

## Nuclear Regulatory Commission

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AUTHORITY: Atomic Energy Act secs. 81, 161, 181, 182, 183, 223, 234 (42 U.S.C. 2111, 2201, 2231, 2232, 2233, 2273, 2282); Energy Reorganization Act sec. 201, 206 (42 U.S.C. 5841, 5842, 5846); sec. 1704 (44 U.S.C. 3504 note); Energy Policy Act of 2005, sec. 651(e), Pub. L. 109-58, 119 Stat. 806-810 (42 U.S.C. 2014, 2021, 2021b, 2111).

SOURCE: 67 FR 20370, Apr. 24, 2002, unless otherwise noted.

### Subpart A—General Information

#### § 35.1 Purpose and scope.

This part contains the requirements and provisions for the medical use of byproduct material and for issuance of specific licenses authorizing the med-

ical use of this material. These requirements and provisions provide for the radiation safety of workers, the general public, patients, and human research subjects. The requirements and provisions of this part are in addition to, and not in substitution for, others in this chapter. The requirements and provisions of parts 19, 20, 21, 30, 37, 71, 170, and 171 of this chapter apply to applicants and licensees subject to this part unless specifically exempted.

[78 FR 17006, Mar. 19, 2013]

#### § 35.2 Definitions.

*Address of use* means the building or buildings that are identified on the license and where byproduct material may be received, prepared, used, or stored.

*Agreement State* means any State with which the Commission or the Atomic Energy Commission has entered into an effective agreement under subsection 274b of the Atomic Energy Act of 1954, as amended.

*Area of use* means a portion of an address of use that has been set aside for the purpose of receiving, preparing, using, or storing byproduct material.

*Authorized medical physicist* means an individual who—

(1) Meets the requirements in §§ 35.51(a) and 35.59; or

(2) Is identified as an authorized medical physicist or teletherapy physicist on—

(i) A specific medical use license issued by the Commission or Agreement State;

(ii) A medical use permit issued by a Commission master material licensee;

(iii) A permit issued by a Commission or Agreement State broad scope medical use licensee; or

(iv) A permit issued by a Commission master material license broad scope medical use permittee.

*Authorized nuclear pharmacist* means a pharmacist who—

(1) Meets the requirements in §§ 35.55(a) and 35.59; or

(2) Is identified as an authorized nuclear pharmacist on—

(i) A specific license issued by the Commission or Agreement State that authorizes medical use or the practice of nuclear pharmacy;

(ii) A permit issued by a Commission master material licensee that authorizes medical use or the practice of nuclear pharmacy;

(iii) A permit issued by a Commission or Agreement State broad scope medical use licensee that authorizes medical use or the practice of nuclear pharmacy; or

(iv) A permit issued by a Commission master material license broad scope medical use permittee that authorizes medical use or the practice of nuclear pharmacy; or

(3) Is identified as an authorized nuclear pharmacist by a commercial nuclear pharmacy that has been authorized to identify authorized nuclear pharmacists; or

(4) Is designated as an authorized nuclear pharmacist in accordance with § 32.72(b)(4).

*Authorized user* means a physician, dentist, or podiatrist who—

(1) Meets the requirements in §§ 35.59 and 35.190(a), 35.290(a), 35.390(a), 35.392(a), 35.394(a), 35.490(a), 35.590(a), or 35.690(a); or

(2) Is identified as an authorized user on—

(i) A Commission or Agreement State license that authorizes the medical use of byproduct material;

(ii) A permit issued by a Commission master material licensee that is authorized to permit the medical use of byproduct material;

(iii) A permit issued by a Commission or Agreement State specific licensee of broad scope that is authorized to permit the medical use of byproduct material; or

(iv) A permit issued by a Commission master material license broad scope permittee that is authorized to permit the medical use of byproduct material.

*Brachytherapy* means a method of radiation therapy in which sources are used to deliver a radiation dose at a distance of up to a few centimeters by surface, intracavitary, intraluminal, or interstitial application.

