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HEALTH AND MENTAL HYGIENE
Thomas Farley, MD, MPH
Commissioner

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February 4, 2013

Pamela J. Henderson, Deputy Director
Division Materials Safety and State Agreements
Office of Federal and State Materials and
Environmental Management Programs (FSME)
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

Dear Ms. Henderson:

Enclosed are:

- a copy of the proposed revisions to the New York City Radiological Health Rules, Article 175 of the New York City Health Code "Radiation Control", last amended in May, 2011; and
- Summary of Change to CFR sheets for RATS IDs 1998-5 and 1998-6.

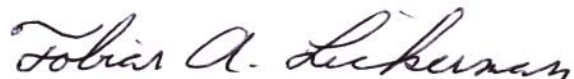
The proposed revisions will be made available for public comment in July, 2013 with a request for comments by Sept, 2013. We request NRC's comments by March, 2013. The proposed changes to regulations are identified by underlined additions and/~~strike-through~~ or [square bracketed] deletions and correspond to the following equivalent amendments to NRC's regulations.

<u>Rats ID</u>	<u>Title</u>	<u>State Section</u>
• 1998-5	Minor Corrections, Clarifying Changes, and a Minor Policy Change	NYC Health Code Article 175 - §§175.02; .03 and .103
• 1998-6	Transfer for Disposal and Manifests; Minor Technical Conforming Amendment	NYC Health Code Article 175 - §§175.03 and .104

We believe that adoption of these revisions satisfies the compatibility and health and safety categories established in the Office of Federal and State Materials and Environmental Programs (FSME) Procedure SA-200.

If you have any questions, please feel free to contact me at 212-313-5216 or tllickerm@health.nyc.gov, or Gene Miskin, Director of ORH at 212-313-5233 or gmiskin@health.nyc.gov

Sincerely,



Tobias A. Lickerman

Chief of Radioactive Materials Division

New York City Office of Radiological Health

Enclosures:

As stated.

NYC ARTICLE 175 AMENDMENTS RATS ID 1998-5 & RATS ID 1998-6

NYC ARTICLE 175 AMENDMENTS

Minor Corrections, Clarifying Changes, and a Minor Policy Change RATS ID 1998-5

Transfer for Disposal and Manifests; Minor Technical Conforming Amendment RATS ID 1998-6

– MARKED UP SECTIONS–

§ 175.01 Applicability and inapplicability, communications.

§ 175.02 Definitions.

(a) As used in this Code, the following definitions shall apply:

(1) "A₁" means the maximum activity of special form radioactive material permitted in a Type A package. "A₂" means the maximum activity of radioactive material, other than special form, LSA and SCO material, permitted in a Type A package. These values are either listed in Table A-1, Appendix A of § 175.105 of this Code or may be derived in accordance with the procedure prescribed in such Appendix A.

(62) "Dead-man switch" means a switch so constructed that a circuit closing contact can be maintained only by continuous pressure on the switch by the operator.

(63) "Declared pregnant woman" means a woman who has voluntarily informed ~~her employer~~ the licensee, in writing, of her pregnancy and the estimated date of conception. The declaration remains in effect until the declared pregnant woman withdraws the declaration in writing or is no longer pregnant.

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(64) "Decommission" means to remove a facility or site safely from service and reduce residual radioactivity to a level that permits-

(109) "High dose-rate remote afterloader" 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.

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(110) "High radiation area" means an area, accessible to individuals, in which radiation levels from radiation sources external to the body could result in an individual receiving a dose equivalent in excess of 1 mSv (0.1 rem) in 1 hour at 30 centimeters (12 inches) from ~~any source of the~~ radiation source or 30 centimeters from any surface that the radiation penetrates. For the purposes of this Code, rooms or areas in which diagnostic x-ray systems are used for healing arts purposes are not considered high radiation areas.

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NYC ARTICLE 175 AMENDMENTS RATS ID 1998-5 & RATS ID 1998-6

(115) "Individual monitoring devices (individual monitoring equipment)" means devices designed to be worn by a single individual for the assessment of dose equivalent such as film badges, thermoluminescence dosimeters (TLDs), pocket ionization chambers, and personal ("lapel") air sampling devices. ~~For purposes of this Code, "personnel dosimeter" and "dosimeter" are equivalent terms. Examples of individual monitoring devices are film badges, thermoluminescent dosimeters (TLDs), pocket ionization chambers, and personal air sampling devices.~~

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(125) "Leakage technique factors" means the technique factors associated with the diagnostic or therapeutic source assembly which are used in measuring leakage radiation. They are defined as follows:

(i) for diagnostic source assemblies intended for capacitor energy storage equipment, the maximum-rated peak tube potential and the maximum-rated number of exposures in an hour for operation at the maximum-rated peak tube potential with the quantity of charge per exposure being 10 millicoulombs, i.e., 10 milliamperere seconds, or the minimum obtainable from the unit, whichever is larger.

(ii) for diagnostic source assemblies intended for field emission equipment rated for pulsed operation, the maximum-rated peak tube potential and the maximum-rated number of x-ray pulses in an hour for operation at the maximum-rated peak tube potential.

(iii) for all other diagnostic or therapeutic source assemblies, the maximum-rated peak tube potential and the maximum-rated continuous tube current for the maximum-rated peak tube potential.

(126) "Lens dose equivalent (LDE)" applies to the external exposure of the lens of the eye and is taken as the dose equivalent at a tissue depth of 0.3 centimeter (300 mg/cm²).

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~~(126,127)~~ "License" means a radioactive materials license issued by the Department for the transfer, receipt, production, possession or use of radioactive materials pursuant to this Code. There are two types of licenses: general and specific. A "general license" means a license to transfer, receive, possess, or use radioactive material in certain forms or quantities which is issued pursuant to the terms and conditions of this Code. General licenses are effective without the filing of an application with or the issuance of a license document by the Department. A "specific license" means a license evidenced by a license document issued by the Department to a licensee upon review and approval of an application submitted pursuant to this Code or a license similarly issued by the New York State Department of Health, the New York State Department of Labor, the U.S. Nuclear Regulatory Commission or any agreement state. Unless otherwise specified, the type of license referred to in this Code shall be a specific license.

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(275) "Variable-aperture beam-limiting device" means a beam-limiting device which has capacity for stepless adjustment of the x-ray field size at a given SID.

(276) "Very high radiation area" means an area, accessible to individuals, in which radiation levels from radiation sources external to the body could result in an individual receiving an absorbed dose in excess of 5 Gy (500 rad) in 1 hour at 1 meter (3 feet) from a radiation source or 1 meter source of radiation or from any surface that the radiation penetrates. ~~At very high doses received at high dose rates, units of absorbed dose (gray and rad) are appropriate, rather than units of dose equivalent (sievert and rem).~~

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NYC ARTICLE 175 AMENDMENTS RATS ID 1998-5 & RATS ID 1998-6

§175.03 Standards for protection against radiation.

(a) General provisions. (1) Purpose. ***

(b) Radiation protection programs. (1) Radiation Protection Programs. Each person who operates or permits the operation of a radiation installation or who operates, transfers, receives, produces, possesses or uses, or permits the operation, transfer, receipt, production, possession or use of any radiation source shall:

(i) use, to the extent practicable, procedures and engineering controls based upon sound radiation protection principles to achieve occupational doses ~~and doses to members of the public and public doses~~ that are as low as is reasonably achievable (ALARA) below the limits specified in this Code;

(c) Occupational dose limits. (1) Occupational dose limits for adults.

(i) Except for planned special exposures pursuant to §175.03(c)(6), the licensee or registrant shall control the occupational dose to any individual adult from licensed or registered activities to ensure that such dose does not exceed:

(A) an annual limit, which is the lesser of:

(a) a total effective dose equivalent of 0.05 Sv (5 rem); or

(b) the sum of the deep dose equivalent and the committed dose equivalent to any individual organ or tissue, other than the lens of the eye, equal to 0.5 Sv (50 rem); and

(B) annual limits to the lens of the eye, to the skin of the whole body, and to the skin of the extremities of:

(a) A lens dose, ~~an eye~~ dose equivalent of 0.15 Sv (15 rem), and

(b) a shallow dose equivalent of 0.5 Sv (50 rem) to the skin of the whole body or to the skin of any extremity.

(ii) Doses received in excess of the annual limits, including doses received during accidents, emergencies, and planned special exposures, shall be subtracted from the limits for planned special exposures that the individual may receive during the current year and during the individual's lifetime.

(iii) The assigned deep dose equivalent and shallow dose equivalent must be for the part of the body receiving the highest exposure. The assigned shallow dose equivalent must be the dose averaged over the contiguous 10 square centimeters of skin receiving the highest exposure:

(A) the deep dose equivalent, ~~eye-lens~~ dose equivalent and shallow dose equivalent may be assessed from surveys or other radiation measurements for the purpose of demonstrating compliance with the occupational dose limits, if the individual monitoring device was not in the region of highest potential exposure, or the results of individual monitoring are unavailable; or

(B) when a protective apron is worn during x-ray fluoroscopic procedures to be in compliance with §175.62(i) of this Code and monitoring is conducted as specified in §175.03(f)(2)(ii), the effective dose equivalent for external radiation may be determined for these individuals as follows:

(2) Requirements for summation of external and internal doses.

(3) Determination of external dose from airborne radioactive material.

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NYC ARTICLE 175 AMENDMENTS RATS ID 1998-5 & RATS ID 1998-6

(i) Licensees, when determining the dose from airborne radioactive material, shall include the contribution to the deep dose equivalent, eye-lens dose equivalent, and shallow dose equivalent from external exposure to the radioactive cloud. (See Appendix B of this section, footnotes 1 and 2).

(ii) Airborne radioactivity measurements and DAC values shall not be used as the primary means to assess the deep dose equivalent when the airborne radioactive material includes radionuclides other than noble gases or if the cloud of airborne radioactive material is not relatively uniform. The determination of the deep dose equivalent to an individual shall be based upon measurements using instruments or individual monitoring devices.

(4) Determination of internal exposure.

(8) **Dose to an embryo/fetus.** (i) The licensee or registrant shall ensure that the dose equivalent to ~~an~~ the embryo/fetus during the entire pregnancy, due to occupational exposure of a declared pregnant woman, does not exceed 5 mSv (0.5 rem). (See §175.03(k)(89) for recordkeeping requirements.)

(ii) The licensee or registrant shall review exposure history and adjust working conditions so as to avoid a monthly exposure of more than 0.5 mSv (50 mrem) to a declared pregnant woman.

(iii) The dose to an embryo/fetus shall be taken as the sum of:

(A) the deep dose equivalent to the declared pregnant woman; and

(B) the dose equivalent to the embryo/fetus resulting from radionuclides in the embryo/fetus and radionuclides in the declared pregnant woman.

(iv) If, by the time the woman declares pregnancy to the licensee or registrant, the dose equivalent to the embryo/fetus is found to have exceeded 0.5 rem (5 mSv), or is within 0.05 rem (0.5 mSv) of this dose, has exceeded 4.5 mSv (0.45 rem), the licensee or registrant shall be deemed to be in compliance with §175.03(c)(8)(i) if the additional dose to the embryo/fetus does not exceed 0.5 mSv (0.05 rem) during the remainder of the pregnancy.

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(d) Radiation dose limits for individual members of the public.

(f) **Surveys and monitoring.** (1) **General.** (i) Each licensee or registrant shall make, or cause to be made, surveys that:

(A) are may be necessary for the licensee or registrant to comply with this Code; and

(B) are necessary under the circumstances to evaluate:

(a) The magnitude and extent of radiation levels; and

(b) concentrations or quantities of radioactive material; and

(c) the potential radiological hazards of the radiation levels and residual radioactivity detected.
that could be present.

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(ii) The licensee or registrant shall ensure that instruments and equipment used for quantitative radiation measurements, for example, dose rate and effluent monitoring, are calibrated at intervals not to exceed 12 months for the radiation measured.

