

**Nuclear Regulatory Commission**

**§ 33.100**

(2) Title II of the Energy Reorganization Act of 1974, as amended; or

(3) A regulation or order issued pursuant to those Acts.

(b) The Commission may obtain a court order for the payment of a civil penalty imposed under section 234 of the Atomic Energy Act:

(1) For violations of—

(i) Sections 53, 57, 62, 63, 81, 82, 101, 103, 104, 107, or 109 of the Atomic Energy Act of 1954, as amended;

(ii) Section 206 of the Energy Reorganization Act;

(iii) Any rule, regulation, or order issued pursuant to the sections specified in paragraph (b)(1)(i) of this section;

(iv) Any term, condition, or limitation of any license issued under the sections specified in paragraph (b)(1)(i) of this section.

(2) For any violation for which a license may be revoked under section 186 of the Atomic Energy Act of 1954, as amended.

[57 FR 55073, Nov. 24, 1992]

**§ 33.23 Criminal penalties.**

(a) Section 223 of the Atomic Energy Act of 1954, as amended, provides for criminal sanctions for willful violation of, attempted violation of, or conspiracy to violate, any regulation issued under sections 161b, 161i, or 161o of the Act. For purposes of section 223, all the regulations in part 33 are issued under one or more of sections 161b, 161i, or 161o, except for the sections listed in paragraph (b) of this section.

(b) The regulations in part 33 that are not issued under sections 161b, 161i, or 161o for the purposes of section 223 are as follows: §§33.1, 33.8, 33.11, 33.12, 33.13, 33.14, 33.15, 33.16, 33.21, 33.23 and 33.100.

[57 FR 55073, Nov. 24, 1992]

**SCHEDULES**

**§ 33.100 Schedule A.**

Byproduct material	Col. I curies	Col. II curies
Antimony-122 .....	1	0.01
Antimony-124 .....	1	.01
Antimony-125 .....	1	.01
Arsenic-73 .....	10	.1
Arsenic-74 .....	1	.01
Arsenic-76 .....	1	.01

Byproduct material	Col. I curies	Col. II curies
Arsenic-77 .....	10	.1
Barium-131 .....	10	.1
Barium-140 .....	1	.01
Bismuth-210 .....	.1	.001
Bromine-82 .....	10	.1
Cadmium-109 .....	1	.01
Cadmium-115m .....	1	.01
Cadmium-115 .....	10	.1
Calcium-45 .....	1	.01
Calcium-47 .....	10	.1
Carbon-14 .....	100	1.
Cerium-141 .....	10	.1
Cerium-143 .....	10	.1
Cerium-144 .....	.1	.001
Cesium-131 .....	100	1.
Cesium-134m .....	100	1.
Cesium-134 .....	.1	.001
Cesium-135 .....	1	.01
Cesium-136 .....	10	.1
Cesium-137 .....	.1	.001
Chlorine-36 .....	1	.01
Chlorine-38 .....	100	1.
Chromium-51 .....	100	1.
Cobalt-58m .....	100	1.
Cobalt-58 .....	1	.01
Cobalt-60 .....	.1	.001
Copper-64 .....	10	.1
Dysprosium-165 .....	100	1.
Dysprosium-166 .....	10	.1
Erbium-169 .....	10	.1
Erbium-171 .....	10	.1
Europium-152 9.2 h .....	10	.1
Europium-152 13 y .....	.1	.001
Europium-154 .....	.1	.001
Europium-155 .....	1	.01
Fluorine-18 .....	100	1.
Gadolinium-153 .....	1	.01
Gadolinium-159 .....	10	.1
Gallium-72 .....	10	.1
Germanium-71 .....	100	1
Gold-198 .....	10	.1
Gold-199 .....	10	.1
Hafnium-181 .....	1	.01
Holmium-166 .....	10	.1
Hydrogen-3 .....	100	1
Indium-113m .....	100	1
Indium-114m .....	1	.01
Indium-115m .....	100	1
Indium-115 .....	1	.01
Iodine-125 .....	.1	.001
Iodine-126 .....	.1	.001
Iodine-129 .....	.1	.01
Iodine-131 .....	.1	.001
Iodine-132 .....	10	.1
Iodine-133 .....	1	.01
Iodine-134 .....	10	.1
Iodine-135 .....	1	.01
Iridium-192 .....	1	.01
Iridium-194 .....	10	.1
Iron-55 .....	10	.1
Iron-59 .....	1	.01
Krypton-85 .....	100	1
Krypton-87 .....	10	.1
Lanthanum-140 .....	1	.01
Lutetium-177 .....	10	.1
Manganese-52 .....	1	.01
Manganese-54 .....	1	.01
Manganese-56 .....	10	.1
Mercury-197m .....	10	.1
Mercury-197 .....	10	.1
Mercury-203 .....	1	.01
Molybdenum-99 .....	10	.1
Neodymium-147 .....	10	.1

