

be limited so that the sum of the transport indexes in any individual group of packages does not exceed 50. Groups of these packages must be stored so as to maintain a spacing of at least 6 m (20 feet) from other groups of packages containing Class 7 (radioactive) materials.

(b) Mixing of different kinds of Class 7 (radioactive) materials packages that include fissile materials packages is authorized only in accordance with § 173.459.

[Amdt. 173–244, 60 FR 50307, Sept. 28, 1995, as amended by 66 FR 45380, Aug. 28, 2001]

**§ 173.448 General transportation requirements.**

(a) Each shipment of Class 7 (radioactive) materials must be secured to prevent shifting during normal transportation conditions.

(b) Except as provided in §§ 174.81, 176.83, and 177.848 of this subchapter, or as otherwise required by the competent authority in the applicable certificate, a package of Class 7 (radioactive) materials may be carried among packaged general cargo without special stowage provisions, if—

(1) The heat output in watts does not exceed 0.1 times the minimum package dimension in cm; or

(2) The average surface heat flux of the package does not exceed 15 watts per square meter and the immediately surrounding cargo is not in sacks or bags or otherwise in a form that would seriously impede air circulation for heat removal.

(c) Packages bearing labels prescribed in § 172.403 of this subchapter may not be carried in compartments occupied by passengers, except in those compartments exclusively reserved for couriers accompanying those packages.

(d) Mixing of different kinds of packages that include fissile packages is authorized only in accordance with § 173.459.

(e) No person shall offer for transportation or transport aboard a passenger-carrying aircraft any single package with a transport index greater than 3.0 or an overpack with a transport index greater than 3.0.

(f) No person shall offer for transportation or transport aboard a passenger-carrying aircraft any Class 7 (radio-

active) material unless that material is intended for use in, or incident to, research, medical diagnosis or treatment.

(g) If an overpack is used to consolidate individual packages of Class 7 (radioactive) materials, the packages must comply with the packaging, marking, and labeling requirements of this subchapter, and the following:

(1) The overpack must be labeled as prescribed in § 172.403 of this subchapter, except as follows:

(i) The “contents” entry on the label may state “mixed” unless each inside package contains the same radionuclide(s);

(ii) The “activity” entry on the label must be determined by adding together the number of Becquerels (curies) of the Class 7 (radioactive) materials packages contained therein;

(iii) For a non-rigid overpack, the required label together with required package markings must be affixed to the overpack by means of a securely attached, durable tag. The transport index must be determined by adding together the transport indexes of the Class 7 (radioactive) materials packages contained therein; and

(iv) For a rigid overpack, the transport index must be determined by:

(A) Adding together the transport indexes of the Class 7 (radioactive) materials packages contained in the overpack; or

(B) Except for fissile Class 7 (radioactive) materials, direct measurements as prescribed in § 173.403 for transport index, taken by the person initially offering the packages contained within the overpack for shipment.

(2) The overpack must be marked as prescribed in subpart D of part 172 of this subchapter and § 173.25(a).

(3) The transport index of the overpack may not exceed 3.0 for passenger-carrying aircraft shipments, or 10.0 for cargo-aircraft only shipments.

**§ 173.453 Fissile materials—exceptions.**

The requirements of §§ 173.457 and 173.459 do not apply to:

(a) A package containing 15 g or less of fissile radionuclides. If the material is transported in bulk, the quantity limitation applies to the conveyance.

(b) A package containing homogeneous solutions or mixtures where: