique benefits will accrue to the public because of the usefulness of the product or device.

(2) In the case of an industrial product or device whose unique benefits are questionable, the department will approve an application for a specific license under this subsection only if the product or device is found to combine a high degree of utility and low probability of uncontrolled disposal and dispersal of significant quantities of depleted uranium into the environment.

(3) The department may deny application for a specific license under this subsection if the end use of the industrial product or device cannot be reasonably foreseen.

(4) Each person licensed pursuant to this subsection shall:

(a) maintain the level of quality control required by the license in the manufacture of the industrial product or device, and in the installation of the depleted uranium into the product or device;

(b) label or mark each unit to:

(i) identify the manufacturer or initial transferor of the product or device and the number of the license under which the product or device was manufactured or initially transferred, the fact that the product or device contains depleted uranium, and the quantity of depleted uranium in each product or device; and

(ii) state that the receipt, possession, use and transfer of the product or device are subject to a general license or the equivalent and the regulations of the NRC or of an agreement state;

(c) assure that the depleted uranium before being installed in each product or device has been impressed with the following legend clearly legible through any plating or other covering: "*depleted uranium*";

(d) furnish a copy of the general license contained in Subsection C of 20.3.3.304 NMAC and a

copy of the department form to each person to whom they transfer depleted uranium in a product or device for use pursuant to the general license contained in Subsection C of 20.3.3.304 NMAC; or furnish a copy of the general license contained in the NRC or agreement state's regulation equivalent to Subsection C of 20.3.3.304 NMAC and a copy of the NRC or agreement state's certificate; or alternatively, furnish a copy of the general license contained in Subsection C of 20.3.3.304 NMAC and a copy of department form to each person to whom they transfer depleted uranium in a product or device for use pursuant to the general license of the NRC or an agreement state, with a note explaining that use of the product or device is regulated by the NRC or an agreement state under requirements substantially the same as those in Subsection C of 20.3.3.304 NMAC;

(e) report to the department all transfers of industrial products or devices to persons for use under the general license in Subsection C of 20.3.3.304 NMAC; such report shall identify each general licensee by name and address, an individual by name and (or) position who may constitute a point of contact between the department and the general licensee, the type and model number of device transferred, and the quantity of depleted uranium contained in the product or device; the report shall be submitted within 30 days after the end of each calendar quarter in which such a product or device is transferred to the generally licensed person; if no transfers have been made to persons generally licensed under Subsection C of 20.3.3.304 NMAC during the reporting period, the report shall so indicate;

(f) report to the director of the office of nuclear material safety and safeguards, by an appropriate method listed in 10 CFR 40.5 all transfers of industrial products or devices to persons for use under the U.S. nuclear regulatory commission general license in 10 CFR 40.25; the report shall contain all information described in Subparagraph (e) of this paragraph;

(g) report to the responsible state agency all transfers of devices manufactured and distributed pursuant to Subsection L of 20.3.3.315 NMAC for use under a general license in that agreement state's regulations equivalent to Subsection C of 20.3.3.304 NMAC; the report shall contain all information described in Subparagraph (e) of this paragraph;

(h) keep records showing the name, address and point of contact for each general licensee to whom they transfer depleted uranium in industrial products or devices for use pursuant to the general license provided in Subsection C of 20.3.3.304 NMAC or equivalent regulations of the NRC or of an agreement state; the records shall be retained for three years and show the date of each transfer, the quantity of depleted uranium in each product or device transferred and compliance with the report requirements of this subsection.

M. Licensing the Manufacture, Assembly, Repair or Distribution of Commodities, Products or Devices which Contain Radioactive Material other than those Enumerated above. The department shall require substantially the same information as required for licensing of similar items by 10 CFR Part 32 not specifically named in this section.

N. Serialization of Nationally Tracked Sources. Each licensee who manufactures a nationally tracked source, as defined in 20.3.4.7 NMAC, after February 6, 2007 shall assign a unique serial number to each nationally tracked source. Serial numbers must be composed only of alpha-numeric characters.

[20.3.3.315 NMAC - Rp, 20.3.3.315 NMAC, 04/30/2009]

20.3.3.316 ISSUANCE OF SPECIFIC LICENSES:

A. Upon a determination that an application meets the requirements of the act and 20.3 NMAC, the department will issue a specific license authorizing the proposed activity in such form and containing such conditions and limitations as it deems appropriate or necessary to effectuate the purposes of the act.

B. The department may incorporate in any license at the time of issuance, or thereafter by license amendment, rule, regulation, or order, such additional requirements and conditions with respect to the licensee's receipt, possession, use and transfer of radioactive material subject to this part as it deems appropriate or necessary in order to:

(1) minimize danger to public health and safety or property; or

(2) require reports and the keeping of records, or to provide for inspections of activities under the license as may be appropriate or necessary; or

(3) prevent loss or theft of material subject to this chapter.

C. The department may request, and the licensee shall provide, additional information after the license has been issued to enable the department to determine whether the license shall be modified in accordance with 20.3.3.322 NMAC.

[20.3.3.316 NMAC - Rp, 20.3.3.316 NMAC, 04/30/2009]

20.3.3.317 TERMS AND CONDITIONS OF LICENSES:

A. Each license issued pursuant to the requirements in this part shall be subject to all the provisions of the act, now or hereafter in effect, and to all rules, regulations and orders of the board or department.

B. No license issued or granted under this part and no any right under a license issued pursuant to this part shall be transferred, assigned, or in any manner disposed of, either voluntarily, or involuntarily, directly or indirectly, through transfer of control of any license to any person unless the department shall, after securing full information, find that the transfer is in accordance with the provisions of the act, and shall give its consent in writing.

C. Each person licensed by the department pursuant to this part shall confine their use and possession of material licensed to the locations and purposes authorized in the license. Except as otherwise provided in the license, a license issued pursuant to the rules in this part shall carry with it the right to receive, acquire, own and possess radioactive material. Preparation for shipment and transport of radioactive material shall be in accordance with the provisions of 20.3.3.306 NMAC, incorporating 10 CFR 71.

D. Each license issued pursuant to the regulations in this part shall be deemed to contain the applicable provisions set forth in the act and 20.3 NMAC, whether or not these provisions are expressly set forth in the license.

E. Filing for Bankruptcy.

(1) Each general licensee that is required to register by Paragraph (m) of Subsection B of 20.3.3.305 NMAC and each specific licensee shall notify the department in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under any chapter of title 11 (bankruptcy) of the United States Code by or against:

(a) the licensee;

(b) an entity (as that term is defined in 11 U.S.C. 101(14)) controlling the licensee or listing the license or licensee as property of the estate; or

(c) an affiliate (as that term is defined in 11 U.S.C. 101(2)) of the licensee.

(2) The notification must indicate:

(a) the bankruptcy court in which the petition for bankruptcy was filed; and

(b) the date of the filing of the petition.

F. The general licenses provided in this part are subject to the provisions in 20.3.1 NMAC, Paragraph (4) of Subsection A of 20.3.3.302 NMAC, Subsection A of 20.3.3.317 NMAC, 20.3.3.322 NMAC, 20.3.3.323 NMAC, 20.3.3.326 NMAC, 20.3.4 NMAC and 20.3.10 NMAC unless indicated otherwise by a particular provision of the general license.

G. Licensees required submitting emergency plans by 20.3.3.309 NMAC shall follow the emergency plan approved by the department. The licensee may change the approved plan without department approval only if the changes do not decrease the effectiveness of the plan. The licensee shall furnish the change to the department and to affected offsite response organizations prior to the effective date of the change. Proposed changes that decrease, or potentially decrease, the effectiveness of the approved emergency plan may not be implemented without prior application to and prior approval by the department.

H. Security Requirements for Portable Gauges. Each portable gauge licensee shall use a minimum of two independent physical controls that form tangible barriers to secure portable gauges from unauthorized removal, whenever portable gauges are not under the control and constant surveillance of the licensee.

I. Generators. Each licensee preparing technetium-99m radiopharmaceuticals from molybdenum-99/technetium-99m generators or rubidium-82 from strontium-82/rubidium-82 generators shall test the generator eluates for molybdenum-99 breakthrough or strontium-82 and strontium-85 contamination, respectively, in accordance with 20.3.7.706 NMAC of this chapter. The licensee shall record the results of each test and retain each record for 3 years after the record is made.

J. PET Drugs for Non-Commercial Distribution.

(1) Authorization under Subsection J of 20.3.3.307 NMAC to produce PET radioactive drugs for non-commercial transfer to medical use licensees in its consortium does not relieve the licensee from complying with applicable FDA, or other federal and state requirements governing radioactive drugs.

(2) Each licensee authorized under Subsection J of 20.3.3.307 NMAC to produce PET radioactive drugs for non-commercial transfer to medical use licensees in its consortium shall:

(a) satisfy the labeling requirements in Subparagraph (d) of Paragraph (1) of Subsection J of 20.3.3.315 NMAC for each PET radioactive drug transport radiation shield and each syringe, vial or other container used to hold a PET radioactive drug intended for non-commercial distribution to members of its consortium; and

(b) possess and use instrumentation to measure the radioactivity of the PET radioactive drugs intended for non-commercial distribution to members of its consortium and meet the procedural, radioactivity measurement, instrument test, instrument check and instrument adjustment requirements in Paragraph (3) of Subsection J of 20.3.3.315 NMAC.

(3) A licensee that is a pharmacy authorized under Subsection J of 20.3.3.307 NMAC to produce PET radioactive drugs for non-commercial transfer to medical use licensees in its consortium shall require that any individual that prepares PET radioactive drugs shall be:

(a) an authorized nuclear pharmacist that meets the requirements in Subparagraph (b) of Paragraph (2) of Subsection J of 20.3.3.315 NMAC; or

(b) an individual under the supervision of an authorized nuclear pharmacist as specified in Subsection F of 20.3.7.702 NMAC.

(4) A pharmacy, authorized under Subsection J of 20.3.3.307 NMAC to produce PET radioactive drugs for non-commercial transfer to medical use licensees in its consortium that allows an individual to work as an authorized nuclear pharmacist, shall meet the requirements of Subparagraph (e) of Paragraph (2) of Subsection J of 20.3.3.315 NMAC.

[20.3.3.317 NMAC - Rp, 20.3.3.317 NMAC, 04/30/2009]

20.3.3.318 EXPIRATION AND TERMINATION OF LICENSES AND DECOMMISSIONING OF SITES AND SEPARATE BUILDINGS OR OUTDOOR AREAS:

A. The term of a specific license is five years unless the department granted a different term. Except as provided in Subsection B of this section, each specific license expires at the end of the day on the expiration date stated in the license unless the licensee has filed an application for renewal under 20.3.3.319 NMAC not less than 30 days before the expiration date stated in the existing license. If an application for renewal has been filed at least 30 days before the expiration date stated in the existing license, the existing license expires at the end of the day on which the department makes a final determination to deny the renewal application or, if the determination states an expiration date, the expiration date stated in the determination.

B. If the licensee failed to pay outstanding annual fees to the department as required by 20.3.16 NMAC, the specific license expires at the end of the day on the expiration date stated in the license. The licensee shall follow the requirements in Subsection F through M of this section for termination of the specific license, or apply for a license pursuant to 20.3.3.307 NMAC after the outstanding annual fee(s) has been paid.

C. Each specific license revoked by the department expires at the end of the day on the date of the department's final determination to revoke the license, or on the expiration date stated in the determination, or as otherwise provided by department order.

D. Expiration of the specific license does not relieve the licensee from the requirements in 20.3 NMAC. All license provisions continue in effect, beyond the expiration date if necessary, with respect to possession of radioactive material until the department notifies the licensee in writing that the license is terminated. During this time, the licensee shall:

(1) limit actions involving radioactive material to those related to decommissioning; and

(2) continue to control entry to restricted areas until they are suitable for release in accordance with department requirements.

E. Within 60 days of the occurrence of any of the following, each licensee shall provide notification to the department in writing of such occurrence, and either begin decommissioning its site, or any separate building or outdoor area that contains residual radioactivity so that the building or outdoor area is suitable for release in accordance with department requirements, or submit within 12 months of notification a decommissioning plan, if required by Subsection H of this section, and begin decommissioning upon approval of that plan if:

(1) the license has expired or has been revoked pursuant to Subsections A, B or C of this section; or

(2) the licensee has decided to permanently cease principal activities, as defined in 20.3.3.7 NMAC, at the entire site or in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with department requirements; or

(3) no principal activities under the license have been conducted for a period of 24 months; or

(4) no principal activities have been conducted for a period of 24 months in any separate building or outdoor area that contains residual radioactivity such that the building or outdoor area is unsuitable for release in accordance with department requirements.

F. Coincident with the notification required by Subsection E of this section, the licensee shall maintain in effect all decommissioning financial assurances established by the licensee pursuant to 20.3.3.311

NMAC in conjunction with a license issuance or renewal or as required by this section. The amount of the financial assurance must be increased, or may be decreased, as appropriate, to cover the detailed cost estimate for decommissioning established pursuant to Subparagraph (e) of Paragraph (4) of Subsection H of this section.

G. The department may grant a request to extend the time periods established in Subsection E of this section, if the department determines that this relief is not detrimental to the public health and safety and is otherwise in the public interest. The request must be submitted no later than 30 days before notification pursuant to Subsection E of this section. The schedule for decommissioning set forth in Subsection E of this section may not commence until the department has made a determination on the request.

H. Decommissioning Plan.

(1) A decommissioning plan must be submitted if required by license condition or if the procedures and activities necessary to carry out decommissioning of the site or separate building or outdoor area have not been previously approved by the department and these procedures could increase potential health and safety impacts to workers or to the public, such as in any of the following cases:

(a) procedures would involve techniques not applied routinely during cleanup or maintenance operations;

(b) workers would be entering areas not normally occupied where surface contamination and radiation levels are significantly higher than routinely encountered during operation;

(c) procedures could result in significantly greater airborne concentrations of radioactive materials than are present during operation; or

(d) procedures could result in significantly greater releases of radioactive material to the environment than those associated with operation.

(2) The department may approve an alternate schedule for submittal of a decommissioning plan required pursuant to Subsection E of this section if the department determines that the alternative schedule is necessary to the effective conduct of decommissioning operations and presents no undue risk from radiation to the public health and safety and is otherwise in the public interest.

(3) Procedures, such as those listed in Paragraph (1) of this subsection, with potential health and safety impacts may not be carried out prior to approval of the decommissioning plan.

(4) The proposed decommissioning plan for the site or separate building or outdoor area must include:

(a) a description of the conditions of the site or separate building or outdoor area sufficient to evaluate the acceptability of the plan;

(b) a description of planned decommissioning activities;

(c) a description of methods used to ensure protection of workers and the environment against radiation hazards during decommissioning;

(d) a description of the planned final radiation survey;

(e) an updated detailed cost estimate for decommissioning, comparison of that estimate with present funds set aside for decommissioning, and a plan for assuring the availability of adequate funds for completion of decommissioning; and

(f) for decommissioning plans calling for completion of decommissioning later than 24 months after plan approval, the plan shall include a justification for the delay based on the criteria in Subsection J of this section.

(5) The proposed decommissioning plan will be approved by the department if the information therein demonstrates that the decommissioning will be completed as soon as practicable and that the health and safety of workers and the public will be adequately protected.

I. Deadline for Decommissioning.

(1) Except as provided in Subsection J of this section, licensees shall complete decommissioning of the site or separate building or outdoor area as soon as practicable but no later than 24 months following the initiation of decommissioning.

(2) Except as provided in Subsection J of this section, when decommissioning involves the entire site, the licensee shall request license termination as soon as practicable but no later than 24 months following the initiation of decommissioning.

J. The department may approve a request for an alternative schedule for completion of decommissioning of the site or separate building or outdoor area, and license termination if appropriate, if the department determines that the alternative is warranted by consideration of the following:

(1) whether it is technically feasible to complete decommissioning within the allotted 24-month

period;

(2) whether sufficient waste disposal capacity is available to allow completion of decommissioning within the allotted 24-month period;

(3) whether a significant volume reduction in wastes requiring disposal will be achieved by allowing short-lived radionuclides to decay;

(4) whether a significant reduction in radiation exposure to workers can be achieved by allowing short-lived radionuclides to decay; and

(5) other site-specific factors which the department may consider appropriate on a case-by-case basis, such as the regulatory requirements of other government agencies, lawsuits, ground-water treatment activities, monitored natural ground-water restoration, actions that could result in more environmental harm than deferred cleanup, and other factors beyond the control of the licensee.

K. As the final step in decommissioning, the licensee shall:

(1) certify the disposition of all licensed material, including accumulated wastes, by submitting a completed c*ertificate - disposition of radioactive material* form or equivalent information; and

(2) conduct a radiation survey of the premises where the licensed activities were carried out and submit a report of the results of this survey, unless the licensee demonstrates in some other manner that the premises are suitable for release in accordance with the criteria for decommissioning in 20.3.4.426 NMAC; the licensee shall, as appropriate:

(a) report levels of gamma radiation in units of millisievert (microroentgen) per hour at one meter from surfaces, and report levels of radioactivity, including alpha and beta, in units of megabecquerels (disintegrations per minute or microcuries) per 100 square centimeters, removable and fixed, for surfaces, megabecquerels (microcuries) per milliliter for water, and becquerels (picocuries) per gram for solids such as soils or concrete; and

(b) specify the survey instrument(s) used and certify that each instrument is properly calibrated and tested.

L. Specific licenses, including expired licenses, will be terminated by written notice to the licensee when the department determines that:

(1) radioactive material has been properly disposed;

(2) reasonable effort has been made to eliminate residual radioactive contamination, if present; and

(3) a radiation survey has been performed which demonstrates that the premises are suitable for release in accordance with the criteria for decommissioning in 20.3.4.426 NMAC; or other information submitted by the licensee is sufficient to demonstrate that the premises are suitable for release in accordance with the criteria for decommissioning in 20.3.4.426 NMAC; and

(4) records required by Subsections D and F of 20.3.3.326 NMAC, have been received by the department.

[20.3.3.318 NMAC - Rp, 20.3.3.318 NMAC, 04/30/2009]

20.3.3.319 RENEWAL OF LICENSES:

A. Applications for renewal of specific licenses shall be filed in accordance with 20.3.3.307 NMAC not less than 30 days before the expiration date stated in the existing license.

B. In any case in which a licensee, not less than 30 days prior to expiration of their existing license, has filed an application in proper form for renewal or for a new license authorizing the same activities, such existing license shall not expire until the application has been finally determined by the department.

C. An application for renewal of a license shall be approved if the department determines that the requirements of this part have been satisfied, and the licensee has paid any outstanding annual fee(s) pursuant to 20.3.16 NMAC.

[20.3.3.319 NMAC - Rp, 20.3.3.319 NMAC and 20.3.3.321 NMAC, 04/30/2009]

20.3.3.320 AMENDMENT OF LICENSES AT REQUEST OF LICENSEE:

A. An license amendment may be requested by filing a form prescribed by the department pursuant to 20.3.3.307 NMAC which shall specify the proposed amendment and the grounds for the amendment.

B. Supporting documentation (e.g. training records, certificates, procedures, etc.) shall be submitted with the amendment, or provided upon request by the department within 30 days from the date of the request or other time as may be specified in the request. Failure to provide the appropriate supporting documentation within the prescribed time frame will be grounds for denial of the amendment.

C. A request for a license amendment shall be approved if the department determines that the requirements of this part have been satisfied, and the licensee has paid any outstanding annual fee(s) pursuant to 20.3.16 NMAC.
[20.3.3.320 NMAC - Rp, 20.3.3.320 NMAC and 20.3.3.321 NMAC, 04/30/2009]

20.3.3.321 [RESERVED]

20.3.3.322 MODIFICATION, SUSPENSION AND REVOCATION OF LICENSES:

A. The terms and conditions of all licenses shall be subject to amendment or modification by the department by reason of amendments to the act, or by reason of rules, regulations and orders issued by the board or department.

B. Any license may be modified, suspended or revoked, in whole or in part by the department, for any material false statement in the application or any statement of fact required under provisions of the act; or because of conditions revealed by such application or statement of fact or any report, record, or inspection or other means which would warrant the department to refuse to grant a license on an original application; or for violation of, or failure to observe any of the terms and conditions of the act, conditions of the license, or of any rule, regulation, or order of the board or department; or the department determines that existing conditions constitute a substantial threat to the public health and safety or the environment.

C. Except in cases of willfulness or those in which the public health, interest or safety requires otherwise, no license shall be modified, suspended, or revoked unless, prior to the institution of proceedings therefore, facts or conduct which may warrant such actions shall have been called to the attention of the licensee in writing and the licensee shall have been accorded an opportunity to demonstrate or achieve compliance with all lawful requirements.
[20.3.3.322 NMAC - Rp, 20.3.3.322 NMAC, 04/30/2009]

20.3.3.323 TRANSFER OF MATERIAL:

A. No licensee shall transfer radioactive material except as authorized by this section.

B. Except as otherwise provided in their license and subject to the provisions of Sections C and D this section any licensee may transfer radioactive material:

(1) to the department after receiving prior approval from the department;

(2) to the agency in any agreement state which regulates radioactive material pursuant to an agreement under Section 274 of the Atomic Energy Act;

(3) to the United States department of energy;

(4) to any person exempt from the Radiation Protection Act to the extent permitted under such exemptions; or to any person in the NRC jurisdiction or an agreement state, subject to the jurisdiction of that state, who has been exempted from the licensing requirements and regulations of the NRC or the agreement state, to the extent permitted under such exemption;

(5) to any person authorized to receive such material under terms of a general license or a specific license or equivalent licensing document issued by the department, the NRC or an agreement state; or

(6) as otherwise authorized by the department in writing.

