TABLE 7.—ACTIVITY	LIMITS EOD	LIMITED OLIANITITIES	INICTOLIMENTO	AND APTICLES
TABLE 1.—ACTIVITY	LIMITS FOR	LIMITED QUANTITIES,	INSTRUMENTS.	AND ARTICLES

	Instruments and articles		
Nature of contents		Package limits <sup>1</sup>	Materials package limits <sup>1</sup>
Solids:			
Special form	10 <sup>-2</sup> A <sub>1</sub>	A <sub>1</sub>	10 <sup>-3</sup> A <sub>1</sub> 4
Special formOther form	10 <sup>-2</sup> A <sub>2</sub>	A <sub>2</sub>	10 <sup>-3</sup> A <sub>2</sub>
Liquids—Tritiated water:			
<0.0037 TBq/liter (0.1 Ci/L)			37 TBq (1,000 Ci)
0.0037 TBq to 0.037 TBq/L (0.1 Ci to 1.0 Ci/L)			
>0.037 TBq/L (1.0 Ci/L)			• • • •
Other Liquids	10 <sup>−3</sup> A <sub>2</sub>	10A <sup>1</sup> A <sub>2</sub>	10 <sup>-4</sup> A <sub>2</sub>
Gases:			
Tritium		$2 \times 10^{-1} A_2$	
Special form	10 <sup>-3</sup> A <sub>1</sub>	10 <sup>-2</sup> A <sub>1</sub>	$10^{-3}A_1$
Other form	10 <sup>-3</sup> A <sub>2</sub>	10 <sup>-2</sup> A <sub>2</sub>	$10^{-3}A_2$

<sup>&</sup>lt;sup>1</sup> For mixtures of radionuclides see § 173.433(b).

## § 173.426 Excepted packages for articles containing natural uranium or thorium.

A manufactured article in which the sole Class 7 (radioactive) material content is natural or unirradiated depleted uranium or natural thorium and its packaging is excepted from the specification packaging, shipping paper and certification, marking, and labeling requirements of this subchapter and requirements of this subpart if:

- (a) Each package meets the general design requirements of § 173.410;
- (b) The outer surface of the uranium or thorium is enclosed in an inactive sheath made of metal or other durable protective material;
- (c) The conditions specified in § 173.421 (b), (c), and (d) are met; and
- (d) The article is otherwise prepared for shipment as specified in § 173.422.

## § 173.427 Transport requirements for low specific activity (LSA) Class 7 (radioactive) materials and surface contaminated objects (SCO).

- (a) In addition to other applicable requirements specified in this subchapter, low specific activity (LSA) materials and surface contaminated objects (SCO), unless excepted by paragraph (d) of this section, must be packaged in accordance with paragraph (b) or (c) of this section and must be transported in accordance with the following conditions:
- (1) The external dose rate must not exceed an external radiation level of 10 mSv/h (1 rem/h) at 3 meters from the unshielded material;
- (2) The quantity of LSA and SCO material in any single conveyance must not exceed the limits specified in Table 9:
- (3) LSA material and SCO that are or contain fissile material must meet the applicable requirements of § 173.451;

- (4) Packages must meet the contamination control limits specified in § 173.443;
- (5) External radiation levels must comply with § 173.441; and
- (6) For LSA material and SCO required by this section to be consigned as exclusive use:
- (i) Shipments must be loaded by the consignor and unloaded by the consignee from the conveyance or freight container in which originally loaded:
- (ii) There must be no loose Class 7 (radioactive) material in the conveyance, however, when the conveyance is the packaging there must be no leakage of Class 7 (radioactive) material from the conveyance;
- (iii) Packages must be braced so as to prevent shifting of lading under conditions normally incident to transportation;
- (iv) Specific instructions for maintenance of exclusive use shipment controls must be provided by the offeror to the carrier. Such instructions must be included with the shipping paper information;
- (v) Except for shipments of unconcentrated uranium or thorium ores, the transport vehicle must be placarded in accordance with subpart F of Part 172 of this subchapter;
- (vi) For domestic transportation only, packages are excepted from the marking and labeling requirements of this subchapter. However, the exterior of each nonbulk package must be stenciled or otherwise marked "Radioactive—LSA" or "Radioactive—SCO", as appropriate, and nonbulk packages that contain a hazardous substance must also be stenciled or otherwise marked with the letters "RQ" in association with the above description; and

- (vii) Except when transported in an industrial package in accordance with Table 8, transportation by aircraft is prohibited.
- (b) Except as provided in paragraph (c) of this section, LSA material and SCO must be packaged as follows:
- (1) In an industrial package (IP-1, IP-2 or IP-3; § 173.411), subject to the limitations of Table 8;
- (2) For domestic transportation only, in a DOT Specification 7A (§ 178.350 of this subchapter) Type A package. The requirements of § 173.412 (a), (b), (c) and (k) do not apply; or
- (3) For domestic transportation only, in a strong, tight package that prevents leakage of the radioactive content under normal conditions of transport. In addition to the requirements of paragraph (a) of this section, the following requirements must be met:
- (i) The shipment must be exclusive use;
- (ii) The quantity of Class 7 (radioactive) material in each packaging may not exceed an A<sub>2</sub> quantity.
- (c) LSA–I and SCO–I (see § 173.403), unless packaged in accordance with paragraph (b) of this section, must be packaged in bulk packagings in accordance with this paragraph. The shipment must be, in addition to complying with the applicable requirements of paragraph (a) of this section, exclusive use:
- (1) Solids. Packages must be strong tight packagings, meeting the requirements of subpart B of this Part, transported in a closed transport vehicle. The requirements of § 173.410 do not apply.
- (2) *Liquids*. Liquids must be transported in the following packagings:
- (i) Specification 103CW, 111A60W7 (§§ 179.200, 179.201, 179.202 of this