

Nuclear Regulatory Commission

§ 30.71

[30 FR 8185, June 26, 1965, as amended at 35 FR 3982, Mar. 3, 1970; 38 FR 29314, Oct. 24, 1973; 59 FR 5520, Feb. 7, 1994]

§ 30.71 Schedule B.

Byproduct material	Microcuries	Byproduct material	Microcuries
Antimony 122 (Sb 122)	100	Iron 59 (Fe 59)	10
Antimony 124 (Sb 124)	10	Krypton 85 (Kr 85)	100
Antimony 125 (Sb 125)	10	Krypton 87 (Kr 87)	10
Arsenic 73 (As 73)	100	Lanthanum 140 (La 140)	10
Arsenic 74 (As 74)	10	Lutetium 177 (Lu 177)	100
Arsenic 76 (As 76)	10	Manganese 52 (Mn 52)	10
Arsenic 77 (As 77)	100	Manganese 54 (Mn 54)	10
Barium 131 (Ba 131)	10	Manganese 56 (Mn 56)	10
Barium 133 (Ba 133)	10	Mercury 197m (Hg 197m)	100
Barium 140 (Ba 140)	10	Mercury 197 (Hg 197)	100
Bismuth 210 (Bi 210)	1	Mercury 203 (Hg 203)	10
Bromine 82 (Br 82)	10	Molybdenum 99 (Mo 99)	100
Cadmium 109 (Cd 109)	10	Neodymium 147 (Nd 147)	100
Cadmium 115m (Cd 115m)	10	Neodymium 149 (Nd 149)	100
Cadmium 115 (Cd 115)	100	Nickel 59 (Ni 59)	100
Calcium 45 (Ca 45)	10	Nickel 63 (Ni 63)	10
Calcium 47 (Ca 47)	10	Nickel 65 (Ni 65)	100
Carbon 14 (C 14)	100	Niobium 93m (Nb 93m)	10
Cerium 141 (Ce 141)	100	Niobium 95 (Nb 95)	10
Cerium 143 (Ce 143)	100	Niobium 97 (Nb 97)	10
Cerium 144 (Ce 144)	1	Osmium 185 (Os 185)	10
Cesium 131 (Cs 131)	1,000	Osmium 191m (Os 191m)	100
Cesium 134m (Cs 134m)	100	Osmium 191 (Os 191)	100
Cesium 134 (Cs 134)	1	Osmium 193 (Os 193)	100
Cesium 135 (Cs 135)	10	Palladium 103 (Pd 103)	100
Cesium 136 (Cs 136)	10	Palladium 109 (Pd 109)	100
Cesium 137 (Cs 137)	10	Phosphorus 32 (P 32)	10
Chlorine 36 (Cl 36)	10	Platinum 191 (Pt 191)	100
Chlorine 38 (Cl 38)	10	Platinum 193m (Pt 193m)	100
Chromium 51 (Cr 51)	1,000	Platinum 193 (Pt 193)	100
Cobalt 58m (Co 58m)	10	Platinum 197m (Pt 197m)	100
Cobalt 58 (Co 58)	10	Platinum 197 (Pt 197)	100
Cobalt 60 (Co 60)	1	Polonium 210 (Po 210)	0.1
Copper 64 (Cu 64)	100	Potassium 42 (K 42)	10
Dysprosium 165 (Dy 165)	10	Praseodymium 142 (Pr 142)	100
Dysprosium 166 (Dy 166)	100	Praseodymium 143 (Pr 143)	100
Erbium 169 (Er 169)	100	Promethium 147 (Pm 147)	10
Erbium 171 (Er 171)	100	Promethium 149 (Pm 149)	10
Europium 152 9.2 h (Eu 152 9.2 h)	100	Rhenium 186 (Re 186)	100
Europium 152 13 yr (Eu 152 13 yr)	1	Rhenium 188 (Re 188)	100
Europium 154 (Eu 154)	1	Rhodium 103m (Rh 103m)	100
Europium 155 (Eu 155)	10	Rhodium 105 (Rh 105)	100
Fluorine 18 (F 18)	1,000	Rubidium 86 (Rb 86)	10
Gadolinium 153 (Gd 153)	10	Rubidium 87 (Rb 87)	10
Gadolinium 159 (Gd 159)	100	Ruthenium 97 (Ru 97)	100
Gallium 72 (Ga 72)	10	Ruthenium 103 (Ru 103)	10
Germanium 71 (Ge 71)	100	Ruthenium 105 (Ru 105)	10
Gold 198 (Au 198)	100	Ruthenium 106 (Ru 106)	1
Gold 199 (Au 199)	100	Samarium 151 (Sm 151)	10
Hafnium 181 (Hf 181)	10	Samarium 153 (Sm 153)	100
Holmium 166 (Ho 166)	100	Scandium 46 (Sc 46)	10
Hydrogen 3 (H 3)	1,000	Scandium 47 (Sc 47)	100
Indium 113m (In 113m)	100	Scandium 48 (Sc 48)	10
Indium 114m (In 114m)	100	Selenium 75 (Se 75)	10
Indium 115m (In 115m)	100	Silicon 31 (Si 31)	100
Indium 115 (In 115)	10	Silver 105 (Ag 105)	10
Iodine 125 (I 125)	1	Silver 110m (Ag 110m)	1
Iodine 126 (I 126)	1	Silver 111 (Ag 111)	100
Iodine 129 (I 129)	0.1	Sodium 24 (Na 24)	10
Iodine 131 (I 131)	1	Strontium 85 (Sr 85)	10
Iodine 132 (I 132)	10	Strontium 89 (Sr 89)	1
Iodine 133 (I 133)	1	Strontium 90 (Sr 90)	0.1
Iodine 134 (I 134)	10	Strontium 91 (Sr 91)	10
Iodine 135 (I 135)	10	Strontium 92 (Sr 92)	10
Iridium 192 (Ir 192)	10	Sulphur 35 (S 35)	100
Iridium 194 (Ir 194)	100	Tantalum 182 (Ta 182)	10
Iron 55 (Fe 55)	100	Technetium 96 (Tc 96)	10
		Technetium 97m (Tc 97m)	100
		Technetium 97 (Tc 97)	100