C. Before transferring radioactive material to a specific licensee of the department, the NRC or an agreement state, or to a general licensee who is required to register with the department, the NRC or an agreement state prior to receipt of the radioactive material, the licensee transferring the material shall verify that the transferee's license authorizes the receipt of the type, form and quantity of radioactive material to be transferred.

D. The following methods for the verification required by Subsection C of this section are acceptable:

(1) the transferor may have in their possession, and read, a current copy of the transferee's specific license or registration certificate;

(2) the transferor may have in their possession a written certification by the transferee that they are authorized by license or registration certificate to receive the type, form and quantity of 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 they are authorized by license or registration certificate to receive the type, form and quantity of radioactive material to be transferred, specifying registration certificate number, issuing agency and expiration date; provided that the oral certification is confirmed in writing within 10 days;

(4) the transferor may obtain other sources of information compiled by a reporting service from official records of the department, the NRC or an agreement state as to the identity of licensees and the scope and expiration dates of licenses and registration; or

(5) when none of the methods of verification described in Paragraphs (1) to (4) of this subsection 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 NRC or an agreement state that the transferee is licensed to receive the radioactive material.

[20.3.3.323 NMAC - Rp, 20.3.3.323 NMAC, 04/30/2009]

20.3.3.324 RECIPROCAL RECOGNITION OF LICENSES:

A. Provided that the requirements of this section have been met, any person who holds a specific license from the NRC or an agreement state, and issued by the regulatory authority having jurisdiction where the licensee maintains an office for directing the licensed activity and at which radiation safety records are normally maintained, is hereby granted a general license to conduct the activities authorized in such licensing document within the state of New Mexico for a period not in excess of 180 days in any calendar year provided that:

(1) the licensing document does not limit the activity authorized by such document to specified installations or locations;

(2) the out-of-state licensee notifies the department in writing at least three business days prior to engaging in such activity, filing a form, *reciprocity application - proposed activities*; such notification shall indicate the location of work, period of work, and type, manufacturer name and model number of radioactive material to be brought within the state, the client's name and address, and shall be accompanied by a copy of the pertinent licensing document and application fee as determined by 20.3.16 NMAC charged once for each calendar year; if, for a specific case, the three-day period would impose an undue hardship on the out-of-state licensee, they may, upon application to the department, obtain permission to proceed sooner; the department may waive the requirements for filing additional written notifications during the calendar year following the receipt of the initial notification from a person engaging in activities under the general license provided in this section;

(3) the out-of-state licensee complies with all applicable provisions of 20.3 NMAC, all provisions of the act, now or hereafter in effect, and orders of the board or department and with all the terms and conditions of their licensing document, except any such terms and conditions which may be inconsistent with requirements in this chapter;

(4) the out-of-state licensee supplies such other information as the department may request; and

(5) the out-of-state licensee shall not transfer or dispose of radioactive material possessed or used under the general license provided in this section except by transfer to a person specifically licensed by the department, an agreement state or by the NRC to receive such material.

B. Notwithstanding the provisions of Subsection A of this section, any person who holds a specific license issued by the NRC or an agreement state authorizing the holder to manufacture, transfer, install or service a device described in Paragraph (1) of Subsection B of 20.3.3.305 NMAC within areas subject to the jurisdiction of the licensing body is hereby granted a general license to install, transfer, demonstrate or service such a device in this state provided that:

(1) such person shall file a report with the department within 30 days after the end of each calendar quarter in which any device is transferred to or installed in this state; each such report shall identify each general license to whom such device is transferred by name and address, the type of device transferred, and the quantity and type of radioactive material contained in the device;

(2) the device has been manufactured, labeled, installed and serviced in accordance with applicable provisions of the specific license issued to such person by the NRC or an agreement state;

(3) such person shall assure that any labels required to be affixed in the device under regulations of the authority which licensed manufacture of the device bear a statement that *"removal of this label is prohibited"*; and

(4) the holder of the specific license shall furnish to each general licensee to whom they transfer such device or on whose premises they install such device a copy of the general license contained in Subsection B of 20.3.3.305 NMAC.

C. The department may withdraw, limit or qualify its acceptance of any specific license or equivalent licensing document issued by another department, or any product distributed pursuant to such licensing document, upon determining that such action is necessary in order to prevent undue hazard to public health and safety or property.

D. Reciprocity in Areas of Exclusive Federal Jurisdiction:

(1) Before radioactive material can be used at temporary jobsites at any federal facility, the jurisdictional status of the jobsites shall be determined. If a temporary jobsite is under exclusive federal jurisdiction, the general license authorized under Subsection A of this section is subject to all the rules, regulations, orders and fees of the NRC.

(2) Authorizations for use of radioactive materials in areas of exclusive federal jurisdiction shall be obtained from the NRC by:

(a) filing an NRC form 241 in accordance with 10 CFR 150.20(b); or

(b) applying for a specific NRC license.

E. Reciprocity in Other States:

(1) Before radioactive material can be used at a temporary jobsite in another state, authorization shall be obtained from the state if it is an agreement state or from NRC for any non-agreement state, either by filing for reciprocity or applying for a specific license.

(2) The general license authorized under Subsection A of this section is subject to all the rules, regulations, orders and fees of the agreement state, or those of the NRC for any non-agreement state.

[20.3.3.324 NMAC - Rp, 20.3.3.324 NMAC, 04/30/2009]

20.3.3.325 REPORTING REQUIREMENTS:

A. Immediate Report. Each licensee shall notify the department as soon as possible but not later than 4 hours after the discovery of an event that prevents immediate protective actions necessary to avoid exposures to radiation or radioactive materials that could exceed regulatory limits or releases of licensed material that could exceed regulatory limits (events may include fires, explosions, toxic gas releases, etc.).

B. Twenty-Four Hour Report. Each licensee shall notify the department within 24 hours after the discovery of any of the following events involving licensed material.

(1) An unplanned contamination event that:

(a) requires access to the contaminated area, by workers or the public, to be restricted for more than 24 hours by imposing additional radiological controls or by prohibiting entry into the area;

(b) involves a quantity of material greater than five times the lowest annual limit on intake specified in 20.3.4.461 NMAC for the material; and

(c) has access to the area restricted for a reason other than to allow radioactive material with a half-life of less than 24 hours to decay prior to decontamination.

(2) An event in which equipment is disabled or fails to function as designed when:

(a) the equipment is required by regulation or license condition to prevent releases exceeding regulatory limits, to prevent exposures to radiation and radioactive materials exceeding regulatory limits, or to mitigate the consequences of an accident;

(b) the equipment is required to be available and operable when it is disabled or fails to function; and

(c) no redundant equipment is available and operable to perform the required safety function.

(3) An event that requires unplanned medical treatment at a medical facility of an individual with spreadable radioactive contamination on the individual's clothing or body.

(4) An unplanned fire or explosion damaging any licensed material or any device, container or equipment containing licensed material when:

(a) the quantity of material involved is greater than five times the lowest annual limit on intake specified in 20.3.4.461 NMAC for the material; and

(b) the damage affects the integrity of the licensed material or its container.

C. Preparation and Submission of Reports. Reports made by licensees in response to the requirements of this section must be made as follows.

(1) Licensees shall make reports required by Subsections A and B of this section by telephone to the department. To the extent that the information is available at the time of notification, the information provided in these reports must include:

(a) the caller's name and call back telephone number;

(b) a description of the event, including date and time;

(c) the exact location of the event;

(d) the radioactive material, quantities and chemical and physical form of the licensed material

involved; and

(e) any personnel radiation exposure data available;

(2) Written report. Each licensee who makes a report required by Subsections A and B of this section shall submit a written follow-up report within 30 days of the initial report. Written reports prepared pursuant to other regulations may be submitted to fulfill this requirement if the reports contain all of the necessary information and the appropriate distribution is made. These written reports must be sent to the department at the address in 20.3.1.116 NMAC. The reports must include the following:

(a) a description of the event, including the probable cause and the manufacturer and model number (if applicable) of any equipment that failed or malfunctioned;

(b) the exact location of the event;

(c) the radioactive material, quantities and chemical and physical form of the licensed material involved;

(d) date and time of the event;

(e) corrective actions taken or planned and the results of any evaluations or assessments; and

(f) the extent of exposure of individuals to radiation or to radioactive materials without identification of individuals by name.

[20.3.3.325 NMAC - Rp, 20.3.3.312 NMAC, 04/30/2009]

20.3.3.326 RECORDS: Each person who receives radioactive material pursuant to a license and the regulations in this part and parts 20.3.5 NMAC, 20.3.7 NMAC, 20.3.12 NMAC, 20.3.13 NMAC, 20.3.14 NMAC and 20.3.15 NMAC is subject to the requirements of this section.

A. The licensee shall keep records showing the receipt, transfer and disposal of the radioactive material as follows.

(1) The licensee shall retain each record of receipt of radioactive material as long as the material is possessed and for three years following transfer or disposal of the material.

(2) The licensee who transferred the material shall retain each record of transfer for three years after each transfer unless a specific requirement in another part of the regulations in this chapter dictates otherwise.

(3) The licensee who disposed of the material shall retain each record of disposal of radioactive material until the department terminates each license that authorizes disposal of the material.

B. The licensee shall retain each record required by applicable parts of 20.3 NMAC or by license condition for the period specified by the applicable regulation or license condition. If a retention period is not otherwise specified by regulation or license condition, the record shall be retained until the department terminates each license that authorizes the activity that is subject to the recordkeeping requirement.

C. Records Format and Retention Period.

(1) Records which must be maintained pursuant to 20.3 NMAC may be the original or a reproduced copy or microform if such reproduced copy or microform is duly authenticated by authorized personnel and the microform is capable of producing a clear and legible copy after storage for the period specified by 20.3 NMAC. 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, 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.

(2) If there is a conflict between the retention period in 20.3 NMAC, license condition or other written department approval or authorization pertaining to the retention period for the same type of record, the retention period specified in 20.3 NMAC for such records shall apply unless the department, pursuant to Subsection A of 20.3.1.107 NMAC, has granted a specific exemption from the record retention requirements specified in 20.3 NMAC.

D. Prior to license termination, each licensee authorized to possess radioactive material with a half-life greater than 120 days, in an unsealed form, shall forward the following records to the department:

(1) records of disposal of licensed material made under Sections 434 (including burials authorized before January 28, 1981), 435, 436 and 437 of 20.3.4 NMAC; and

(2) records required by Paragraph (4) of Subsection B of 20.3.4.442 NMAC.

