

Nuclear Regulatory Commission

§ 33.8

of the Atomic Energy Act of 1954, as amended.

[57 FR 55073, Nov. 24, 1992]

§ 32.303 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 32 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 32 that are not issued under subsections 161b, 161i, or 161o for the purposes of section 223 are as follows: §§ 32.1, 32.2, 32.8, 32.11, 32.14, 32.18, 32.22, 32.23, 32.24, 32.26, 32.27, 32.28, 32.51, 32.53, 32.57, 32.61, 32.71, 32.74, 32.301, and 32.303.

[57 FR 55073, Nov. 24, 1992, as amended at 59 FR 61781, Dec. 2, 1994; 73 FR 42674, July 23, 2008]

PART 33—SPECIFIC DOMESTIC LICENSES OF BROAD SCOPE FOR BYPRODUCT MATERIAL

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33.100 Schedule A.

AUTHORITY: Secs. 81, 161, 182, 183, 68 Stat. 935, 948, 953, 954, as amended (42 U.S.C. 2111, 2201, 2232, 2233); sec. 201, 88 Stat. 1242, as

amended (42 U.S.C. 5841); sec. 1704, 112 Stat. 2750 (44 U.S.C. 3504 note); sec. 651(e), Pub. L. 109-58, 119 Stat. 806-810 (42 U.S.C. 2014, 2021, 2021b, 2111).

SOURCE: 33 FR 14579, Sept. 28, 1968, unless otherwise noted.

§ 33.1 Purpose and scope.

This part prescribes requirements for the issuance of specific licenses of broad scope for byproduct material ("broad licenses") and certain regulations governing holders of such licenses. The provisions and requirements of this part are in addition to, and not in substitution for, other requirements of this chapter. In particular, the provisions of part 30 of this chapter apply to applications and licenses subject to this part.

§ 33.8 Information collection requirements: OMB approval.

(a) The Nuclear Regulatory Commission has submitted the information collection requirements contained in this part to the Office of Management and Budget (OMB) for approval as required by the Paperwork Reduction Act (44 U.S.C. 3501 et seq.). The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. OMB has approved the information collection requirements contained in this part under control number 3150-0015.

(b) The approved information collection requirements contained in this part appear in §§ 33.12, 33.13, 33.14 and 33.15.

(c) This part contains information collection requirements in addition to those approved under the control number specified in paragraph (a) of this section. These information collection requirements and the control numbers under which they are approved are as follows:

(1) In § 33.12, NRC Form 313 is approved under control number 3150-0120.

(2) [Reserved]

[49 FR 19625, May 9, 1984, as amended at 62 FR 52186, Oct. 6, 1997; 67 FR 67099, Nov. 4, 2002]

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SPECIFIC LICENSES OF BROAD SCOPE

§ 33.11 Types of specific licenses of broad scope.

(a) A "Type A specific license of broad scope" is a specific license authorizing receipt, acquisition, ownership, possession, use, and transfer of any chemical or physical form of the byproduct material specified in the license, but not exceeding quantities specified in the license, for purposes authorized by the Act. The quantities specified are usually in the multicurie range.

(b) A "Type B specific license of broad scope" is a specific license authorizing receipt, acquisition, ownership, possession, use, and transfer of any chemical or physical form of byproduct material specified in § 33.100, Schedule A, of this part for purposes authorized by the Act. The possession limit for a Type B broad license, if only one radionuclide is possessed thereunder, is the quantity specified for that radionuclide in § 33.100, Schedule A, Column I. If two or more radionuclides are possessed thereunder, the possession limit for each is determined as follows: For each radionuclide, determine the ratio of the quantity possessed to the applicable quantity specified in § 33.100, Schedule A, Column I, for that radionuclide. The sum of the ratios for all radionuclides possessed under the license shall not exceed unity.

