

APPENDIX A-10

TABLE 1 – EXEMPTIONS

Exemption 1. Except for persons who apply radioactive material to, or who incorporate radioactive material into, the following products, or persons who initially transfer them for sale or distribution, any person is exempt from the requirements of this Part (rule) to the extent that he transfers, receives, possesses or uses the following products:

(i) timepieces or timepiece hands or dials containing radium which were manufactured prior to July 1, 1973.

(ii) timepieces or timepiece hands or dials containing radium which were manufactured under a specific license issued by the commissioner, the State Department of Health or any Agreement State and which meet the following or equivalent conditions:

(a) timepieces or timepiece hands or dials containing not more than the following specified quantities of radium:

1. 0.15 microcurie per watch;
2. 0.03 microcurie per watch hand;
3. 0.09 microcurie per watch dial;
4. 0.20 microcurie per clock;
5. 0.04 microcurie per clock hand;
6. 0.12 microcurie per clock dial.

(b) the timepiece is not a pocket watch;

(c) the timepiece is marked or coded to identify the date of manufacture and that it contains radium;

(d) the timepiece emits sufficient light, omitting photoactivation, that its dial can be read in the dark during its entire lifetime.

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

(a) 25 millicuries of hydrogen 3 per timepiece;

(b) five millicuries of hydrogen 3 per hand;

- (c) 15 millicuries of hydrogen 3 per dial (bezels when used shall be considered as part of the dial);
- (d) 100 microcuries of promethium 147 per watch hand or 200 microcuries of promethium 147 per any other timepiece;
- (e) 20 microcuries of promethium 147 per watch hand or 40 microcuries of promethium 147 per other timepiece hand;
- (f) 60 microcuries of promethium 147 per watch dial or 120 microcuries of promethium 147 per other timepiece dial (bezels when used shall be considered as part of the dial);
- (g) the levels of radiation from hand and dials containing promethium 147 will not exceed, when measured through 50 milligrams per square centimeter of absorber:
 - (1) for wrist watches, 0.1 millirad per hour at 10 centimeters from any surface;
 - (2) for pocket watches, 0.1 millirad per hour at one centimeter from any surface;
 - (3) for any other timepiece, 0.2 millirad per hour at 10 centimeters from any surface.

Exemption 2. Radioactive material contained in any item in a concentration not exceeding that set forth in Table 8. No person may introduce radioactive material into a product or material when such person knows or has reason to believe that such product or material will be transferred to persons who are exempt under this Exemption or equivalent regulations of the United States Nuclear Regulatory Commission or any agreement state, unless such introduction or transfer is accomplished in accordance with a specific license or permit issued pursuant to this Part (rule) or by the State Department of Health, the New York City Department of Health, the United States Nuclear Regulatory Commission or any agreement state, and such specific license or permit expressly authorizes such introduction. For the purposes of this Exemption, the processing of materials or items which results in an increase in the concentration of radioactive material therein shall be deemed to be the same as introduction by the addition of radioactive material.

Exemption 3. Source material contained in, but less than 0.05 percent by weight of, any chemical mixture, compound, solution or alloy.

Exemption 4. Source material contained in unrefined and unprocessed ore. This Exemption does not apply to any refinement or processing of ore containing 0.05 percent or more by weight of source material.

Exemption 5. Source material contained in any of the following products: glazed ceramic tableware, the glaze of which contains not more than 20 percent by weight of source material; glassware, containing more than 10 percent by weight of source material, except glass brick, pane glass, ceramic tile and other glass, glass enamel or ceramic products used in building construction; glass enamel and glass enamel frit containing not more than 10 percent by weight of source material imported or ordered for importation in the United States, before July 25, 1983; piezoelectric ceramic containing not more than two percent by weight of source material. This Exemption does not apply to the manufacture or importation of such products or their components.

Exemption 6. Thorium contained in incandescent gas mantles, vacuum tubes, welding rods, electric lamps for illuminating purposes provided that each lamp does not contain more than 50 milligrams of thorium, or germicidal lamps and sunlamps and lamps for outdoor or industrial lighting provided that each lamp does not contain more than two grams of Thorium, or personnel neutron dosimeters provided that each dosimeter does not contain more than 50 milligrams of Thorium. This Exemption does not apply to the manufacture or importation of such products or their components.

