Pipeline and Haz. Matls. Safety Admin., DOT

§172.403

Transport index	Maximum radiation level at any point on the external surface	Label category ¹
02	Less than or equal to 0.005 mSv/h (0.5 mrem/h).	WHITE-I.
More than 0 but not more than 1	Greater than 0.005 mSv/h (0.5 mrem/h) but less than or equal to 0.5 mSv/h (50 mrem/h).	YELLOW-II.
More than 1 but not more than 10	Greater than 0.5 mSv/h (50 mrem/h) but less than or equal to 2 mSv/h (200 mrem/h).	YELLOW-III.
More than 10	Greater than 2 mSv/h (200 mrem/h) but less than or equal to 10 mSv/h (1,000 mrem/h).	YELLOW-III (Must be shipped under exclusive use provisions; see 173.441(b) of this subchapter).

¹Any package containing a "highway route controlled quantity" (§173.403 of this subchapter) must be labelled as RADIO-ACTIVE YELLOW-III. ²If the measured TI is not greater than 0.05, the value may be considered to be zero.

(d) *EMPTY label.* See §173.428(e) of this subchapter for EMPTY labeling requirements.

(e) FISSILE label. For packages required in §172.402 to bear a FISSILE label, each such label must be completed with the criticality safety index (CSI) assigned in the NRC or DOE package design approval, or in the certificate of approval for special arrangement or the certificate of approval for the package design issued by the Competent Authority for import and export shipments. For overpacks and freight containers required in §172.402 to bear a FISSILE label, the CSI on the label must be the sum of the CSIs for all of the packages contained in the overpack or freight container.

(f) Each package required by this section to be labeled with a RADIO-ACTIVE label must have two of these labels, affixed to opposite sides of the package. (See 172.406(e)(3) for freight container label requirements).

(g) The following applicable items of information must be entered in the blank spaces on the RADIOACTIVE label by legible printing (manual or mechanical), using a durable weather resistant means of marking:

(1) Contents. Except for LSA-1 material, the names of the radionuclides as taken from the listing of radionuclides in §173.435 of this subchapter (symbols which conform to established radiation protection terminology are authorized, *i.e.*, ⁹⁹Mo, ⁶⁰Co, etc.). For mixtures of radionuclides, with consideration of space available on the label, the radionuclides that must be shown must be determined in accordance with §173.433(g) of this subchapter. For LSA-I material, the term "LSA-I" may be

used in place of the names of the radionuclides.

(2) Activity. The maximum activity of the radioactive contents in the package during transport must be expressed in appropriate SI units (e.g., Becquerels (Bq), Terabecquerels (TBq)). The activity may also be stated in appropriate customary units (e.g., Curies (Ci), milliCuries (mCi), microCuries (uCi)) in parentheses following the SI units. Abbreviations are authorized. Except for plutonium-239 and plutonium-241, the weight in grams or kilograms of fissile radionuclides (or the mass of each fissile nuclide for mixtures when appropriate) may be inserted instead of activity units. For plutonium-239 and plutonium-241, the weight in grams of fissile radionuclides (or the mass of each fissile nuclide for mixtures when appropriate) may be inserted in addition to the activity units.

(3) *Transport index*. (see §173.403 of this subchapter.)

(h) When one or more packages of Class 7 (radioactive) material are placed within an overpack, the overpack must be labeled as prescribed in this section, except as follows:

(1) The "contents" entry on the label may state "mixed" in place of the names of the radionuclides unless each inside package contains the same radionuclide(s).

(2) The "activity" entry on the label must be determined by adding together the number of becquerels of the Class 7 (radioactive) materials packages contained therein.

(3) For an overpack, the transport index (TI) must be determined by adding together the transport indices of the Class 7 (radioactive) materials