

**4731.3030 EXEMPTION; CERTAIN ITEMS CONTAINING RADIOACTIVE MATERIAL.**

Subpart 1. **Exempt products.** Except for persons who apply radioactive material to or incorporate radioactive material into the following products or persons who initially transfer for sale or distribution the following products containing radioactive material, a person is exempt from parts 4731.3000 to 4731.7280 to the extent that the person receives, possesses, uses, transfers, owns, or acquires the following products:

A. timepieces or hands or dials of timepieces that:

(1) contain not more than the following specified quantities of radioactive material:

- (a) 25 millicuries of tritium per timepiece;
- (b) five millicuries of tritium per hand;
- (c) 15 millicuries of tritium per dial (bezels, when used, are considered part of the dial);
- (d) 100 microcuries of promethium-147 per watch 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 any other timepiece dial (bezels, when used, are considered as part of the dial);
- (g) one microcurie (0.037 MBq) of radium-226 per timepiece in intact timepieces manufactured prior to November 30, 2007; and

(2) do not exceed the following levels of radiation. The levels of radiation from hands and dials containing promethium-147 must not exceed, when measured through 50 milligrams per square centimeter of absorber:

- (a) for wrist watches, 0.1 millirad per hour at ten centimeters from any surface;
  - (b) for pocket watches, 0.1 millirad per hour at one centimeter from any surface;
- or
- (c) for any other timepiece, 0.2 millirad per hour at ten centimeters from any surface;

B. (1) static elimination devices which contain, as a sealed source or sources, by-product material consisting of a total of not more than 18.5 MBq (500  $\mu$ Ci) of polonium-210 per device;

(2) ion-generating tubes designed for ionization of air that contain, as a sealed source or sources, by-product material consisting of a total of not more than 18.5 MBq (500 $\mu$ Ci) of polonium-210 per device or of a total of not more than 1.85 GBq (50 mCi) of hydrogen-3 (tritium) per device; and

(3) devices in subitems (1) and (2) authorized before December 31, 2014, for use under a general license that were manufactured, tested, and labeled by the manufacturer in accordance with the specifications contained in a specific license issued by the commissioner, the NRC, or an agreement state.

C. balances of precision containing not more than one millicurie of tritium per balance or not more than 0.5 millicurie of tritium per balance part manufactured before December 17, 2007;

D. marine compasses containing not more than 750 millicuries of tritium gas and other marine navigational instruments containing not more than 250 millicuries of tritium gas manufactured before December 17, 2007;

E. ionization chamber smoke detectors containing not more than one microcurie ( $\mu\text{Ci}$ ) of americium-241 per detector in the form of a foil and designed to protect life and property from fires;

F. electron tubes. For purposes of this item, "electron tubes" include spark gap tubes, power tubes, gas tubes including glow lamps, receiving tubes, microwave tubes, indicator tubes, pickup tubes, radiation detection tubes, and any other completely sealed tube that is designed to conduct or control electrical currents. The exemption under this item applies only if the levels of radiation from each electron tube containing radioactive material do not exceed one millirad per hour at one centimeter from any surface when measured through seven milligrams per square centimeter of absorber and if each tube does not contain more than one of the following specified quantities of radioactive materials:

(1) 150 millicuries of tritium per microwave receiver protector tube or ten millicuries of tritium per any other electron tube;

(2) one microcurie of cobalt-60;

(3) five microcuries of nickel-63;

(4) 30 microcuries of krypton-85;

(5) five microcuries of cesium-137; or

(6) 30 microcuries of promethium-147; or

G. ionizing radiation measuring instruments containing, for purposes of internal calibration or standardization, one or more sources of radioactive material. For purposes of this item, an instrument's source 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 part 4731.3145, provided that the sum of the fractions does not exceed unity. For purposes of this item, 0.05 microcurie of americium-241 is an exempt quantity under part 4731.3145. The exemption under this item applies only if:

(1) each source contains no more than one exempt quantity under part 4731.3145; and

(2) each instrument contains no more than ten exempt quantities.

Subp. 2. **Specific license required.** A person who desires to apply radioactive material to or incorporate radioactive material into the products exempted under subpart 1 or who desires to initially transfer for sale or distribution such products containing radioactive material must apply for a specific license under Code of Federal Regulations, title 10, section 32.14, which license states that the product may be distributed by the licensee to persons exempt under subpart 1.

**Statutory Authority:** *MS s 144.1201; 144.1202; 144.1203; 144.1204; 144.1205*

**History:** *29 SR 755; 33 SR 1440; 40 SR 145; 44 SR 239*

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