E. If licensed activities are transferred or assigned in accordance with Subsection B of 20.3.3.317 NMAC, each licensee authorized to possess radioactive material, with a half-life greater than 120 days, in an unsealed form, shall transfer the following records to the new licensee and the new licensee will be responsible for maintaining these records until the license is terminated:

(1) records of disposal of licensed material made under Sections 434 (including burials authorized before January 28, 1981), 435, 436 and 437 of 20.3.4 NMAC;

(2) records required by Paragraph (4) of Subsection B of 20.3.4.442 NMAC; and

(3) the records required under Subsection G of 20.3.3.311 NMAC.

F. Prior to license termination, each licensee shall forward the records required by Subsection G of 20.3.3.311 NMAC to the department.

[20.3.3.326 NMAC - Rp, 20.3.3.300 NMAC, 04/30/2009]

20.3.3.327 [RESERVED]

20.3.3.328 [RESERVED]

20.3.3.329 SCHEDULE A - EXEMPT CONCENTRATIONS:

A. Table 339.1.

TABLE 329.1			
Element (Atomic Number)	**Isotope**	**Column I Gas Concentration microcurie/milliliter[1]**	**Column II Liquid and Solid Concentration microcurie/milliliter[2]**
Antimony (51)	Sb-122 Sb-124 Sb-125		$3x10^{-4}$ $2x10^{-4}$ $1x10^{-3}$
Argon (18)	Ar-37 Ar-41	$1x10^{-3}$ $4x10^{-7}$	
Arsenic (33)	As-73 As-74 As-76 As-77		$5x10^{-3}$ $5x10^{-4}$ $2x10^{-4}$ $8x10^{-4}$
Barium (56)	Ba-131 Ba-140		$2x10^{-3}$ $3x10^{-4}$
Beryllium (4)	Be-7		$2x10^{-2}$
Bismuth (83)	Bi-206		$4x10^{-4}$
Bromine (35)	Br-82	$4x10^{-7}$	$3x10^{-3}$
Cadmium (48)	Cd-109 Cd-115m Cd-115		$2x10^{-3}$ $3x10^{-4}$ $3x10^{-4}$
Calcium (20)	Ca-45 Ca-47		$9x10^{-5}$ $5x10^{-4}$
Carbon (6)	C-14	$1x10^{-6}$	$8x10^{-3}$
Cerium (58)	Ce-141 Ce-143 Ce-144		$9x10^{-4}$ $4x10^{-4}$ $1x10^{-4}$
Cesium (55)	Cs-131 Cs-134m Cs-134		$2x10^{-2}$ $6x10^{-2}$ $9x10^{-5}$
Chlorine (17)	Cl-38	$9x10^{-7}$	$4x10^{-3}$
Chromium (24)	Cr-51		$2x10^{-2}$
Cobalt (27)	Co-57 Co-58 Co-60		$5x10^{-3}$ $1x10^{-3}$ $5x10^{-4}$
Copper (29)	Cu-64		$3x10^{-3}$
Dysprosium (66)	Dy-165		$4x10^{-3}$

TABLE 329.1			
Element (Atomic Number)	**Isotope**	**Column I Gas Concentration microcurie/milliliter[1]**	**Column II Liquid and Solid Concentration microcurie/milliliter[2]**
	Dy-166		$4x10^{-4}$
Erbium (68)	Er-169 Er-171		$9x10^{-4}$ $1x10^{-3}$
Europium (63)	Eu-152 (T ½ = 9.2 h) Eu-155		$6x10^{-4}$ $2x10^{-3}$
Fluorine (9)	F-18	$2x10^{-6}$	$8x10^{-3}$
Gadolinium (64)	Gd-153 Gd-159		$2x10^{-3}$ $8x10^{-4}$
Gallium (31)	Ga-72		$4x10^{-4}$
Germanium (32)	Ge-71		$2x10^{-2}$
Gold (79)	Au-196 Au-198 Au-199		$2x10^{-3}$ $5x10^{-4}$ $2x10^{-3}$
Hafnium (72)	Hf-181		$7x10^{-4}$
Hydrogen (1)	H-3	$5x10^{-6}$	$3x10^{-2}$
Indium (49)	In-113m In-114m		$1x10^{-2}$ $2x10^{-4}$
Iodine (53)	I-126 I-131 I-132 I-133 I-134	$3x10^{-9}$ $3x10^{-9}$ $8x10^{-8}$ $1x10^{-8}$ $2x10^{-7}$	$2x10^{-5}$ $2x10^{-5}$ $6x10^{-4}$ $7x10^{-5}$ $1x10^{-3}$
Iridium (77)	Ir-190 Ir-192 Ir-194		$2x10^{-3}$ $4x10^{-4}$ $3x10^{-4}$
Iron (26)	Fe-55 Fe-59		$8x10^{-3}$ $6x10^{-4}$
Krypton (36)	Kr-85m Kr-85	$1x10^{-6}$ $3x10^{-6}$	
Lanthanum (57)	La-140		$2x10^{-4}$
Lead (82)	Pb-203		$4x10^{-3}$
Lutetium (71)	Lu-177		$1x10^{-3}$
Manganese (25)	Mn-52 Mn-54 Mn-56		$3x10^{-4}$ $1x10^{-3}$ $1x10^{-3}$
Mercury (80)	Hg-197m Hg-197 Hg-203		$2x10^{-3}$ $3x10^{-3}$ $2x10^{-4}$
Molybdenum (42)	Mo-99		$2x10^{-3}$
Neodymium (60)	Nd-147 Nd-149		$6x10^{-4}$ $3x10^{-3}$
Nickel (28)	Ni-65		$1x10^{-3}$
Niobium (Columbium) (41)	Nb-95 Nb-97		$1x10^{-3}$ $9x10^{-3}$
Osmium (76)	Os-185		$7x10^{-4}$

TABLE 329.1			
Element (Atomic Number)	**Isotope**	**Column I Gas Concentration microcurie/milliliter[1]**	**Column II Liquid and Solid Concentration microcurie/milliliter[2]**
	Os-191m Os-191 Os-193		$3x10^{-2}$ $2x10^{-3}$ $6x10^{-4}$
Palladium (46)	Pd-103 Pd-109		$3x10^{-3}$ $9x10^{-4}$
Phosphorous (15)	P-32		$2x10^{-4}$
Platinum (78)	Pt-191 Pt-193m Pt-197m Pt-197		$1x10^{-3}$ $1x10^{-2}$ $1x10^{-2}$ $1x10^{-3}$
Potassium (19)	K-42		$3x10^{-3}$
Praseodymium (59)	Pr-142 Pr-143		$3x10^{-4}$ $5x10^{-4}$
Promethium (61)	Pm-147 Pm-149		$2x10^{-3}$ $4x10^{-4}$
Rhenium (75)	Re-183 Re-186 Re-188		$6x10^{-3}$ $9x10^{-4}$ $6x10^{-4}$
Rhodium (45)	Rh-103m Rh-105		$1x10^{-1}$ $1x10^{-3}$
Rubidium (37)	Rb-86		$7x10^{-4}$
Ruthenium (44)	Ru-97 Ru-103 Ru-105 Ru-106		$4x10^{-3}$ $8x10^{-4}$ $1x10^{-3}$ $1x10^{-4}$
Samarium (62)	Sm-153		$8x10^{-4}$
Scandium (21)	Sc-46 Sc-47 Sc-48		$4x10^{-4}$ $9x10^{-4}$ $3x10^{-4}$
Selenium (34)	Se-75		$3x10^{-3}$
Silicon (14)	Si-31		$9x10^{-3}$
Silver (47)	Ag-102 Ag-110m Ag-111		$1x10^{-3}$ $3x10^{-4}$ $4x10^{-4}$
Sodium (11)	Na-24		$2x10^{-3}$
Strontium (38)	Sr-85 Sr-89 Sr-91 Sr-92		$1x10^{-3}$ $1x10^{-4}$ $7x10^{-4}$ $7x10^{-4}$
Sulfur (16)	S-35	$9x10^{-8}$	$6x10^{-4}$
Tantalum (73)	Ta-182		$4x10^{-4}$
Technetium (43)	Tc-96m Tc-96		$1x10^{-1}$ $1x10^{-3}$
Tellurium (52)	Te-125m Te-127m Te-127 Te-129m		$2x10^{-3}$ $6x10^{-4}$ $3x10^{-3}$ $3x10^{-4}$

TABLE 329.1			
Element (Atomic Number)	**Isotope**	**Column I Gas Concentration microcurie/milliliter[1]**	**Column II Liquid and Solid Concentration microcurie/milliliter[2]**
	Te-131m Te-132		$6x10^{-4}$ $3x10^{-4}$
Terbium (65)	Tb-160		$4x10^{-4}$
Thallium (81)	Tl-200 Tl-201 Tl-202 Tl-204		$4x10^{-3}$ $3x10^{-3}$ $1x10^{-3}$ $1x10^{-3}$
Thulium (69)	Tm-170 Tm-171		$5x10^{-4}$ $5x10^{-3}$
Tin (50)	Sn-113 Sn-125		$9x10^{-4}$ $2x10^{-4}$
Tungsten (Wolfram) (74)	W-181 W-187		$4x10^{-3}$ $7x10^{-4}$
Vanadium (23)	V-48		$3x10^{-4}$
Xenon (54)	Xe-131m Xe-133 Xe-135	$4x10^{-6}$ $3x10^{-6}$ $1x10^{-6}$	
Ytterbium (70)	Yb-175		$1x10^{-3}$
Yttrium (39)	Y-90 Y-91m Y-91 Y-92 Y-93		$2x10^{-4}$ $3x10^{-2}$ $3x10^{-4}$ $6x10^{-4}$ $3x10^{-4}$
Zinc (30)	Zn-65 Zn-69m Zn-69		$1x10^{-3}$ $7x10^{-4}$ $2x10^{-2}$
Zirconium (40)	Zr-95 Zr-97		$6x10^{-4}$ $2x10^{-4}$
Beta or gamma emitting radioactive material not listed above with half-life less than 3 years.		$1x10^{-10}$	$1x10^{-6}$

Table 329.1 notes:

[1] values are given in column I only for those materials normally used as gases;

[2] microcuries per gram for solids.

B. Notes.

(1) Many radioisotopes disintegrate into isotopes which are also radioactive. In expressing the concentrations in Subsection A the activity stated is that of the parent isotope and takes into account the daughters.

(2) For purposes of 20.3.3.302 NMAC where there is involved a combination of isotopes, the limit for the combination shall be derived as follows: determine for each isotope in the product the ratio between the concentration present in the product and the exempt concentration established in Subsection A of this section for the specific isotope when not in combination. The sum of such ratios may not exceed “1” (i.e., unity). Example: (concentration of isotope A in product) / (exempt concentration of isotope A) + (concentration of isotope B in product) / (exempt concentration of isotope B) <1.

(3) The values in this table are presented in scientific notation. In this notation, a value of 3×10^{-4} represents a value of 3E-4 or 0.0003.