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Byproduct material	Microcuries
Technetium 99m (Tc 99m)	100
Technetium 99 (Tc 99)	10
Tellurium 125m (Te 125m)	10
Tellurium 127m (Te 127m)	10
Tellurium 127 (Te 127)	100
Tellurium 129m (Te 129m)	10
Tellurium 129 (Te 129)	100
Tellurium 131m (Te 131m)	10
Tellurium 132 (Te 132)	10
Terbium 160 (Tb 160)	10
Thallium 200 (Tl 200)	100
Thallium 201 (Tl 201)	100
Thallium 202 (Tl 202)	100
Thallium 204 (Tl 204)	10
Thulium 170 (Tm 170)	10
Thulium 171 (Tm 171)	10
Tin 113 (Sn 113)	10
Tin 125 (Sn 125)	10
Tungsten 181 (W 181)	10
Tungsten 185 (W 185)	10
Tungsten 187 (W 187)	100
Vanadium 48 (V 48)	10
Xenon 131m (Xe 131m)	1,000
Xenon 133 (Xe 133)	100
Xenon 135 (Xe 135)	100
Ytterbium 175 (Yb 175)	100
Yttrium 90 (Y 90)	10
Yttrium 91 (Y 91)	10
Yttrium 92 (Y 92)	100
Yttrium 93 (Y 93)	100
Zinc 65 (Zn 65)	10
Zinc 69m (Zn 69m)	100
Zinc 69 (Zn 69)	1,000
Zirconium 93 (Zr 93)	10
Zirconium 95 (Zr 95)	10
Zirconium 97 (Zr 97)	10
Any byproduct material not listed above other than alpha emitting byproduct material	0.1

[35 FR 6427, Apr. 22, 1970, as amended at 36 FR 16898, Aug. 26, 1971; 59 FR 5519, Feb. 7, 1994]

§ 30.72 Schedule C—Quantities of radioactive materials requiring consideration of the need for an emergency plan for responding to a release.