(c) A "Type C specific license of broad scope" is a specific license authorizing receipt, acquisition, ownership, possession, use, and transfer of any chemical or physical form of byproduct material specified in § 33.100, Schedule A, for purposes authorized by the Act. The possession limit for a Type C broad license, if only one radionuclide is possessed thereunder, is the quantity specified for that radionuclide in § 33.100, Schedule A, Column II. If two or more radionuclides are possessed thereunder, the possession limit is determined for each as follows: For each radionuclide determine the ratio of the quantity possessed to the applicable quantity specified in § 33.100, Schedule A, Column II, for that radionuclide. The sum of the ratios for all radionuclides pos-

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sessed under the license shall not exceed unity.

(Sec. 161, as amended, Pub. L. 83-703, 68 Stat. 948 (42 U.S.C. 2201); sec. 201, as amended, Pub. L. 93-438, 88 Stat. 1243 (42 U.S.C. 5841))

[33 FR 14579, Sept. 28, 1968, as amended at 43 FR 6923, Feb. 17, 1978]

§ 33.12 Applications for specific licenses of broad scope.

A person may file an application for specific license of broad scope on NRC Form 313, "Application for Material License," in accordance with the provisions of § 30.32 of this chapter.

[68 FR 58805, Oct. 10, 2003]

§ 33.13 Requirements for the issuance of a Type A specific license of broad scope.

An application for a Type A specific license of broad scope will be approved if:

(a) The applicant satisfies the general requirements specified in § 30.33 of this chapter;

(b) The applicant has engaged in a reasonable number of activities involving the use of byproduct material; and

(c) The applicant has established administrative controls and provisions relating to organization and management, procedures, record keeping, material control, and accounting and management review that are necessary to assure safe operations, including:

(1) The establishment of a radiation safety committee composed of such persons as a radiological safety officer, a representative of management, and persons trained and experienced in the safe use of radioactive materials;

(2) The appointment of a radiological safety officer who is qualified by training and experience in radiation protection, and who is available for advice and assistance on radiological safety matters; and

(3) The establishment of appropriate administrative procedures to assure:

(i) Control of procurement and use of byproduct material;

(ii) Completion of safety evaluations of proposed uses of byproduct material which take into consideration such matters as the adequacy of facilities and equipment, training and experience of the user, and the operating or handling procedures; and

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(iii) Review, approval, and recording by the radiation safety committee of safety evaluations of proposed uses prepared in accordance with paragraph (c)(3)(ii) of this section prior to use of the byproduct material.

§ 33.14 Requirements for the issuance of a Type B specific license of broad scope.

An application for a Type B specific license of broad scope will be approved if:

(a) The applicant satisfies the general requirements specified in § 30.33 of this chapter; and

(b) The applicant has established administrative controls and provisions relating to organization and management, procedures, record keeping, material control and accounting, and management review that are necessary to assure safe operations, including:

(1) The appointment of a radiological safety officer who is qualified by training and experience in radiation protection, and who is available for advice and assistance on radiological safety matters; and

(2) The establishment of appropriate administrative procedures to assure:

(i) Control of procurement and use of byproduct material;

(ii) Completion of safety evaluations of proposed uses of byproduct material which take into consideration such matters as the adequacy of facilities and equipment, training and experience of the user, and the operating or handling procedures; and

(iii) Review, approval, and recording by the radiological safety officer of safety evaluations of proposed uses prepared in accordance with paragraph (b)(2)(ii) of this section prior to use of the byproduct material.

§ 33.15 Requirements for the issuance of a Type C specific license of broad scope.

An application for a Type C specific license of broad scope will be approved if:

(a) The applicant satisfies the general requirements specified in § 30.33 of this chapter; and

(b) The applicant submits a statement that byproduct material will be used only by, or under the direct super-

vision of, individuals who have received:

(1) A college degree at the bachelor level, or equivalent training and experience, in the physical or biological sciences or in engineering; and

(2) At least 40 hours of training and experience in the safe handling of radioactive materials, and in the characteristics of ionizing radiation, units of radiation dose and quantities, radiation detection instrumentation, and biological hazards of exposure to radiation appropriate to the type and forms of byproduct material to be used; and

(c) The applicant has established administrative controls and provisions relating to procurement of byproduct material, procedures, record keeping, material control and accounting, and management review necessary to assure safe operations.