(2) **Personnel monitoring.** (i) **External radiation sources.**

Each licensee shall monitor occupational exposure to radiation from licensed and unlicensed radiation sources under the control of the licensee and shall supply and require the use of individual monitoring devices by;

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NYC ARTICLE 175 AMENDMENTS RATS ID 1998-5 & RATS ID 1998-6

~~Each who possesses any radiation source shall supply and require the proper use of appropriate, calibrated and operable individual monitoring devices by:~~

(A) adults likely to receive, in 1 year from sources external to the body, a dose in excess of 10 percent of the limits in §175.03(c)(1)(i) and

(B) minors and declared pregnant women likely to receive, in 1 year from sources external to the body, a deep dose equivalent -in excess of 10 percent of any of the applicable limits in §175.03(c)(7) or §175.03(c)(8); and

(C) individuals entering a high or very high radiation area.

(ii) A person supplying personnel monitoring devices to individuals pursuant to §175.03(f)(2)(i) shall ensure that the individuals wear such devices as follows:

(k) **Records. (1) General provisions.** (i) (a) Each licensee or registrant shall use the units: curie, rad, rem, including multiples and subdivisions, SI units (becquerel, gray, sievert and coulomb per kilogram) or special units (curie, rad, rem and roentgen) including multiples and subdivisions, and shall clearly indicate the units of all quantities on records required by this Code.

(b) In the records required by this Code, the licensee may record quantities in SI units in parentheses following each of the units specified in paragraph (a) of this section. However, all quantities must be recorded as stated in paragraph (a) of this section.

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~~(ii) The licensee or registrant shall make a clear distinction between the quantities entered on the records required by this section, such as, total effective dose equivalent, total organ dose equivalent, shallow dose equivalent, eye dose equivalent, deep dose equivalent, or committed effective dose equivalent.~~

(9) **Records of individual monitoring results.** (i) Recordkeeping Requirement. Each licensee or registrant shall maintain records of doses received by all individuals for whom monitoring was required pursuant to §175.03(f)(2) of this Code, and records of doses received during planned special exposures, accidents, and emergency conditions. Assessments of dose equivalent and records made using units in effect before the effective date of these requirements need not be changed. These records shall include, when applicable:

(A) the deep dose equivalent to the whole body, eye-lens dose equivalent, shallow dose equivalent to the skin, and shallow dose equivalent to the extremities; and

(B) the estimated intake or body burden of radionuclides (see §175.03(c)(2)); and

(C) the committed effective dose equivalent assigned to the intake or body burden of radionuclides; and

(D) the specific information used to calculate-assess the committed effective dose equivalent pursuant to §175.03(c)(4)(iii); and

(38) **Maintenance of records.**

(l) **Reports. (1) Reports of stolen, lost, or missing licensed or registered sources of radiation.**

NYC ARTICLE 175 AMENDMENTS RATS ID 1998-5 & RATS ID 1998-6

(2) **Notification of incidents.** (i) **Immediate notification.** Notwithstanding other requirements for notification, each licensee or registrant shall immediately report each event involving ~~byproduct, source, or special nuclear material~~ or a source of radiation possessed by the licensee or registrant that may have caused or threatens to cause any of the following conditions:

(A) an individual to receive:

(a) a total effective dose equivalent of 0.25 Sv (25 rem) or more; or

(b) ~~an eye~~ lens dose equivalent of 0.75 Sv (75 rem) or more; or

(c) a shallow dose equivalent to the skin or extremities or a total organ dose equivalent of 2.5 Gy (250 rad) or more;
or

(B) the release of radioactive material, inside or outside of a restricted area, so that, had an individual been present for 24 hours, the individual could have received an intake five (5) times the occupational ALI. This provision does not apply to locations where personnel are not normally stationed during routine operations, such as hot-cells or process enclosures.