Radioactive material ¹	Release fraction	Quantity (curies)
Actinium-228	0.001	4,000
Americium-241 .....	.001	2
Americium-242 .....	.001	2
Americium-243 .....	.001	2
Antimony-124 .....	.01	4,000
Antimony-126 .....	.01	6,000
Barium-133 .....	.01	10,000
Barium-140 .....	.01	30,000
Bismuth-207 .....	.01	5,000
Bismuth-210 .....	.01	600
Cadmium-109 .....	.01	1,000
Cadmium-113 .....	.01	80
Calcium-45 .....	.01	20,000
Californium-252 .....	.001	9 (20 mg)
Carbon-14 (non-carbon dioxide) .....	.01	50,000
Cerium-141 .....	.01	10,000
Cerium-144 .....	.01	300
Cesium-134 .....	.01	2,000
Cesium-137 .....	.01	3,000
Chlorine-36 .....	.5	100

Radioactive material ¹	Release fraction	Quantity (curies)
Chromium-51 .....	.01	300,000
Cobalt-60 .....	.001	5,000
Copper-64 .....	.01	200,000
Curium-242 .....	.001	60
Curium-243 .....	.001	3
Curium-244 .....	.001	4
Curium-245 .....	.001	2
Europium-152 .....	.01	500
Europium-154 .....	.01	400
Europium-155 .....	.01	3,000
Germanium-68 .....	.01	2,000
Gadolinium-153 .....	.01	5,000
Gold-198 .....	.01	30,000
Hafnium-172 .....	.01	400
Hafnium-181 .....	.01	7,000
Holmium-166m .....	.01	100
Hydrogen-3 .....	.5	20,000
Iodine-125 .....	.5	10
Iodine-131 .....	.5	10
Indium-114m .....	.01	1,000
Iridium-192 .....	.001	40,000
Iron-55 .....	.01	40,000
Iron-59 .....	.01	7,000
Krypton-85	1.0	6,000,000
Lead-210 .....	.01	8
Manganese-56 .....	.01	60,000
Mercury-203 .....	.01	10,000
Molybdenum-99 .....	.01	30,000
Neptunium-237 .....	.001	2
Nickel-63 .....	.01	20,000
Niobium-94 .....	.01	300
Phosphorus-32 .....	.5	100
Phosphorus-33 .....	.5	1,000
Polonium-210 .....	.01	10
Potassium-42 .....	.01	9,000
Promethium-145 .....	.01	4,000
Promethium-147 .....	.01	4,000
Ruthenium-106 .....	.01	200
Samarium-151 .....	.01	4,000
Scandium-46 .....	.01	3,000
Selenium-75 .....	.01	10,000
Silver-110m .....	.01	1,000
Sodium-22 .....	.01	9,000
Sodium-24 .....	.01	10,000
Strontium-89 .....	.01	3,000
Strontium-90 .....	.01	90
Sulfur-35 .....	.5	900
Technitium-99 .....	.01	10,000
Technitium-99m .....	.01	400,000
Tellurium-127m .....	.01	5,000
Tellurium-129m .....	.01	5,000
Terbium-160 .....	.01	4,000
Thulium-170 .....	.01	4,000
Tin-113 .....	.01	10,000
Tin-123 .....	.01	3,000
Tin-126 .....	.01	1,000
Titanium-44 .....	.01	100
Vanadium-48 .....	.01	7,000
Xenon-133	1.0	900,000
Yttrium-91 .....	.01	2,000
Zinc-65 .....	.01	5,000
Zirconium-93 .....	.01	400
Zirconium-95 .....	.01	5,000
Any other beta-gamma emitter .....	.01	10,000
Mixed fission products .....	.01	1,000
Mixed corrosion products .....	.01	10,000
Contaminated equipment beta-gamma .....	.001	10,000
Irradiated material, any form other than solid noncombustible .....	.01	1,000
Irradiated material, solid noncombustible .....	.001	10,000
Mixed radioactive waste, beta-gamma .....	.01	1,000
Packaged mixed waste, beta-gamma ⁴ .....	.001	10,000