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during the reporting period, this information shall be reported to 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 this section. Records required by this paragraph must be maintained for a period of 3 years following the date of the recorded event.

[65 FR 79189, Dec. 18, 2000, as amended at 68 FR 58805, Oct. 10, 2003; 73 FR 5719, Jan. 31, 2008]

§ 32.53 Luminous safety devices for use in aircraft: Requirements for license to manufacture, assemble, repair or initially transfer.

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 §31.7 of this chapter, will be approved if:

- (a) The applicant satisfies the general requirements specified in §30.33 of this chapter;
- (b) The applicant submits sufficient information regarding each device pertinent to evaluation of the potential radiation exposure, including:
- (1) Chemical and physical form and maximum quantity of tritium or promethium-147 in each device;
- (2) Details of construction and design;
- (3) Details of the method of binding or containing the tritium or promethium-147;
- (4) Procedures for and results of prototype testing to demonstrate that the tritium or promethium-147 will not be released to the environment under the most severe conditions likely to be encountered in normal use;
- (5) Any quality control procedures proposed as alternatives to those prescribed by §32.55;
- (6) Any additional information, including experimental studies and tests, required by the Commission to facilitate a determination of the safety of the device.
- (c) Each device will contain no more than 10 curies of tritium or 300 millicuries of promethium-147. The lev-

els of radiation from each device containing promethium-147 will not exceed 0.5 millirad per hour at 10 centimeters from any surface when measured through 50 milligrams per square centimeter of absorber.

- (d) The Commission determines that:
- (1) The method of incorporation and binding of the tritium or promethium-147 in the device is such that the tritium or promethium-147 will not be released under the most severe conditions which are likely to be encountered in normal use and handling of the device:
- (2) The tritium or promethium-147 is incorporated or enclosed so as to preclude direct physical contact by any person with it;
- (3) The device is so designed that it cannot easily be disassembled; and
- (4) The device has been subjected to and has satisfactorily passed the prototype tests prescribed by §32.101, Schedule B, of this part.

[30 FR 8192, June 26, 1965, as amended at 33 FR 6463, Apr. 27, 1968; 43 FR 6923, Feb. 17, 1978]

§ 32.54 Same: Labeling of devices.

(a) A person licensed under §32.53 to manufacture, assemble, or initially transfer devices containing tritium or promethium-147 for distribution to persons generally licensed under §31.7 of this chapter shall, except as provided in paragraph (b) of this section, affix to each device a label containing the radiation symbol prescribed by §20.1901 of this chapter, such other information as may be required by the Commission including disposal instructions when appropriate, and the following or a substantially similar statement which contains the information called for in the following statement: 1

The receipt, possession, use, and transfer
of this device, Model*, Serial
No.*, containing (Identity
and quantity of radioactive material) are
subject to a general license or the equivalent
and the regulations of the U.S. NRC or of a
State with which the NRC has entered into
an agreement for the exercise of regulatory
authority. Do not remove this label.

¹Devices licensed under §32.53 prior to January 19, 1975 may bear labels authorized by the regulations in effect on January 1, 1975.

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(Name of manufacturer, assembler, or initial transferor.)*

*The model, serial number, and name of manufacturer, assembler, or initial transferor may be omitted from this label provided they are elsewhere specified in labeling affixed to the device.

- (b) If the Commission determines that it is not feasible to affix a label to the device containing all the information called for in paragraph (a) of this section, it may waive the requirements of that paragraph and require in lieu thereof that:
- (1) A label be affixed to the device identifying:
- (i) The manufacturer, assembler, or initial transferor; and
- (ii) The type of radioactive material; and
- (2) A leaflet bearing the following information be enclosed in or accompany the container in which the device is shipped:
- (i) The name of the manufacturer, assembler, or initial transferor,
- (ii) The type and quantity of radioactive material,
 - (iii) The model number,
- (iv) A statement that the receipt, possession, use, and transfer of the device are subject to a general license or the equivalent and the regulations of the U.S. NRC or of an Agreement State, and
- (v) Such other information as may be required by the Commission, including disposal instructions when appropriate.
- [33 FR 16331, Nov. 7, 1968, as amended at 40 FR 8785, Mar. 3, 1975; 43 FR 6923, Feb. 17, 1978; 63 FR 39483, July 23, 1998]

§32.55 Same: Quality assurance; prohibition of transfer.

- (a) Each person licensed under §32.53 shall visually inspect each device and shall reject any which has an observable physical defect that could affect containment of the tritium or promethium-147.
- (b) Each person licensed under §32.53 shall take a random sample of the size required by the table in §32.110 for Lot Tolerance Percent Defective of 5.0 percent from each inspection lot, and shall subject each unit in the sample to the following tests:

- (1) Each device shall be immersed in 30 inches of water for 24 hours and shall show no visible evidence of water entry. Absolute pressure of the air above the water shall then be reduced to 1 inch of mercury. Lowered pressure shall be maintained for 1 minute or until air bubbles cease to be given off by the water, whichever is the longer. Pressure shall then be increased to normal atmospheric pressure. Any device which leaks as evidenced by bubbles emanating from within the device, or water entering the device, shall be considered as a defective unit.
- (2) The immersion test water from the preceding test in paragraph (b)(1) of this section shall be measured for tritium or promethium-147 content by an apparatus that has been calibrated to measure tritium or promethium-147, as appropriate. If more than 0.1 percent of the original amount of tritium or promethium-147 in any device is found to have leaked into the immersion test water, the leaking device shall be considered as a defective unit.
- (3) The levels of radiation from each device containing promethium-147 shall be measured. Any device which has a radiation level in excess of 0.5 millirad per hour at 10 centimeters from any surface when measured through 50 milligrams per square centimeter of absorber, shall be considered as a defective unit.
- (c) An application for a license or for amendment of a license may include a description of procedures proposed as alternatives to those prescribed by paragraph (b) of this section, and proposed criteria for acceptance under those procedures. The Commission will approve the proposed alternative procedures if the applicant demonstrates that:
- (1) They will consider defective any sampled device which has a leakage rate exceeding 0.1 percent of the original quantity of tritium or promethium 147 in any 24-hour period; and
- (2) The operating characteristic curve or confidence interval estimate for the alternative procedures provides a Lot Tolerance Percent Defective of 5.0 percent at the consumer's risk of 0.10.