*Brachytherapy source* means a radioactive source or a manufacturer-assembled source train or a combination of these sources that is designed to deliver a therapeutic dose within a distance of a few centimeters.

*Client's address* means the area of use or a temporary job site for the purpose of providing mobile medical service in accordance with § 35.80.

*Cyclotron* means a particle accelerator in which the charged particles travel in an outward spiral or circular path. A cyclotron accelerates charged particles at energies usually in excess of 10 megaelectron volts and is commonly used for production of short half-life radionuclides for medical use.

*Dedicated check source* means a radioactive source that is used to assure the constant operation of a radiation detection or measurement device over several months or years.

*Dentist* means an individual licensed by a State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to practice dentistry.

*High dose-rate remote afterloader*, as used in this part, means a brachytherapy device that remotely delivers a dose rate in excess of 12 gray (1200 rads) per hour at the point or surface where the dose is prescribed.

*Low dose-rate remote afterloader*, as used in this part, means a brachytherapy device that remotely delivers a dose rate of less than or equal to 2 gray (200 rads) per hour at the point or surface where the dose is prescribed.

*Management* means the chief executive officer or other individual having the authority to manage, direct, or administer the licensee's activities, or those persons' delegate or delegates.

*Manual brachytherapy*, as used in this part, means a type of brachytherapy in which the brachytherapy sources (e.g., seeds, ribbons) are manually placed topically on or inserted either into the body cavities that are in close proximity to a treatment site or directly into the tissue volume.

*Medical event* means an event that meets the criteria in § 35.3045(a) or (b).

*Medical institution* means an organization in which more than one medical discipline is practiced.

*Medical use* means the intentional internal or external administration of byproduct material or the radiation from byproduct material to patients or human research subjects under the supervision of an authorized user.

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*Medium dose-rate remote afterloader*, as used in this part, means a brachytherapy device that remotely delivers a dose rate of greater than 2 gray (200 rads) per hour, but less than or equal to 12 gray (1200 rads) per hour at the point or surface where the dose is prescribed.

*Mobile medical service* means the transportation of byproduct material to and its medical use at the client's address.

*Output* means the exposure rate, dose rate, or a quantity related in a known manner to these rates from a brachytherapy source or a teletherapy, remote afterloader, or gamma stereotactic radiosurgery unit for a specified set of exposure conditions.

*Patient intervention* means actions by the patient or human research subject, whether intentional or unintentional, such as dislodging or removing treatment devices or prematurely terminating the administration.

*Pharmacist* means an individual licensed by a State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to practice pharmacy.

*Physician* means a medical doctor or doctor of osteopathy licensed by a State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to prescribe drugs in the practice of medicine.

*Podiatrist* means an individual licensed by a State or Territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to practice podiatry.

*Positron Emission Tomography (PET) radionuclide production facility* is defined as a facility operating a cyclotron or accelerator for the purpose of producing PET radionuclides.

*Preceptor* means an individual who provides, directs, or verifies training and experience required for an individual to become an authorized user, an authorized medical physicist, an authorized nuclear pharmacist, or a Radiation Safety Officer.

*Prescribed dosage* means the specified activity or range of activity of unsealed byproduct material as documented—

- (1) In a written directive; or

- (2) In accordance with the directions of the authorized user for procedures performed pursuant to §§ 35.100 and 35.200.

*Prescribed dose* means—

- (1) For gamma stereotactic radiosurgery, the total dose as documented in the written directive;

- (2) For teletherapy, the total dose and dose per fraction as documented in the written directive;

- (3) For manual brachytherapy, either the total source strength and exposure time or the total dose, as documented in the written directive; or

- (4) For remote brachytherapy afterloaders, the total dose and dose per fraction as documented in the written directive.

*Pulsed dose-rate remote afterloader*, as used in this part, means a special type of remote afterloading brachytherapy device that uses a single source capable of delivering dose rates in the "high dose-rate" range, but—

- (1) Is approximately one-tenth of the activity of typical high dose-rate remote afterloader sources; and

- (2) Is used to simulate the radiobiology of a low dose-rate treatment by inserting the source for a given fraction of each hour.