(ii) **Twenty-four hour notification.** Each licensee or registrant shall, within 24 hours of discovery of the event, report to the Department each event involving loss of control of a licensed or registered source of radiation possessed by the licensee or registrant that may have caused, or threatens to cause, any of the following conditions:

(A) an individual to receive, in a period of 24 hours:

(a) a total effective dose equivalent exceeding 0.05 Sv (5 rem); or

(b) ~~an eye~~ lens dose equivalent exceeding 0.15 Sv (15 rem); or

(c) a shallow dose equivalent to the skin or extremities or a total organ dose equivalent exceeding 0.5 Sv (50 rem);
or

(B) the release of radioactive material, inside or outside of a restricted area, so that, had an individual been present for 24 hours, the individual could have received an intake in excess of one occupational ALI. This provision does not apply to locations where personnel are not normally stationed during routine operations, such as hot-cells or process enclosures.

(iii) ***

(iv) ***

(v) ***

(3) **Reports of exposures, radiation levels, and concentrations of radioactive material exceeding the limits.**

(i) **Reportable events.** In addition to the notification required by §175.03(l)(2), each licensee or registrant shall submit a written report within thirty (30) days after learning of any of the following occurrences:

(9) **Report and notification of a dose to an embryo/fetus or a nursing child.**

§175.104 Waste disposal.

(a) **General requirements.**

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NYC ARTICLE 175 AMENDMENTS RATS ID 1998-5 & RATS ID 1998-6

(e) Disposal of specific wastes.

(f) **Transfer for disposal and manifests.** (1) The requirements of §175.104(f) and ~~Appendix A of §175.104~~ Appendix G to 10 CFR Part 20 are designed to

~~(i) control transfers of low-level radioactive waste intended for disposal at a licensed low-level radioactive waste by any waste generator, waste collector, or waste processor licensee, as defined in 10 CFR 20, who ships low-level waste either directly, or indirectly through a waste collector or waste processor, to a licensed low-level waste land disposal facility (as defined in 10 CFR Part 61;~~

~~(ii) disposal facility,~~ establish a manifest tracking system, and

~~(iii) supplement existing requirements concerning transfers and recordkeeping for those wastes.~~

(2) Each shipment of radioactive waste designated for disposal at a licensed low-level radioactive waste disposal facility shall be accompanied by a shipment manifest as specified in Section I of Appendix ~~G to 10 CFR Part 20~~ A of §175.104.

(3) Each shipment manifest shall include a certification by the waste generator as specified in Section II of ~~Appendix A of §175.104~~ Appendix G to 10 CFR Part 20.

(4) Each person involved in the transfer of waste for disposal ~~or in the~~ and disposal of waste, including the waste generator, waste collector, waste processor, and disposal facility operator, shall comply with the requirements specified in Section III of Appendix ~~A of §175.104~~ G to 10 CFR Part 20.

(5) The licensee or applicant for a license shall comply with the requirements of the New York State Department of Environmental Conservation as codified in 6 NYCRR Part 381, or any successor law or regulation.

(6) Any licensee shipping radioactive waste intended for ultimate disposal at a licensed land disposal facility must document the information required on NRC's Uniform Low-Level Radioactive Waste Manifest and transfer this recorded manifest information to the intended consignee in accordance with Appendix G to 10 CFR Part 20.

(7) Any licensee shipping byproduct material as defined in paragraphs §175.02(a)(iii) and (iv) intended for ultimate disposal at a land disposal facility licensed under part 61 of this chapter must document the information required on the NRC's Uniform Low-Level Radioactive Waste Manifest and transfer this recorded manifest information to the intended consignee in accordance with Appendix G to 10 CFR Part 20.

(g) Compliance with environmental and health protection regulations.

(h) **Records of waste disposal.** (1) The licensee shall maintain records of the disposal of licensed materials made under §175.104(b), (c), (d), (e) and 10 CFR Part 61 or the equivalent regulations of an agreement state.

