

§ 173.428

authorized. Trailer-on-flat-car service is not authorized.

(c) LSA material and SCO in groups LSA-I and SCO-I may be transported unpackaged under the following conditions:

(1) All unpackaged material, other than ores containing only naturally occurring radionuclides, shall be transported in such a manner that under normal conditions of transport there will be no escape of the radioactive contents from the conveyance nor will there be any loss of shielding;

(2) Each conveyance must be under exclusive use, except when only transporting SCO-I on which the contamination on the accessible and the inaccessible surfaces is not greater than 4.0 Bq/cm² for beta and gamma emitters and low toxicity alpha emitters and 0.4 Bq/cm² for all other alpha emitters; and

(3) For SCO-I where it is suspected that non-fixed contamination exists on inaccessible surfaces in excess of the values specified in paragraph (c)(2) of this section, measures shall be taken to ensure that the radioactive material is not released into the conveyance or to the environment.

(d) LSA and SCO that exceed the packaging limits in this section must be packaged in accordance with 10 CFR part 71.

(e) Tables 5 and 6 are as follows:

TABLE 5—CONVEYANCE ACTIVITY LIMITS FOR LSA MATERIAL AND SCO

Nature of material	Activity limit for conveyances
1. LSA-I	No limit.
2. LSA-II and LSA-III; Non-combustible solids	No limit.
3. LSA-II and LSA-III; Combustible solids and all liquids and gases.	100 A ₂
4. SCO	100 A ₂

TABLE 6—INDUSTRIAL PACKAGE INTEGRITY REQUIREMENTS FOR LSA MATERIAL AND SCO

Contents	Industrial packaging type	
	Exclusive use shipment	Non exclusive use shipment
1. LSA-I: Solid	IP-1 ...	IP-1

49 CFR Ch. I (10–1–10 Edition)

TABLE 6—INDUSTRIAL PACKAGE INTEGRITY REQUIREMENTS FOR LSA MATERIAL AND SCO—Continued

Contents	Industrial packaging type	
	Exclusive use shipment	Non exclusive use shipment
Liquid	IP-1 ...	IP-2
2. LSA-II: Solid	IP-2 ...	IP-2
Liquid and gas	IP-2 ...	IP-3
3. LSA-III	IP-2 ...	IP-3
4. SCO-I	IP-1 ...	IP-1
5. SCO-II	IP-2 ...	IP-2

[69 FR 3676, Jan. 26, 2004; 69 FR 55118, Sept. 13, 2004; 69 FR 58843, Oct. 1, 2004; 70 FR 56098, Sept. 23, 2005]

§ 173.428 Empty Class 7 (radioactive) materials packaging.

A packaging which previously contained Class 7 (radioactive) materials and has been emptied of contents as far as practical, is excepted from the shipping paper and marking (except for the UN identification number marking requirement described in §173.422(a)) requirements of this subchapter, provided that—

(a) The packaging meets the requirements of §173.421(a) (2), (3), and (5) of this subpart;

(b) The packaging is in unimpaired condition and is securely closed so that there will be no leakage of Class 7 (radioactive) material under conditions normally incident to transportation;

(c) The outer surface of any uranium or thorium in its structure is covered with an inactive sheath made of metal or some other substantial material;

(d) Internal contamination does not exceed 100 times the limits in §173.443(a);

(e) Any labels previously applied in conformance with subpart E of part 172 of this subchapter are removed, obliterated, or covered and the “Empty” label prescribed in §172.450 of this subchapter is affixed to the packaging; and

(f) The packaging is prepared for shipment as specified in §173.422.

[Amdt. 173–244, 60 FR 50307, Sept. 28, 1995, as amended by Amdt. 173–244, 61 FR 20752, May 8, 1996; 64 FR 51919, Sept. 27, 1999; 69 FR 3677, Jan. 26, 2004]