*Radiation Safety Officer* means an individual who—

- (1) Meets the requirements in §§ 35.50(a) or (c)(1) and 35.59; or

- (2) Is identified as a Radiation Safety Officer on—

- (i) A specific medical use license issued by the Commission or Agreement State; or

- (ii) A medical use permit issued by a Commission master material licensee.

*Sealed source* means any byproduct material that is encased in a capsule designed to prevent leakage or escape of the byproduct material.

*Sealed Source and Device Registry* means the national registry that contains all the registration certificates, generated by both NRC and the Agreement States, that summarize the radiation safety information for the sealed sources and devices and describe the licensing and use conditions approved for the product.

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*Stereotactic radiosurgery* means the use of external radiation in conjunction with a stereotactic guidance device to very precisely deliver a therapeutic dose to a tissue volume.

*Structured educational program* means an educational program designed to impart particular knowledge and practical education through interrelated studies and supervised training.

*Teletherapy*, as used in this part, means a method of radiation therapy in which collimated gamma rays are delivered at a distance from the patient or human research subject.

*Temporary job site* means a location where mobile medical services are conducted other than those location(s) of use authorized on the license.

*Therapeutic dosage* means a dosage of unsealed byproduct material that is intended to deliver a radiation dose to a patient or human research subject for palliative or curative treatment.

*Therapeutic dose* means a radiation dose delivered from a source containing byproduct material to a patient or human research subject for palliative or curative treatment.

*Treatment site* means the anatomical description of the tissue intended to receive a radiation dose, as described in a written directive.

*Type of use* means use of byproduct material under §§ 35.100, 35.200, 35.300, 35.400, 35.500, 35.600, or 35.1000.

*Unit dosage* means a dosage prepared for medical use for administration as a single dosage to a patient or human research subject without any further manipulation of the dosage after it is initially prepared.

*Written directive* means an authorized user's written order for the administration of byproduct material or radiation from byproduct material to a specific patient or human research subject, as specified in § 35.40.

[67 FR 20370, Apr. 24, 2002, as amended at 68 FR 19324, Apr. 21, 2003; 69 FR 55737, Sept. 16, 2004; 70 FR 16361, Mar. 30, 2005; 71 FR 15008, Mar. 27, 2006; 72 FR 45151, Aug. 13, 2007; 72 FR 55930, Oct. 1, 2007]

### § 35.5 Maintenance of records.

Each record required by this part must be legible throughout the specified retention period. The record may be the original, a reproduced copy, or a

microform if the copy or microform is authenticated by authorized personnel and the microform is capable of producing a clear copy throughout the required retention period. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Records such as letters, drawings, and specifications must include all pertinent information such as stamps, initials, and signatures. The licensee shall maintain adequate safeguards against tampering with and loss of records.

### § 35.6 Provisions for the protection of human research subjects.

(a) A licensee may conduct research involving human research subjects only if it uses the byproduct materials specified on its license for the uses authorized on its license.

(b) If the research is conducted, funded, supported, or regulated by another Federal agency that has implemented the Federal Policy for the Protection of Human Subjects (Federal Policy), the licensee shall, before conducting research—

(1) Obtain review and approval of the research from an "Institutional Review Board," as defined and described in the Federal Policy; and

(2) Obtain "informed consent," as defined and described in the Federal Policy, from the human research subject.

(c) If the research will not be conducted, funded, supported, or regulated by another Federal agency that has implemented the Federal Policy, the licensee shall, before conducting research, apply for and receive a specific amendment to its NRC medical use license. The amendment request must include a written commitment that the licensee will, before conducting research—

(1) Obtain review and approval of the research from an "Institutional Review Board," as defined and described in the Federal Policy; and

(2) Obtain "informed consent," as defined and described in the Federal Policy, from the human research subject.