(4) To convert microcuries to SI units of kilobecquerels multiply the above values by 37. For example: Zirconium-97 of $2x10^{-4}$ microcurie multiplied by 37 is equivalent to 0.0074 kilobecquerel or 7.4 becquerels.

[20.3.3.329 NMAC - Rp, 20.3.3.329 NMAC, 04/30/2009]

20.3.3.330 SCHEDULE B - EXEMPT QUANTITIES:

TABLE 330.1		
Radioactive Material	**Acronym**	**Microcuries**
Antimony-122	(Sb-122)	100
Antimony-124	(Sb-124)	10
Antimony-125	(Sb-125)	10
Arsenic-73	(As-73)	100
Arsenic-74	(As-74)	10
Arsenic-76	(As-76)	10
Arsenic-77	(As-77)	100
Barium-131	(Ba-131)	10
Barium-133	(Ba-133)	10
Barium-140	(Ba-140)	10
Bismuth-210	(Bi-210)	1
Bromine-82	(Br-82)	10
Cadmium-109	(Cd-109)	10
Cadmium-115m	(Cd-115m)	10
Cadmium-115	(Cd-115)	100
Calcium-45	(Ca-45)	10
Calcium-47	(Ca-47)	10
Carbon-14	(C-14)	100
Cerium-141	(Ce-141)	100
Cerium-143	(Ce-143)	100
Cerium-144	(Ce-144)	1
Cesium-129	(Cs-129)	100
Cesium-131	(Cs-131)	1,000
Cesium-134m	(Cs-134m)	100
Cesium-134	(Cs-134)	1
Cesium-135	(Cs-135)	10
Cesium-136	(Cs-136)	10
Cesium-137	(Cs-137)	10
Chlorine-36	(Cl-36)	10
Chlorine-38	(Cl-38)	10
Chromium-51	(Cr-51)	1,000
Cobalt-57	(Co-57)	100
Cobalt-58m	(Co-58m)	10
Cobalt-58	(Co-58)	10
Cobalt-60	(Co-60)	1
Copper-64	(Cu-64)	100
Dysprosium-165	(Dy-165)	10
Dysporsium-166	(Dy-166)	100
Erbium-169	(Er-169)	100
Erbium-17	(Er-171)	100
Europium-152(9.2h)	(Eu-152)	100
Europium-152(13y)	(Eu-152)	1
Europium-154	(Eu-154)	1
Europium-155	(Eu-155)	10
Fluorine-18	(F-18)	1,000

TABLE 330.1		
Radioactive Material	**Acronym**	**Microcuries**
Gadolinium-153	(Gd-153)	10
Gadolinium-159	(Gd-159)	100
Gallium-67	(Ga-67)	100
Gallium-72	(Ga-72)	10
Germanium-68	(Ge-68)	10
Germanium-71	(Ge-71)	100
Gold-195	(Au-195)	10
Gold-198	(Au-198)	100
Gold-199	(Au-199)	100
Hafnium-181	(Hf-181)	10
Holmium-166	(Ho-166)	100
Hydrogen-3	(H-3)	1,000
Indium-111	(In-111)	100
Indium-113m	(In-113m)	100
Indium-114m	(In-114m)	10
Indium-115m	(In-115m)	100
Indium-115	(In-115)	10
Iodine-123	(I-123)	100
Iodine-125	(I-125)	1
Iodine-126	(I-126)	1
Iodine-129	(I-129)	0.1
Iodine-131	(I-131)	1
Iodine-132	(I-132)	10
Iodine-133	(I-133)	1
Iodine-134	(I-134)	10
Iodine-135	(I-135)	10
Iridium-192	(Ir-192)	10
Iridum-194	(Ir-194)	100
Iron-52	(Fe-52)	10
Iron-55	(Fe-55)	100
Iron-59	(Fe-59)	10
Krypton-85	(Kr-85)	100
Krypton-87	(Kr-87)	10
Lanthanum-140	(La-140)	10
Lutetium-177	(Lu-177)	100
Manganese-52	(Mn-52)	10
Manganese-54	(Mn-54)	10
Manganese-56	(Mn-56)	10
Mercury-197m	(Hg-197m)	100
Mercury-197	(Hg-197)	100
Mercury-203	(Hg-203)	10
Molybdenum-99	(Mo-99)	100
Neodymium-147	(Nd-147)	100
Neodymium-149	(Nd-149)	100
Nickel-59	(Ni-59)	100
Nickel-63	(Ni-63)	10
Nickel-65	(Ni-65)	100
Niobium-93m	(Nb-93m)	10
Niobium-95	(Nb-95)	10

TABLE 330.1		
Radioactive Material	**Acronym**	**Microcuries**
Niobium-97	(Nb-97)	10
Osmium-185	(Os-185)	10
Osmium-191m	(Os-191m)	100
Osmium-191	(Os-191)	100
Osmium-193	(Os-193)	100
Palladium-103	(Pd-103)	100
Palladium-109	(Pd-109)	100
Phosphorus-32	(P-32)	10
Platinum-191	(Pt-191)	100
Platinum-193m	(Pt-193m)	100
Platinum-193	(Pt-193)	100
Platinum-197m	(Pt-197m)	100
Platinum-197	(Pt-197)	100
Polonium-210	(Po-210)	0.1
Potassium-42	(K-42)	10
Potassium-43	(K-43)	10
Praseodymium-142	(Pr-142)	100
Praseodymium-143	(Pr-143)	100
Promethium-147	(Pm-147)	10
Promethium-149	(Pm-149)	10
Rhenium-186	(Re-186)	100
Rhenium-188	(Re-188)	100
Rhodium-103m	(Rh-103m)	100
Rhodium-105	(Rh-105)	100
Rubidium-81	(Rb-81)	10
Rubidium-86	(Rb-86)	10
Rubidium-87	(Rb-87)	10
Ruthenium-97	(Ru-97)	100
Ruthenium-103	(Ru-103)	10
Ruthenium-105	(Ru-105)	10
Ruthenium-106	(Ru-106)	1
Samarium-151	(Sm-151)	10
Samarium-153	(Sm-153)	100
Scandium-46	(Sc-46)	10
Scandium-47	(Sc-47)	100
Scandium-48	(Sc-48)	10
Selenium-75	(Se-75)	10
Silicon-31	(Si-31)	100
Silver-105	(Ag-105)	10
Silver-110m	(Ag-110m)	1
Silver-111	(Ag-111)	100
Sodium-22	(Na-22)	10
Sodium-24	(Na-24)	10
Strontium-85	(Sr-85)	10
Strontium-89	(Sr-89)	1
Strontium-90	(Sr-90)	0.1
Strontium-91	(Sr-91)	10
Strontium-92	(Sr-92)	10
Sulphur-35	(S-35)	100

TABLE 330.1		
Radioactive Material	**Acronym**	**Microcuries**
Tantalum-182	(Ta-182)	10
Technetium-96	(Tc-96)	10
Technetium-97m	(Tc-97m)	100
Technetium-97	(Tc-97)	100
Technetium-99m	(Tc-99m)	100
Technetium-99	(Tc-99)	10
Tellurium-125m	(Te-125m)	10
Tellurium-127m	(Te-127m)	10
Tellurium-127	(Te-127)	100
Tellurium-129m	(Te-129m)	10
Tellurium-129	(Te-129)	100
Tellurium-131m	(Te-131m)	10
Tellurium-132	(Te-132)	10
Terbium-160	(Tb-160)	10
Thallium-200	(T1-200)	100
Thallium-201	(T1-201)	100
Thallium-202	(T1-202)	100
Thallium-204	(T1-204)	10
Thulium-170	(Tm-170)	10
Thulium-171	(Tm-171)	10
Tin-113	(Sn-113)	10
Tin-125	(Sn-125)	10
Tungsten-181	(W-181)	10
Tungsten-185	(W-185)	10
Tungsten-187	(W-187)	100
Vanadium-48	(V-48)	10
Xenon-131m	(Xe-131m)	1,000
Xenon-133	(Xe-133)	100
Xenon-135	(Xe-135)	100
Ytterbium-175	(Yb-175)	100
Yttrium-87	(Y-87)	10
Yttrium-88	(Y-88)	10
Yttrium-90	(Y-90)	10
Yttrium-91	(Y-91)	10
Yttrium-92	(Y-92)	100
Yttrium-93	(Y-93)	100
Zinc-65	(Zn-65)	10
Zinc-69m	(Zn-69m)	100
Zinc-69	(Zn-69)	1,000
Zirconium-93	(Zr-93)	10
Zirconium-95	(Zr-95)	10
Zirconium-97	(Zr-97)	10
Any radioactive material not listed above other than alpha emitting radioactive material		0.1

Table 330.1 note: to convert microcuries to SI units of kilobecquerels multiply the above values by 37. For example: Zirconium-97 of 10 microcuries multiplied by 37 is equivalent to 370 kilobecquerels.
[20.3.3.330 NMAC - Rp, 20.3.3.330 NMAC, 04/30/2009]

20.3.3.331 SCHEDULE C - GROUPS OF DIAGNOSTIC USES OF RADIOPHARMACEUTICALS

IN HUMANS:

A. Group I. Uptake, Dilution and Excretion Studies. Possession and use of unsealed radioactive material for uptake, dilution and excretion studies for which a written directive is not required shall be authorized pursuant to 20.3.7.704 NMAC.

B. Group II. Imaging and Tumor Localization Studies. Possession and use of unsealed radioactive material for imaging and localization studies for which a written directive is not required shall be authorized pursuant to 20.3.7.705 NMAC.