§ 33.16 Application for other specific licenses.

An application filed pursuant to part 30 of this chapter for a specific license other than one of broad scope will be considered by the Commission as an application for a specific license of broad scope under this part if the requirements of the applicable sections of this part are satisfied.

§ 33.17 Conditions of specific licenses of broad scope.

(a) Unless specifically authorized pursuant to other parts of this chapter, persons licensed under this part shall not:

(1) Conduct tracer studies in the environment involving direct release of byproduct material;

(2) Receive, acquire, own, possess, use, transfer, or import devices containing 100,000 curies or more of byproduct material in sealed sources used for irradiation of materials;

(3) Conduct activities for which a specific license issued by the Commission under part 32, 34, or 35 of this chapter is required; or

(4) Add or cause the addition of byproduct material to any food, beverage, cosmetic, drug, or other product designed for ingestion or inhalation by, or application to, a human being.

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(b) Each Type A specific license of broad scope issued under this part shall be subject to the condition that by-product material possessed under the license may only be used by, or under the direct supervision of, individuals approved by the licensee's radiation safety committee.

(c) Each Type B specific license of broad scope issued under this part shall be subject to the condition that by-product material possessed under the license may only be used by, or under the direct supervision of, individuals approved by the licensee's radiological safety officer.

(d) Each Type C specific license of broad scope issued under this part shall be subject to the condition that by-product material possessed under the license may only be used by, or under the direct supervision of, individuals who satisfy the requirements of § 33.15 of this part.

VIOLATIONS

§ 33.21 Violations.

(a) The Commission may obtain an injunction or other court order to prevent a violation of the provisions of—

(1) The Atomic Energy Act of 1954, as amended;

(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

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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
Arsenic-77	10	.1
Barium-131	10	.1
Barium-140	1	.01
Beryllium-7	10	0.1
Bismuth-2101	.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-1441	.001
Cesium-131	100	1.
Cesium-134m	100	1.
Cesium-1341	.001
Cesium-135	1	.01
Cesium-136	10	.1
Cesium-1371	.001
Chlorine-36	1	.01
Chlorine-38	100	1.
Chromium-51	100	1.
Cobalt-57	10	0.1
Cobalt-58m	100	1.
Cobalt-58	1	.01
Cobalt-601	.001
Copper-64	10	.1
Dysprosium-165	100	1.
Dysprosium-166	10	.1