Byproduct material	Col. I curies	Col. II curies
Neodymium-149	10	.1
Nickel-59	10	.1
Nickel-63	1	.01
Nickel-65	10	.1
Niobium-93m	1	.01
Niobium-95	1	.01
Niobium-97	100	1.
Osmium-185	1	.01
Osmium-191m	100	1.
Osmium-191	10	.1
Osmium-193	10	.1
Palladium-103	10	.1
Palladium-109	10	.1
Phosphorus-32	1	.01
Platinum-191	10	.1
Platinum-193m	100	1.
Platinum-193	10	.1
Platinum-197m	100	1
Platinum-197	10	.1
Polonium-210	.01	.0001
Potassium-42	1	.01
Praseodymium-142	10	.1
Praseodymium-143	10	.1
Promethium-147	1	.01
Promethium-149	10	.1
Rhenium-186	10	.1
Rhenium-188	10	.1
Rhodium-103m	1,000	10.
Rhodium-105	10	.1
Rubidium-86	1	.01
Rubidium-87	1	.01
Ruthenium-97	100	1.
Ruthenium-103	1	.01
Ruthenium-105	10	.1
Ruthenium-106	.1	.001
Samarium-151	1	.01
Samarium-153	10	.1
Scandium-46	1	.01
Scandium-47	10	.1
Scandium-48	1	.01
Selenium-75	1	.01
Silicon-31	10	.1
Silver-105	1	.01
Silver-110m	.1	.001
Silver-111	10	.1
Sodium-24	1	.01
Strontium-85m	1,000	10.
Strontium-85	1	.01
Strontium-89	1	.01
Strontium-90	.01	.0001
Strontium-91	10	.1
Strontium-92	10	.1
Sulphur-35	10	.1
Tantalum-182	1	.01
Technetium-96	10	.1
Technetium-97m	10	.1
Technetium-97	10	.1
Technetium-99m	100	1.
Technetium-99	1	.01
Tellurium-125m	1	.01
Tellurium-127m	1	.01
Tellurium-127	10	.1
Tellurium-129m	1	.01
Tellurium-129	100	1
Tellurium-131m	10	.1
Tellurium-132	1	.01
Terbium-160	1	.01
Thallium-200	10	.1
Thallium-201	10	.1
Thallium-202	10	.1
Thallium-204	1	.01
Thulium-170	1	.01
Thulium-171	1	.01

Byproduct material	Col. I curies	Col. II curies
Tin-113	1	.01
Tin-125	1	.01
Tungsten-181	1	.01
Tungsten-185	1	.01
Tungsten-187	10	.1
Vanadium-48	1	.01
Xenon-131m	1,000	10.
Xenon-133	100	1.
Xenon-135	100	1.
Ytterbium-175	10	.1
Yttrium-90	1	.01
Yttrium-91	1	.01
Yttrium-92	10	.1
Yttrium-93	1	.01
Zinc-65	1	.01
Zinc-69m	10	.1
Zinc-69	100	1.
Zirconium-93	1	.01
Zirconium-95	1	.01
Zirconium-97	1	.01
Any byproduct material other than alpha emitting byproduct material not listed above	.1	.001

(Sec. 201, Pub. L. 93-438; 88 Stat. 1242 (42 U.S.C. 5841))

[33 FR 14579, Sept. 28, 1968]

**PART 34—LICENSES FOR INDUSTRIAL RADIOGRAPHY AND RADIATION SAFETY REQUIREMENTS FOR INDUSTRIAL RADIOGRAPHIC OPERATIONS**

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