[20.3.3.331 NMAC - Rp, 20.3.3.331 NMAC, 04/30/2009]

20.3.3.332 SCHEDULE D - RADIOACTIVE MATERIAL QUANTITIES FOR BROAD SCOPE LICENSES:

A. Table 332.1

TABLE 332.1		
Radioactive Material	**Column I curies**	**Column II curies**
Antimony-122	1	0.01
Antimony-124	1	0.01
Antimony-125	1	0.01
Arsenic-73	10	0.1
Arsenic-74	1	0.01
Arsenic-76	1	0.01
Arsenic-77	10	0.1
Barium-131	10	0.1
Barium-140	1	0.01
Beryllium-7	10	0.1
Bismuth-210	0.1	0.001
Bromine-82	10	0.1
Cadmium-109	1	0.01
Cadmium-115m	1	0.01
Cadmium-115	10	0.1
Calcium-45	1	0.01
Calcium-47	10	0.1
Carbon-14	100	1.0
Cerium-141	10	0.1
Cerium-143	10	0.1
Cerium-144	0.1	0.001
Cesium-131	100	1.0
Cesium-134m	100	1.0
Cesium-134	0.1	0.001
Cesium-135	1	0.01
Cesium-136	10	0.1
Cesium-137	0.1	0.001
Chlorine-36	1	0.01
Chlorine-38	100	1.0
Chromium-51	100	1.0
Cobalt-57	10	0.1
Cobalt-58m	100	1.0
Cobalt-58	1	0.01
Cobalt-60	0.1	0.001
Copper-64	10	0.1
Dysprosium-165	100	1.0
Dysprosium-166	10	0.1

TABLE 332.1		
Radioactive Material	**Column I curies**	**Column II curies**
Erbium-169	10	0.1
Erbium-171	10	0.1
Europium-152 (9.2 h)	10	0.1
Europium-152 (13 y)	0.1	0.001
Europium-154	0.1	0.001
Europium-155	1	0.01
Fluorine-18	100	1.0
Gadolinium-153	1	0.01
Gadolinium-159	10	0.1
Gallium-72	10	0.1
Germanium-71	100	1.0
Gold-198	10	0.1
Gold-199	10	0.1
Hafnium-181	1	0.01
Holmium-166	10	0.1
Hydrogen-3	100	1.0
Indium-113m	100	1.0
Indium-114m	1	0.01
Indium-115m	100	1.0
Indium-115	1	0.01
Iodine-125	0.1	0.001
Iodine-126	0.1	0.001
Iodine-129	0.1	0.01
Iodine-131	0.1	0.001
Iodine-132	10	0.1
Iodine-133	1	0.01
Iodine-134	10	0.1
Iodine-135	1	0.01
Iridium-192	1	0.01
Iridium-194	10	0.1
Iron-55	10	0.1
Iron-59	1	0.01
Krypton-85	100	1.0
Krypton-87	10	0.1
Lanthanum-140	1	0.01
Lutetium-177	10	0.1
Manganese-52	1	0.01
Manganese-54	1	0.01
Manganese-56	10	0.1
Mercury-197m	10	0.1
Mercury-197	10	0.1
Mercury-203	1	0.01
Molybdenum-99	10	0.1
Neodymium-147	10	0.1
Neodymium-149	10	0.1
Nickel-59	10	0.1
Nickel-63	1	0.01
Nickel-65	10	0.1

TABLE 332.1		
Radioactive Material	**Column I curies**	**Column II curies**
Niobium-93	1	0.01
Niobium-95	1	0.01
Niobium-97	100	1.0
Osmium-185	1	0.01
Osmium-191m	100	1.0
Osmium-191	10	0.1
Osmium-193	10	0.1
Palladium-103	10	0.1
Palladium-109	10	0.1
Phosphorus-32	1	0.01
Platinum-191	10	0.1
Platinum-193m	100	1.0
Platinum-193	10	0.1
Platinum-197m	100	1.0
Platinum-197	10	0.1
Polonium-210	0.01	0.0001
Potassium-42	1	0.01
Praseodymium-142	10	0.1
Praseodymium-143	10	0.1
Promethium-147	1	0.01
Promethium-149	10	0.1
Radium-226	0.01	0.0001
Rhenium-186	10	0.1
Rhenium-188	10	0.1
Rhodium-103m	1,000	10.0
Rhodium-105	10	0.1
Rubidium-86	1	0.01
Rubidium-87	1	0.01
Ruthenium-97	100	1.0
Ruthenium-103	1	0.01
Ruthenium-105	10	0.1
Ruthenium-106	0.1	0.001
Samarium-151	1	0.01
Samarium-153	10	0.1
Scandium-46	1	0.01
Scandium-47	10	0.1
Scandium-48	1	0.01
Selenium-75	1	0.01
Silicon-31	10	0.1
Silver-105	1	0.01
Silver-110m	0.1	0.001
Silver-111	10	0.1
Sodium-22	0.1	0.001
Sodium-24	1	0.01
Strontium-85m	1,000	10.0
Strontium-85	1	0.01
Strontium-89	1	0.01
Strontium-90	0.01	0.0001

TABLE 332.1		
Radioactive Material	**Column I curies**	**Column II curies**
Strontium-91	10	0.1
Strontium-92	10	0.1
Sulphur-35	10	0.1
Tantalum-182	1	0.01
Technetium-96	10	0.1
Technetium-97m	10	0.1
Technetium-97	10	0.1
Technetium-99m	100	1.0
Technetium-99	1	0.01
Tellurium-125m	1	0.01
Tellurium-127m	1	0.01
Tellurium-127	10	0.1
Tellurium-129m	1	0.01
Tellurium-129	100	1.0
Tellurium-131m	10	0.1
Tellurium-132	1	0.01
Terbium-160	1	0.01
Thallium-200	10	0.1
Thallium-201	10	0.1
Thallium-202	10	0.1
Thallium-204	1	0.01
Thulium-170	1	0.01
Thulium-171	1	0.01
Tin-113	1	0.01
Tin-125	1	0.01
Tungsten-181	1	0.01
Tungsten-185	1	0.01
Tungsten-187	10	0.1
Vanadium-48	1	0.01
Xenon-131m	1,000	10.0
Xenon-133	100	1.0
Xenon-135	100	1.0
Ytterbium-175	10	0.1
Yttrium-90	1	0.01
Yttrium-91	1	0.01
Yttrium-92	10	0.1
Yttrium-93	1	0.01
Zinc-65	1	0.01
Zinc-69m	10	0.1
Zinc-69	100	1.0
Zirconium-93	1	0.01
Zirconium-95	1	0.01
Zirconium-97	1	0.01
Any radioactive material other than source material, special nuclear material, or alpha emitting radioactive material not listed above	0.1	0.001

B. **Note.** To convert curies to SI units of gigabecquerels, multiply the above values by 37. For example: Zirconium-97 (Column II) of 0.01 curie multiplied by 37 is equivalent to 0.37 gigabecquerel.
[20.3.3.332 NMAC - Rp, 20.3.3.332 NMAC, 04/30/2009]

20.3.3.333 SCHEDULE E - QUANTITIES OF RADIOACTIVE MATERIALS REQUIRING CONSIDERATION OF THE NEED FOR AN EMERGENCY PLAN FOR RESPONDING TO A RELEASE:

A. Table 333.1

TABLE 333.1		
Radioactive Material	**Release Fraction**	**Quantity (Curies)**
Actinium-228	0.001	4,000
Americium-241	0.001	2
Americium-242	0.001	2
Americium-243	0.001	2
Antimony-124	0.01	4,000
Antimony-126	0.01	6,000
Barium-133	0.01	10,000
Barium-140	0.01	30,000
Bismuth-207	0.01	5,000
Bismuth-210	0.01	600
Cadmium-109	0.01	1,000
Cadmium-113	0.01	80
Calcium-45	0.01	20,000
Californium-252	0.001	9 (20 mg)
Carbon-14 (Non CO_2)	0.01	50,000
Cerium-141	0.01	10,000
Cerium-144	0.01	300
Cesium-134	0.01	2,000
Cesium-137	0.01	3,000
Chlorine-36	0.5	100
Chromium-51	0.01	300,000
Cobalt-60	0.001	5,000
Copper-64	0.01	200,000
Curium-242	0.001	60
Curium-243	0.001	3
Curium-244	0.001	4
Curium-245	0.001	2
Europium-152	0.01	500
Europium-154	0.01	400
Europium-155	0.01	3,000
Gadolinium-153	0.01	5,000
Germanium-68	0.01	2,000
Gold-198	0.01	30,000
Hafnium-172	0.01	400
Hafnium-181	0.01	7,000
Holmium-166m	0.01	100
Hydrogen-3	0.5	20,000
Iodine-125	0.5	10
Iodine-131	0.5	10
Indium-114m	0.01	1,000
Iridium-192	0.001	40,000

TABLE 333.1		
Radioactive Material	**Release Fraction**	**Quantity (Curies)**
Iron-55	0.01	40,000
Iron-59	0.01	7,000
Krypton-85	1.0	6,000,000
Lead-210	0.01	8
Manganese-56	0.01	60,000
Mercury-203	0.01	10,000
Molybdenum-99	0.01	30,000
Neptunium-237	0.001	2
Nickel-63	0.01	20,000
Niobium-94	0.01	300
Phosphorus-32	0.5	100
Phosphorus-33	0.5	1,000
Polonium-210	0.01	10
Potassium-42	0.01	9,000
Promethium-145	0.01	4,000
Promethium-147	0.01	4,000
Radium-226	0.001	100
Ruthenium-106	0.01	200
Samarium-151	0.01	4,000
Scandium-46	0.01	3,000
Selenium-75	0.01	10,000
Silver-110m	0.01	1,000
Sodium-22	0.01	9,000
Sodium-24	0.01	10,000
Strontium-89	0.01	3,000
Strontium-90	0.01	90
Sulfur-35	0.5	900
Technetium-99	0.01	10,000
Technetium-99m	0.01	400,000
Tellurium-127m	0.01	5,000
Tellurium-129m	0.01	5,000
Terbium-160	0.01	4,000
Thulium-170	0.01	4,000
Tin-113	0.01	10,000
Tin-123	0.01	3,000
Tin-126	0.01	1,000
Titanium-44	0.01	100
Vanadium-48	0.01	7,000
Xenon-133	1.0	900,000
Yttrium-91	0.01	2,000
Zinc-65	0.01	5,000
Zirconium-93	0.01	400
Zirconium-95	0.01	5,000
Any other beta-gamma emitter	.01	10,000
Mixed fission products	.01	1,000
Mixed corrosion products	.01	10,000
Contaminated equipment beta-gamma	.001	10,000

TABLE 333.1		
Radioactive Material	**Release Fraction**	**Quantity (Curies)**
Irradiated material, any form other than solid. noncombustible	.01	1,000
Irradiated material solid, noncombustible	.001	10,000
Mixed radioactive waste, beta-gamma	.01	1,000
Packaged mixed waste, beta-gamma	.001	10,000
Any other alpha emitter	.001	2
Contaminated equipment alpha	.0001	20
Packaged waste, alpha[1]	.0001	20

Table 333.1 note:
[1] waste packaged in Type B containers does not require an emergency plan.

B. Notes.

(1) To convert curies to SI units of gigabecquerels, multiply the above values by 37. Example: Zirconium-95 of 5000 curies multiplied by 37 is equivalent to 185,000 gigabecquerels or 185 terabecquerels.

(2) For combinations of radioactive materials, consideration of the need for an emergency plan is required if the sum of the ratios of the quantity of each radioactive material authorized to the quantity listed for that material in table 333.1 exceeds one.

[20.3.3.333 NMAC - Rp, 20.3.3.333 NMAC, 04/30/2009]

20.3.3.334 CRITERIA RELATING TO USE OF FINANCIAL TESTS AND PARENT COMPANY GUARANTEES FOR PROVIDING REASONABLE ASSURANCE OF FUNDS FOR DECOMMISSIONING:

A. Introduction. An applicant or licensee may provide reasonable assurance of the availability of funds for decommissioning based on obtaining a parent company guarantee that funds will be available for decommissioning costs and on a demonstration that the parent company passes a financial test. This section establishes criteria for passing the financial test and for obtaining the parent company guarantee.