Exemption 7. Uranium contained in counterweights installed in aircraft, rockets, projectiles or missiles or stored or handled in connection with the installation or removal of such counterweights if such counterweights are manufactured or imported in accordance with a specific license issued by the United States Nuclear Regulatory Commission and such license provides that such counterweights may be distributed to persons who have not been issued a licensing document therefor, and if each such counterweight has been impressed with a statement, clearly legible after plating, which states "Depleted Uranium" (counterweights which were manufactured prior to December 1, 1969 are impressed with the statement "Caution-Radioactive Material-Uranium" and is durable and legibly labeled or marked with the identification of the manufacturer, and the statement "Unauthorized Alterations Prohibited." The Exemption contained herein shall not be deemed to authorize the chemical, physical or metallurgical treatment or processing of any such counterweights other than repair or restoration of any plating or other covering and there is no removal or penetration of the plating on such counterweights.

Exemption 8. Source material contained in photographic films, negatives or prints. This Exemption does not apply to the manufacture or importation of such products or their components.

Exemption 9. Tungsten-Thorium alloy or Magnesium-Thorium alloy containing not more than four percent by weight of Thorium when fabricated into any finished product or part thereof. This Exemption does not apply to the manufacture or importation of the product or to any treatment or processing thereof.

Exemption 10. Reserved.

Exemption 11. Radiation equipment which by reason of its design cannot emit radiation at a level which, when measured five centimeters from the surface of such radiation equipment with all external shielding removed, exceeds a rate of 0.5 millirem in any hour. This Exemption does not apply to the testing or servicing of such equipment during the production thereof.

Exemption 12. Television receivers providing the dose rate averaged over 10 square centimeters at five centimeters from any outer surface is less than 0.5 millirem per hour. This Exemption does not apply to the testing or servicing of receivers during the production thereof.

Exemption 13. Radiation equipment during its storage, shipment, retail sale or other similar use in the course of which the equipment does not emit radiation. This Exemption does not apply to the labeling requirements of this Part (rule).

Exemption 14. Lock illuminators each containing not more than 15 millicuries of Hydrogen 3 or two millicuries of Promethium 147 installed in automobile locks, provided also that the radiation level from lock illuminators containing Promethium 147 does not exceed one millirad per hour at one centimeter from any surface when measured through 50 milligrams per square centimeter of absorber. This Exemption does not apply to the manufacture or importation of such illuminators or to their installation into automobile locks.

Exemption 15. Rare earth metals and compounds, mixtures and products containing not more than 0.25 percent by weight Thorium, Uranium or any combination of these. This Exemption does not apply to the manufacture or importation of any of these products.

Exemption 16. Uranium 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 3.2 millimeters. This Exemption does not authorize the manufacture or importation of any such shielding or container.

Exemption 17. Thorium contained in any finished optical lens which contains not more than 30 percent by weight Thorium. This Exemption does not apply to the importation or the shaping, grinding or polishing of such lenses, to manufacturing processes other than the assembly of such lenses into optical systems and devices without any alteration of the lens, or to the receipt, possession, use or transfer of Thorium contained in contact lenses or in spectacles, or in eyepieces in binoculars or other optical instruments.

Exemption 18. Uranium contained in any detector head for use in fire detection units. Each detector head shall contain not more than 0.01 microcurie of Uranium. This Exemption does not apply to the manufacture or importation of any detector head containing Uranium.

Exemption 19. Balances of precision, or balance parts, containing Tritium. Each such balance part shall contain not more than 0.5 millicurie of Tritium. This Exemption does not authorize the importation or the application of Tritium to or incorporation of Tritium in any such balances or balance parts.

Exemption 20. Marine compasses and other marine navigational instruments containing Tritium gas. Each such marine compass shall contain not more than 750 millicuries of Tritium gas. Other marine navigational instruments shall contain not more than 250 millicuries of Tritium gas. This Exemption does not authorize the importation, the application of Tritium to or the incorporation of Tritium in any such marine compasses or other marine navigational instruments.

Exemption 21. Thermostat dials and pointers containing not more than 25 millicuries of Tritium per thermostat. This Exemption does not authorize the importation, the application of Tritium to or the incorporation of Tritium in thermostat dials or pointers.

Exemption 22. Electron tubes containing specified amounts of radioactive material. Each tube contains no more than one of the following quantities of radioactive materials:

- (i) 10 millicuries of Tritium, except for 150 millicuries of Tritium in microwave receiver protector tubes;
- (ii) 1 microcurie of Cobalt 60;
- (iii) 5 microcuries of Nickel 63;
- (iv) 30 microcuries of Krypton 85;
- (v) 5 microcuries of Cesium 137;
- (vi) 30 microcuries of Promethium 147.