**Minor Corrections, Clarifying Changes, and a Minor Policy Change
(63 FR 39477, 63 FR 45393) RATS ID 1998-5 Effective 10/26/98**

Change to NRC Section	Title	State Section	Compatibility Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
' 20.1003	Definitions	§175.02	A	Amended Definition: Declared pregnant woman means a woman who has voluntarily informed the licensee, in writing, of her pregnancy and the estimated date of conception. The declaration remains in effect until the declared pregnant woman withdraws the declaration in writing or is no longer pregnant.			
' 20.1003	Definitions	§175.02	A	Amended Definition: High radiation area means an area, accessible to individuals, in which radiation levels from radiation sources external to the body could result in an individual receiving a dose equivalent in excess of 0.1 rem (1 mSv) in 1 hour at 30 centimeters from the radiation source or 30 centimeters from any surface that the radiation penetrates.			
' 20.1003	Definitions	§175.02	C	Amended Definition: Individual monitoring devices (individual monitoring equipment) means devices designed to be worn by a single individual for the assessment of dose equivalent such as film badges,			

Change to NRC Section	Title	State Section	Compatibility Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
				thermoluminescence dosimeters (TLDs), pocket ionization chambers, and personal ("lapel") air sampling devices.			
'20.1003	Definitions	§175.02	A	Amended Definition: Lens dose equivalent (LDE) applies to the external exposure of the lens of the eye and is taken as the dose equivalent at a tissue depth of 0.3 centimeter (300 mg/cm ²).			
'20.1003	Definitions	§175.02	A	Amended Definition: Very high radiation area means an area, accessible to individuals, in which radiation levels from radiation sources external to the body could result in an individual receiving an absorbed dose in excess of 500 rads (5 grays) in 1 hour at 1 meter from a radiation source or 1 meter from any surface that the radiation penetrates.			
'20.1101 (b)	Radiation protection programs	§175.03 (b)(1)(i)	H&S	Revised Paragraph (b): (b) The licensee shall use, to the extent practical, procedures and engineering controls based upon sound radiation protection principles to achieve occupational doses and doses to members of the public that are as low as is reasonably achievable (ALARA).			

Change to NRC Section	Title	State Section	Compatibility Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
' 20.1201	Occupational dose limits for adults	§175.03 (c)(1)(i) §175.03 (c)(1) (iii)	A	Revised Paragraphs (a)(2) and (c): (a)(2)(i) A lens dose equivalent of 15 rems (0.15 Sv), and (c) The assigned deep-dose equivalent and shallow-dose equivalent must be for the part of the body receiving the highest exposure. The deep-dose equivalent, lens dose equivalent, and shallow-dose equivalent may be assessed from surveys or other radiation measurements for the purpose of demonstrating compliance with the occupational dose limits, if the individual monitoring device was not in the region of highest potential exposure, or the results of individual monitoring are unavailable.			
' 20.1203	Determination of external dose from airborne radioactive material	§175.03 (c)(3)(i)	A	Revised Introductory Text: Licensees shall, when determining the dose from airborne radioactive material, include the contribution to the deep-dose equivalent, lens dose equivalent, and shallow-dose equivalent from external exposure to the radioactive cloud (see appendix B to part 20, footnotes 1 and 2).			.
' 20.1206	Planned special	§175.03 (c)(6)	D	N/A	N/A		

Change to NRC Section	Title	State Section	Compatibility Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
	exposures						
' 20.1208	Dose equivalent to an embryo/fetus	§175.03 (c)(8)	A	<p>Revised paragraphs (a), (c) & (d):</p> <p>(a) The licensee shall ensure that the dose equivalent to the embryo/fetus during the entire pregnancy, due to the occupational exposure of a declared pregnant woman, does not exceed 0.5 rem (5 mSv). (For recordkeeping requirements, see Sec. 20.2106.)</p> <p>(c) The dose equivalent to the embryo/fetus is the sum of:</p> <p>(1) The deep-dose equivalent to the declared pregnant woman; and</p> <p>(2) The dose equivalent to the embryo/fetus resulting from radionuclides in the embryo/fetus and radionuclides in the declared pregnant woman.</p> <p>(d) If the dose equivalent to the embryo/fetus is found to have exceeded 0.5 rem (5 mSv), or is within 0.05 rem (0.5 mSv) of this dose, by the time the woman declares the pregnancy to the licensee, the licensee shall be deemed to be in compliance with paragraph (a) of this section if the additional dose equivalent to the embryo/fetus does not exceed 0.05 rem (0.5 mSv)</p>			