B. Financial Test.

(1) To pass the financial test, the parent company must meet the criteria of either Subparagraphs (a) or (b) of this paragraph.

(a) The parent company must have:

(i) two of the following three ratios: a ratio of total liabilities to net worth less than 2.0; a ratio of the sum of net income plus depreciation, depletion and amortization to total liabilities greater than 0.1; and a ratio of current assets to current liabilities greater than 1.5;

(ii) net working capital and tangible net worth each at least six times the current decommissioning cost estimates (or prescribed amount if a certification is used);

(iii) tangible net worth of at least $10 million; and

(iv) assets located in the United States amounting to at least 90 percent of total assets or at least six times the current decommissioning cost estimates (or prescribed amount if a certification is used);

(b) The parent company must have:

(i) a current rating for its most recent bond issuance of AAA, AA, A or BBB as issued by Standard and Poor's or Aaa, Aa, A or Baa as issued by Moody's;

(ii) tangible net worth at least six times the current decommissioning cost estimate (or prescribed amount if a certification is used);

(iii) tangible net worth of at least $10 million; and

(iv) assets located in the United States amounting to at least 90 percent of total assets or at least six times the current decommissioning cost estimates for the total of all facilities or parts thereof (or prescribed amount if certification is used).

(2) The parent company's independent certified public accountant must have compared the data used by the parent company in the financial test, which is derived from the independently audited, year end financial statements for the latest fiscal year, with the amounts in such financial statement. In connection with that procedure the licensee shall inform the department within 90 days of any matters coming to the auditor's attention which cause the auditor to believe that the data specified in the financial test shall be adjusted and that the company no longer

passes the test.

(3) After the initial financial test, the parent company must repeat the passage of the test within 90 days after the close of each succeeding fiscal year.

(4) If the parent company no longer meets the requirements of Subsection A of this section, the licensee must send notice to the department of intent to establish alternate financial assurance as specified in this section. The notice must be sent by certified mail within 90 days after the end of the fiscal year for which the year end financial data show that the parent company no longer meets the financial test requirements. The licensee must provide alternate financial assurance within 120 days after the end of such fiscal year.

C. Parent Company Guarantee. The terms of a parent company guarantee which an applicant or licensee obtains must provide the following.

(1) The parent company guarantee will remain in force unless the guarantor sends notice of cancellation by certified mail to the licensee and the department; cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the licensee and the department, as evidenced by the return receipts.

(2) If the licensee fails to provide alternate financial assurance as specified in the department's regulations within 90 days after receipt by the licensee and department of a notice of cancellation of the parent company guarantee from the guarantor, the guarantor will provide such alternative financial assurance in the name of the licensee.

(3) The parent company guarantee and financial test provisions must remain in effect until the department has terminated the license.

(4) If a trust is established for decommissioning costs, the trustee and trust must be acceptable to the department; an acceptable trustee includes an appropriate state or federal government agency or an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

[20.3.3.334 NMAC - Rp, 20.3.3.334 NMAC, 04/30/2009]

20.3.3.335 CRITERIA RELATING TO USE OF FINANCIAL TESTS AND SELF-GUARANTEES FOR PROVIDING REASONABLE ASSURANCE OF FUNDS FOR DECOMMISSIONING:

A. Introduction. An applicant or licensee may provide reasonable assurance of the availability of funds for decommissioning based on furnishing its own guarantee that funds will be available for decommissioning costs and on a demonstration that the company passes the financial test of Subsection B of this section. The terms of the self-guarantee are in Subsection C of this section. This section establishes criteria for passing the financial test for the self guarantee and establishes the terms for a self-guarantee.

B. Financial Test.

(1) To pass the financial test, a company must meet all of the following criteria:

(a) tangible net worth at least 10 times the total current decommissioning cost estimate for the total of all facilities or parts thereof (or the current amount required if certification is used) for all decommissioning activities for which the company is responsible as self-guaranteeing licensee and as parent-guarantor;

(b) assets located in the United States amounting to at least 90 percent of total assets or at least 10 times the total current decommissioning cost estimate for the total of all facilities of parts thereof (or the current amount required if certification is used) for all decommissioning activities for which the company is responsible as self-guaranteeing licensee and as parent-guarantor; and

(c) a current rating for its most recent bond issuance of AAA, AA or A as issued by Standard and Poors, or Aaa, Aa or A as issued by Moodys.

(2) To pass the financial test, a company must meet all of the following additional requirements:

(a) the company must have at least one class of equity securities registered under the Securities Exchange Act;

(b) the company's independent certified public accountant must have compared the data used by the company in the financial test which is derived from the independently audited, year-end financial statements for the latest fiscal year, with the amounts in such financial statement; in connection with that procedure, the licensee shall inform the department within 90 days of any matters coming to the attention of the auditor that cause the auditor to believe that the data specified in the financial test shall be adjusted and that the company no longer passes the test; and

(c) after the initial financial test, the company must repeat passage of the test within 90 days after the close of each succeeding fiscal year.

(3) If the licensee no longer meets the requirements of Paragraph (1) of Subsection B of this section,

the licensee must send immediate notice to the department of its intent to establish alternate financial assurance as specified in the department's regulations within 120 days of such notice.

C. Company Self-Guarantee. The terms of a self-guarantee which an applicant or licensee furnishes must provide the following.

(1) The guarantee will remain in force unless the licensee sends notice of cancellation by certified mail to the department; cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by the department, as evidenced by the return receipt.

(2) The licensee shall provide alternative financial assurance as specified in 20.3.3.311 NMAC within 90 days following receipt by the department of a notice of cancellation of the guarantee.

(3) The guarantee and financial test provisions must remain in effect until the department has terminated the license or until another financial assurance method acceptable to the department has been put in effect by the licensee.

(4) The licensee will promptly forward to the department and the licensee's independent auditor all reports covering the latest fiscal year filed by the licensee with the securities and exchange commission pursuant to the requirements of Section 13 of the Securities and Exchange Act.

(5) If, at any time, the licensee's most recent bond issuance ceases to be rated in any category of "A" or above by either Standard and Poors or Moodys, the licensee will provide notice in writing of such fact to the department within 20 days after publication of the change by the rating service. If the licensee's most recent bond issuance ceases to be rated in any category of "A" or above by both Standard and Poors and Moodys, the licensee no longer meets the requirements of Paragraph (1) of Subsection B of this section.

(6) The applicant or licensee must provide to the department a written guarantee (a written commitment by a corporate officer) which states that the licensee will fund and carry out the required decommissioning activities or, upon issuance of an order by the department, the licensee will set up and fund a trust in the amount of the current cost estimates for decommissioning.

[20.3.3.335 NMAC - Rp, 20.3.3.335 NMAC, 04/30/2009]

20.3.3.336 CRITERIA RELATING TO USE OF FINANCIAL TESTS AND SELF-GUARANTEES FOR PROVIDING REASONABLE ASSURANCE OF FUNDS FOR DECOMMISSIONING BY COMMERCIAL COMPANIES THAT HAVE NO OUTSTANDING RATED BONDS:

A. Introduction. An applicant or licensee may provide reasonable assurance of the availability of funds for decommissioning based on furnishing its own guarantee that funds will be available for decommissioning costs and on a demonstration that the company passes the financial test of Subsection B of this section. The terms of the self-guarantee are in Subsection C of this section. This section establishes criteria for passing the financial test for the self guarantee and establishes the terms for a self-guarantee.

B. Financial Test.

(1) To pass the financial test, a company must meet the following criteria:

(a) tangible net worth greater than $10 million, or at least 10 times the total current decommissioning cost estimate (or the current amount required if certification is used), whichever is greater, for all decommissioning activities for which the company is responsible as self-guaranteeing licensee and as parent-guarantor;

(b) assets located in the United States amounting to at least 90 percent of total assets or at least 10 times the total current decommissioning cost estimate (or the current amount required if certification is used) for all decommissioning activities for which the company is responsible as self-guaranteeing licensee and as parent-guarantor; and

(c) a ratio of cash flow divided by total liabilities greater than 0.12 and a ratio of total liabilities divided by net worth less than 1.5.

(2) In addition, to pass the financial test, a company must meet all of the following requirements:

(a) the company's independent certified public accountant must have compared the data used by the company in the financial test which is derived from the independently audited, year-end financial statements for the latest fiscal year, with the amounts in such financial statement; in connection with that procedure, the licensee shall inform the department within 90 days of any matters coming to the attention of the auditor that cause the auditor to believe that the data specified in the financial test shall be adjusted and that the company no longer passes the test;

(b) after the initial financial test, the company must repeat passage of the test within 90 days after the close of each succeeding fiscal year; and

(c) if the licensee no longer meets the requirements of Paragraph (1) of Subsection B of this section, the licensee must send immediate notice to the department of its intent to establish alternate financial assurance as specified in 20.3.3.311 NMAC; the notice must be sent by certified mail, return receipt requested, within 90 days after the end of the fiscal year for which the year end financial data show that the licensee no longer meets the financial test requirements; the licensee must provide alternative financial assurance within 120 days after the end of such fiscal year.

C. Company Self-Guarantee. The terms of a self-guarantee which an applicant or licensee furnishes must provide the following.

(1) The guarantee will remain in force unless the licensee sends notice of cancellation by certified mail to the department; cancellation may not occur until alternative financial assurance mechanism is in place.

(2) The licensee shall provide alternative financial assurance as specified in 20.3.3.311 NMAC within 90 days following receipt by the department of a notice of cancellation of the guarantee.

(3) The guarantee and financial test provisions must remain in effect until the department has terminated the license or until another financial assurance method acceptable to the department has been put in effect by the licensee.

(4) The applicant or licensee must provide to the department a written guarantee (a written commitment by a corporate officer) which states that the licensee will fund and carry out the required decommissioning activities or, upon issuance of an order by the department, the licensee will set up and fund a trust in the amount of the current cost estimates for decommissioning.

[20.3.3.336 NMAC - N, 04/30/2009]

20.3.3.337 CRITERIA RELATING TO USE OF FINANCIAL TESTS AND SELF-GUARANTEE FOR PROVIDING REASONABLE ASSURANCE OF FUNDS FOR DECOMMISSIONING BY NONPROFIT COLLEGES, UNIVERSITIES AND HOSPITALS:

A. Introduction. An applicant or licensee may provide reasonable assurance of the availability of funds for decommissioning based on furnishing its own guarantee that funds will be available for decommissioning costs and on a demonstration that the applicant or licensee passes the financial test of Subsection B of this section. The terms of the self-guarantee are in Subsection C of this section. This section establishes criteria for passing the financial test for the self-guarantee and establishes the terms for a self-guarantee.

B. Financial Test.

(1) For colleges and universities, to pass the financial test a college or university must meet either the criteria in Subparagraph (a) or the criteria in Subparagraph (b) of this paragraph.

(a) For applicants or licensees that issue bonds, a current rating for its most recent uninsured, uncollateralized and unencumbered bond issuance of AAA, AA or A as issued by Standard and Poors or Aaa, Aa or A as issued by Moodys.