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Byproduct material	Col. I curies	Col. II curies	Byproduct material	Col. I curies	Col. II curies
Erbium-169	10	.1	Rhodium-105	10	.1
Erbium-171	10	.1	Rubidium-86	1	.01
Europium-152 9.2 h	10	.1	Rubidium-87	1	.01
Europium-152 13 y	.1	.001	Ruthenium-97	100	1.
Europium-154	.1	.001	Ruthenium-103	1	.01
Europium-155	1	.01	Ruthenium-105	10	.1
Fluorine-18	100	1.	Ruthenium-106	.1	.001
Gadolinium-153	1	.01	Samarium-151	1	.01
Gadolinium-159	10	.1	Samarium-153	10	.1
Gallium-72	10	.1	Scandium-46	1	.01
Germanium-71	100	1	Scandium-47	10	.1
Gold-198	10	.1	Scandium-48	1	.01
Gold-199	10	.1	Selenium-75	1	.01
Hafnium-181	1	.01	Silicon-31	10	.1
Holmium-166	10	.1	Silver-105	1	.01
Hydrogen-3	100	1	Silver-110m	.1	.001
Indium-113m	100	1	Silver-111	10	.1
Indium-114m	1	.01	Sodium-22	0.1	0.001
Indium-115m	100	1	Sodium-24	1	.01
Indium-115	1	.01	Strontium-85m	1,000	10.
Iodine-125	.1	.001	Strontium-85	1	.01
Iodine-126	.1	.001	Strontium-89	1	.01
Iodine-129	.1	.01	Strontium-90	.01	.0001
Iodine-131	.1	.001	Strontium-91	10	.1
Iodine-132	10	.1	Strontium-92	10	.1
Iodine-133	1	.01	Sulphur-35	10	.1
Iodine-134	10	.1	Tantalum-182	1	.01
Iodine-135	1	.01	Technetium-96	10	.1
Iridium-192	1	.01	Technetium-97m	10	.1
Iridium-194	10	.1	Technetium-97	10	.1
Iron-55	10	.1	Technetium-99m	100	1.
Iron-59	1	.01	Technetium-99	1	.01
Krypton-85	100	1	Tellurium-125m	1	.01
Krypton-87	10	.1	Tellurium-127m	1	.01
Lanthanum-140	1	.01	Tellurium-127	10	.1
Lutetium-177	10	.1	Tellurium-129m	1	.01
Manganese-52	1	.01	Tellurium-129	100	1
Manganese-54	1	.01	Tellurium-131m	10	.1
Manganese-56	10	.1	Tellurium-132	1	.01
Mercury-197m	10	.1	Terbium-160	1	.01
Mercury-197	10	.1	Thallium-200	10	.1
Mercury-203	1	.01	Thallium-201	10	.1
Molybdenum-99	10	.1	Thallium-202	10	.1
Neodymium-147	10	.1	Thallium-204	1	.01
Neodymium-149	10	.1	Thulium-170	1	.01
Nickel-59	10	.1	Thulium-171	1	.01
Nickel-63	1	.01	Tin-113	1	.01
Nickel-65	10	.1	Tin-125	1	.01
Niobium-93m	1	.01	Tungsten-181	1	.01
Niobium-95	1	.01	Tungsten-185	1	.01
Niobium-97	100	1.	Tungsten-187	10	.1
Osmium-185	1	.01	Vanadium-48	1	.01
Osmium-191m	100	1.	Xenon-131m	1,000	10.
Osmium-191	10	.1	Xenon-133	100	1.
Osmium-193	10	.1	Xenon-135	100	1.
Palladium-103	10	.1	Ytterbium-175	10	.1
Palladium-109	10	.1	Yttrium-90	1	.01
Phosphorus-32	1	.01	Yttrium-91	1	.01
Platinum-191	10	.1	Yttrium-92	10	.1
Platinum-193m	100	1.	Yttrium-93	1	.01
Platinum-193	10	.1	Zinc-65	1	.01
Platinum-197m	100	1	Zinc-69m	10	.1
Platinum-197	10	.1	Zinc-69	100	1.
Polonium-210	.01	.0001	Zirconium-93	1	.01
Potassium-42	1	.01	Zirconium-95	1	.01
Praseodymium-142	10	.1	Zirconium-97	1	.01
Praseodymium-143	10	.1	Any byproduct material other than alpha emitting byproduct material not listed above	.1	.001
Promethium-147	1	.01			
Promethium-149	10	.1			
Radium-226	0.01	0.0001			
Rhenium-186	10	.1			
Rhenium-188	10	.1			
Rhodium-103m	1,000	10.			

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

[33 FR 14579, Sept. 28, 1968, as amended at 72 FR 55930, Oct. 1, 2007]

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

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APPENDIX A TO PART 34—RADIOGRAPHER CERTIFICATION

AUTHORITY: Secs. 81, 161, 182, 183, 68 Stat. 935, 948, 953, 954, as amended (42 U.S.C. 2111, 2201, 2232, 2233); sec. 201, 88 Stat. 1242, as amended (42 U.S.C. 5841); sec. 1704, 112 Stat. 2750 (44 U.S.C. 3504 note). Section 34.45 also issued under sec. 206, 88 Stat. 1246 (42 U.S.C. 5846).

SOURCE: 62 FR 28963, May 28, 1997, unless otherwise noted.

Subpart A—General Provisions

§ 34.1 Purpose and scope.

This part prescribes requirements for the issuance of licenses for the use of sealed sources containing byproduct material and radiation safety requirements for persons using these sealed sources in industrial radiography. The provisions and requirements of this