Change to NRC Section	Title	State Section	Compatibility Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
				during the remainder of the pregnancy.			
' 20.1501	General	§175.03 (f)(1)	H&S	Amended paragraphs (a)(2)(i)&(iii): (a)(2) (i) The magnitude and extent of radiation levels; and (iii) The potential radiological hazards.			
' 20.1502	Conditions requiring individual monitoring of external and internal occupational dose	§175.03 (f)(2)	H&S	Amended Paragraph (a): (a) Each licensee shall monitor occupational exposure to radiation from licensed and unlicensed radiation sources under the control of the licensee and shall supply and require the use of individual monitoring devices byC (1) Adults likely to receive, in 1 year from sources external to the body, a dose in excess of 10 percent of the limits in ' 20.1201(a), (2) Minors likely to receive, in 1 year, from radiation sources external to the body, a deep dose equivalent in excess of 0.1 rem (1 mSv), a lens dose equivalent			

Change to NRC Section	Title	State Section	Compatibility Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
				<p>in excess of 0.15 rem (1.5 mSv), or a shallow dose equivalent to the skin or to the extremities in excess of 0.5 rem (5 mSv);</p> <p>(3) Declared pregnant women likely to receive during the entire pregnancy, from radiation sources external to the body, a deep dose equivalent in excess of 0.1 rem (1 mSv); ² and</p> <p>²All of the occupational doses in ' 20.1201 continue to be applicable to the declared pregnant worker as long as the embryo/fetus dose limit is not exceeded.</p> <p>(4) Individuals entering a high or very high radiation area.</p>			
' 20.1502	Conditions requiring individual monitoring of external and internal occupational dose	§175.03 (f)(2)(v)	H&S	<p>Revised Paragraph (b):</p> <p>(b)</p> <p>(1) Adults likely to receive, in 1 year, an intake in excess of 10 percent of the applicable ALI(s) in table 1, Columns 1 and 2, of appendix B to Secs. 20.1001-20.2402;</p> <p>(2) Minors likely to receive, in 1 year, a committed effective dose equivalent in excess of 0.1 rem (1 mSv); and</p> <p>(3) Declared pregnant women likely to receive, during the entire pregnancy, a committed effective dose equivalent in excess of 0.1 rem (1 mSv).</p>			

Change to NRC Section	Title	State Section	Compatibility Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
' 20.1903	Exceptions to posting requirements		D	N/A	N/A		
' 20.1906	Procedures for receiving and opening packages	§175.03 (j)(6)(iv)	H&S	In Sec. 20.1906, the introductory text of paragraph (d) is revised to read as follows: * * * * * (d) The licensee shall immediately notify the final delivery carrier and the NRC Operations Center (301-816-5100), by telephone, when--			
' 20.2101	General provisions	§175.03 (k)(1)(i)	C	New Paragraph (b): (b) In the records required by this part, the licensee may record quantities in SI units in parentheses following each of the units specified in paragraph (a) of this section. However, all quantities must be recorded as stated in paragraph (a) of this section.			
' 20.2106	Records of individual monitoring results	§175.03 (k)(9)(i)	C	Amended Paragraph (a): a) (1) The deep-dose equivalent to the whole body, lens dose equivalent, shallow-dose equivalent to the skin, and shallow-dose equivalent to the extremities; (2) The estimated intake of radionuclides (see Sec. 20.1202); (3) The committed effective dose			