The radiation level due to the radioactive material contained in each electron tube shall not exceed one millirad per hour at one centimeter from any surface when measured through seven milligrams per square centimeter of absorber. This Exemption does not authorize the importation, application of radioactive material to, or incorporation of radioactive material into, any electron tube.

Exemption 23. Synthetic plastic resins containing Scandium 46 for sand consolidation in oil wells which have been manufactured in accordance with a specific license issued by the commissioner, the United States Nuclear Regulatory Commission or any agreement state, which authorizes distribution of such resins to persons exempt pursuant to this Part (Rule) or equivalent regulations of the United States Nuclear Regulatory Commission or any agreement State. This Exemption does not authorize the manufacture or importation of any such resins.

Exemption 24. Automobile shift quadrants containing not more than 25 millicuries of Tritium. This Exemption does not authorize importation, the application of Tritium to, or the incorporation of Tritium in, any such automobile shift quadrant.

Exemption 25. Thorium contained in any finished aircraft engine part containing Nickel-Thoria alloy, provided that: the Thorium is dispersed in the Nickel-Thoria alloy in the form of finely divided Thoria (Thorium oxide); and the Thorium content of the Nickel-Thoria alloy does not exceed four percent by weight. This Exemption does not authorize the importation or manufacture of such finished aircraft engine parts containing Thorium.

Exemption 26. Radioactive material contained in instruments or devices other than timepieces covered by Exemption 1 to provide self-illumination. Any such instrument or device shall be produced, manufactured, processed, imported or transferred in accordance with a specific license issued by the United States Nuclear Regulatory Commission or an agreement state. Such a license shall authorize the transfer to persons exempt from the requirements of this Part (rule) or equivalent regulations of the United States Nuclear Regulatory Commission or an agreement state. This Exemption does not apply to products used for frivolous purposes or in toys or adornments.

Exemption 27. Radioactive material contained in smoke, gas or aerosol detectors designed to protect life or property from fires or airborne hazards. Such detectors shall be produced, manufactured, processed, imported or transferred in accordance with specific licenses issued by an agreement state or by the United States Nuclear Regulatory Commission. Such licenses shall authorize the transfer of such detectors to persons exempt from the requirements of this Part (rule) or equivalent regulations of the United States Nuclear Regulatory Commission or an agreement state.

Exemption 28. Radioactive material contained in individual, packaged quantities each of which does not exceed the value listed in Table 2 of this Part (rule). For purposes of this Exemption, an individual, packaged quantity may be composed of fractional parts of one or more of the exempt quantities, provided that the sum of such fractions shall not exceed unity. There shall be no commercial distribution or human use of radioactive material possessed under this Exemption. Also, sources obtained under this exemption shall not be used in a combination that exceeds the value listed in Table 2 of this Part for a single radionuclide, or the sum of the fractions for more than one radionuclide, as a source of ionizing radiation in any device designed for use in detecting, measuring, gauging or controlling thickness, density, level, interface location, radiation, leakage, or qualitative or quantitative chemical composition, or designed for producing light or an ionized atmosphere. Radioactive material exempted under this Part (rule) effective October 15, 1962, and which are larger in quantity than listed in Table 2 and obtained before September 1, 1971 shall continue to be exempt.

Exemption 29. Radioactive sources contained in or on ionizing radiation measuring instruments for purposes of internal calibration or standardization. No source shall exceed the quantity set forth in Table 2 of this Part (rule), or 0.05 microcurie of Americium-241, and each instrument shall contain no more than 10 such sources. For purposes of this Exemption, each source may contain more than one radionuclide. An individual exempt quantity may be composed of fractional parts of the exempt quantities in Table 2 of this Part, provided that the sum of the fractions shall not exceed unity. Such sources shall be produced, manufactured, processed, imported or transferred in accordance with a specific license issued by the United States Nuclear Regulatory Commission, an agreement state or a licensing nonagreement state. Such license shall authorize the transfer of such calibration sources to persons exempt from the requirements of this Part (rule) or equivalent regulations of the United States Nuclear Regulatory Commission or an agreement state.

Exemption 30. Cobalt-60 contained in spark gap irradiators for use in electrically ignited fuel oil burners having a firing rate of at least 11.4 liters (three gallons) per hour and each spark gap containing no more than one microcurie of Cobalt-60. Such spark gap irradiators shall be manufactured, assembled or imported in accordance with a specific license issued by the United States Nuclear Regulatory Commission or an agreement State. The exempt transfer of such spark gap irradiators shall be in accordance with a specific license by the United States Nuclear Regulatory Commission.