(b) For applicants or licensees that do not issue bonds, unrestricted endowment consisting of assets located in the United States of at least $50 million, or at least 30 times the total current decommissioning cost estimate (or the current amount required if certification is used), whichever is greater, for all decommissioning activities for which the college or university is responsible as a self-guaranteeing licensee.

(2) For hospitals, to pass the financial test a hospital must meet either the criteria in Subparagraph (a) or the criteria in Subparagraph (b) of this paragraph.

(a) For applicants or licensees that issue bonds, a current rating for its most recent uninsured, uncollateralized, and unencumbered bond issuance of AAA, AA or A as issued by Standard and Poors or Aaa, Aa or A as issued by Moodys.

(b) For applicants or licensees that do not issue bonds, all the following tests must be met:

(i) total revenues less total expenditures divided by total revenues must be equal to or greater than 0.04;

(ii) long term debt divided by net fixed assets must be less than or equal to 0.67;

(iii) current assets and depreciation fund divided by current liabilities must be greater than or equal to 2.55; and

(iv) operating revenues must be at least 100 times the total current decommissioning cost estimate (or the current amount required if certification is used) for all decommissioning activities for which the hospital is responsible as a self-guaranteeing license.

(3) In addition, to pass the financial test, a licensee must meet all the following requirements:

(a) the licensee's independent certified public accountant must have compared the data used by

the licensee in the financial test, which is required to be derived from the independently audited year end financial statements, based on United States generally accepted accounting practices, for the latest fiscal year, with the amounts in such financial statement; in connection with that procedure, the licensee shall inform the department within 90 days of any matters coming to the attention of the auditor that cause the auditor to believe that the data specified in the financial test shall be adjusted and that the licensee no longer passes the test;

(b) after the initial financial test, the licensee must repeat passage of the test within 90 days after the close of each succeeding fiscal year; and

(c) if the licensee no longer meets the requirements of Subsection B of this section, the licensee must send notice to the department of its intent to establish alternative financial assurance as specified in 20.3.3.311 NMAC; the notice must be sent by certified mail, return receipt requested, within 90 days after the end of the fiscal year for which the year end financial data show that the licensee no longer meets the financial test requirements; the licensee must provide alternate financial assurance within 120 days after the end of such fiscal year.

C. Self-Guarantee. The terms of a self-guarantee which an applicant or licensee furnishes must provide the following.

(1) The guarantee shall remain in force unless the licensee sends notice of cancellation by certified mail and return receipt requested, to the department. Cancellation may not occur unless an alternative financial assurance mechanism is in place.

(2) The licensee shall provide alternative financial assurance as specified in the 20.3.3.311 NMAC within 90 days following receipt by the department of a notice of cancellation of the guarantee.

(3) The guarantee and financial test provisions must remain in effect until the department has terminated the license or until another financial assurance method acceptable to the department has been put in effect by the licensee.

(4) The applicant or licensee must provide to the department a written guarantee (a written commitment by a corporate officer or officer of the institution) which states that the licensee will fund and carry out the required decommissioning activities or, upon issuance of an order by the department, the licensee will set up and fund a trust in the amount of the current cost estimates for decommissioning.

(5) If, at any time, the licensee's most recent bond issuance ceases to be rated in any category of “A” or above by either Standard and Poors or Moodys, the licensee shall provide notice in writing of such fact to the department within 20 days after publication of the change by the rating service.

[20.3.3.337 NMAC - N, 04/30/2009]

20.3.3.338 QUANTITIES FOR USE WITH DECOMMISSIONING AND QUANTITIES OF LICENSED MATERIAL REQUIRING LABELING:

A. Table 338.1

TABLE 338.1	
Radioactive Material	**Microcuries[1]**
Americium-241	0.01
Antimony-122	100
Antimony-124	10
Antimony-125	10
Arsenic-73	100
Arsenic-74	10
Arsenic-76	10
Arsenic-77	100
Barium-131	10
Barium-133	10
Barium-140	10
Bismuth-210	1
Bromine-82	10
Cadmium-109	10
Cadmium-115m	10
Cadmium-115	100

TABLE 338.1	
Radioactive Material	**Microcuries[1]**
Calcium-45	10
Calcium-47	10
Carbon-14	100
Cerium-141	100
Cerium-143	100
Cerium-144	1
Cesium-131	1,000
Cesium-134m	100
Cesium-134	1
Cesium-135	10
Cesium-136	10
Cesium-137	10
Chlorine-36	10
Chlorine-38	10
Chromium-51	1,000
Cobalt-58m	10
Cobalt-58	10
Cobalt-60	1
Copper-64	100
Dysprosium-165	10
Dysprosium-166	100
Erbium-169	100
Erbium-171	100
Europium-152 (9.2 h)	100
Europium-152 (13 yr)	1
Europium-154	1
Europium-155	10
Florine-18	1,000
Gadolinium-153	10
Gadolinium-159	100
Gallium-72	10
Germanium-71	100
Gold-198	100
Gold-199	100
Hafnium-181	10
Holmium-166	100
Hydrogen-3	1,000
Indium-113m	100
Indium-114m	10
Indium-115m	100
Indium-115	10
Iodine-125	1
Iodine-126	1
Iodine-129	0.1
Iodine-131	1
Iodine-132	10
Iodine-133	1
Iodine-134	10
Iodine-135	10

TABLE 338.1	
Radioactive Material	**Microcuries[1]**
Iridium-192	10
Iridium-194	100
Iron-55	100
Iron-59	10
Krypton-85	100
Krypton-87	10
Lanthanum-140	10
Lutetium-177	100
Manganese-52	10
Manganese-54	10
Manganese-56	10
Mercury-197m	100
Mercury-197	100
Mercury-203	10
Molybdenum-99	100
Neodymium-147	100
Neodymium-149	100
Nickel-59	100
Nickel-63	10
Nickel-65	100
Niobium-93m	10
Niobium-95	10
Niobium-97	10
Osmium-185	10
Osmium-191m	100
Osmium-191	100
Osmium-193	100
Palladium-103	100
Palladium-109	100
Phosphorus-32	10
Platinum-191	100
Platinum-193m	100
Platinum-193	100
Platinum-197m	100
Platinum-197	100
Plutonium-239	0.01
Polonium-210	0.1
Potassium-42	10
Praseodymium-142	100
Praseodymium-143	100
Promethium-147	10
Promethium-149	10
Radium-226	0.01
Rhenium-186	100
Rhenium-188	100
Rhodium-103m	100
Rhodium-105	100
Rubidium-86	10
Rubidium-87	10

TABLE 338.1	
Radioactive Material	**Microcuries[1]**
Ruthenium-97	100
Ruthenium-103	10
Ruthenium-105	10
Ruthenium-106	1
Samarium-151	10
Samarium-153	100
Scandium-46	10
Scandium-47	100
Scandium-48	10
Selenium-75	10
Silicon-31	100
Silver-105	10
Silver-110m	1
Silver-111	100
Sodium-22	1
Sodium-24	10
Strontium-89	1
Strontium-90	0.1
Strontium-91	10
Strontium-92	10
Sulfur-35	100
Tantalum-182	10
Technetium-96	10
Technetium-97m	100
Technetium-97	100
Technetium-99m	100
Technetium-99	10
Tellurium-125m	10
Tellurium-127m	10
Tellurium-127	100
Tellurium-129m	10
Tellurium-129	100
Tellurium-131m	10
Tellurium-132	10
Terbium-160	10
Thallium-200	100
Thallium-201	100
Thallium-202	100
Thallium-204	10
Thorium (natural)[2]	100
Thulium-170	10
Thulium-171	10
Tin-113	10
Tin-125	10
Tungsten-181	10
Tungsten-185	10
Tungsten-187	100
Uranium (natural)[3]	100
Uranium-233	0.01

TABLE 338.1	
Radioactive Material	**Microcuries[1]**
Uranium-234	0.01
Uranium-235	0.01
Vanadium-48	10
Xenon-131m	1,000
Xenon-133	100
Xenon-135	100
Ytterbium-175	100
Yttrium-90	10
Yttrium-91	10
Yttrium-92	100
Yttrium-93	100
Zinc-65	10
Zinc-69m	100
Zinc-69	1,000
Zirconium-93	10
Zirconium-95	10
Zirconium-97	10
Any alpha emitting radionuclide not listed above or mixtures of alpha emitters of unknown composition	0.01
Any radionuclide other than alpha emitting radionuclides, not listed above or mixtures of beta emitters of unknown composition	0.1

Table 338.1 notes:
[1] to convert microcurie to kilobecquerels, multiply the microcurie value by 37;
[2] based on alpha disintegration rate of Th-232, Th-230 and their daughter products;
[3] based on alpha disintegration rate of U-238, U-234 and U-235.

B. Note. Where a combination of isotopes in known amounts is involved, the limit for the combination shall be derived as follows: determine, for each isotope in the combination, the ratio between the quantity present in the combination and the limit otherwise established for the specific isotope when not in combination. The sum of such ratios for all the isotopes in the combination may not exceed "1" (i.e. “unity”).
[20.3.3.338 NMAC - Rp, 20.3.4.465 NMAC, 04/30/2009]

HISTORY OF 20.3.3 NMAC:
Pre-NMAC History: The material in this part was derived from that previously filed as follows:
EIB 73-2, Regulations for Governing the Health and Environmental Aspects of Radiation filed on 7/9/73;
EIB 73-2, Amendment 1, Regulations for Governing the Health and Environmental Aspects of Radiation filed on 4/17/78;
EIB RPR-1, Radiation Protection Regulations filed on 4/21/80;
EIB RPR-1, Amendment 1, Radiation Protection Regulations filed on 10/13/81;
EIB RPR-1, Amendment 2, Radiation Protection Regulations filed on 12/15/82; and
EIB RPR-1, Radiation Protection Regulations filed on 3/10/89.

History of Repealed Material:
20.3.3 NMAC, Licensing of Radioactive Material (filed 03/15/2004) repealed 04/30/2009).

Other History: EIB RPR 1, Radiation Protection Regulations (filed 03/10/1989) renumbered and reformatted to 20 NMAC 3.1; Radioactive Materials and Radiation Machines, effective 05/03/1995;
20 NMAC 3.1; Radioactive Materials and Radiation Machines (filed 04/03/1995) internally renumbered, reformatted and replaced by 20 NMAC 3.1, Radioactive Materials and Radiation Machines, effective 07/30/1999.

20 NMAC 3.1.Subpart 3, Licensing of Radioactive Material (filed 06/17/1999), reformatted, amended and replaced by 20.3.3 NMAC, Licensing of Radioactive Material, effective 04/15/2004.
20.3.3 NMAC, Licensing of Radioactive Material (filed 03/15/2004) replaced by 20.3.3 NMAC, Licensing of Radioactive Material, effective 04/30/2009.