Change to NRC Section	Title	State Section	Compatibility Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
				equivalent assigned to the intake of radionuclides; (4) The specific information used to assess the committed effective dose equivalent pursuant to Sec. 20.1204(a) and (c), and when required by Sec. 20.1502;			
' 20.2202	Notification of incidents	§175.03 (l)(2)(i), (ii)	C	Amended Paragraphs (a)(1)(ii), (b)(1)(ii), and (d)(2): (a)(1)(ii) A lens dose equivalent of 75 rems (0.75 Sv) or more; or (b)(1)(ii) A lens dose equivalent exceeding 15 rems (0.15 Sv); or (d)(2) All other licensees shall make the reports required by paragraphs (a) and (b) of this section by telephone to the NRC Operations Center (301) 816-5100.			
' 35.641	Radiation surveys for teletherapy facilities	§175.10 3(h)(16) (i)(B)(a)	H&S	Amended Paragraph (a)(2): (a)(2) (i) Radiation dose rates in restricted areas are not likely to cause any occupationally exposed individual to receive a dose in excess of the limits specified in Sec. 20.1201 of this chapter; and (ii) Radiation dose rates in controlled or unrestricted areas are not likely to cause any individual member of the public to receive a dose in excess of the			

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				limits specified in Sec. 20.1301 of this chapter.			
' 35.643	Modification of teletherapy unit or room before beginning a treatment program	§175.103(h)(18)	H&S	<p>In Sec. 35.643, paragraphs (a) introductory text and (a)(1) are revised to read as follows:</p> <p>(a) If the survey required by Sec. 35.641 indicates that any individual member of the public is likely to receive a dose in excess of the limits specified in Sec. 20.1301 of this chapter, the licensee shall, before beginning the treatment program:</p> <p>(1) Either equip the unit with stops or add additional radiation shielding to ensure compliance with Sec. 20.1301 of this chapter.</p>			
' 36.23	Access control	N/A	H&S	<p>Amended Paragraph (g):</p> <p>(g) Each entrance to the radiation room of a panoramic irradiator and each entrance to the area within the personnel access barrier of an underwater irradiator must be posted as required by 10 CFR 20.1902. Radiation postings for panoramic irradiators must comply with the posting requirements of 10 CFR 20.1902, except that signs may be removed, covered, or otherwise made inoperative when the sources are fully shielded.</p>			NYC does not license or regulate panoramic or underwater irradiators.

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' 39.33	Radiation detection instruments	N/A	C	Amended Paragraph (a): (a) The licensee shall keep a calibrated and operable radiation survey instrument capable of detecting beta and gamma radiation at each field station and temporary jobsite to make the radiation surveys required by this part and by part 20 of this chapter. To satisfy this requirement, the radiation survey instrument must be capable of measuring 0.001 mSv (0.1 mrem) per hour through at least 0.5 mSv (50 mrem) per hour.			NYC does not license or regulate well logging operations.

**Transfer for Disposal and Manifests; Minor Technical Conforming Amendment
(63 FR 50127) RATS ID 1998-6 Effective 11/20/98**

Change to NRC Section	Title	State Section	Compatibility Category	Summary of Change to CFR	Difference Yes/No	Significant Yes/No	If Difference, Why or Why Not Was a Comment Generated
'20.1002	Scope	§175.03(a)(2)	D	N/A	N/A		
'20.1009	Information collection requirements: OMB approval	N/A	D	N/A	N/A		
'20.2006	Transfer for disposal and manifests	§175.104(f)	B	<p>Amended Section: (a) The requirements of this section and appendix G to 10 CFR Part 20 are designed to-- (1) Control transfers of low-level radioactive waste by any waste generator, waste collector, or waste processor licensee, as defined in this part, who ships low-level waste either directly, or indirectly through a waste collector or waste processor, to a licensed low-level waste land disposal facility (as defined in Part 61 of this chapter); (2) Establish a manifest tracking system; and (3) Supplement existing requirements concerning transfers and recordkeeping</p>			

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				<p>for those wastes.</p> <p>(b) Any licensee shipping radioactive waste intended for ultimate disposal at a licensed land disposal facility must document the information required on NRC's Uniform Low-Level Radioactive Waste Manifest and transfer this recorded manifest information to the intended consignee in accordance with appendix G to 10 CFR Part 20.</p> <p>(c) Each shipment manifest must include a certification by the waste generator as specified in section II of appendix G to 10 CFR Part 20.</p> <p>(d) Each person involved in the transfer for disposal and disposal of waste, including the waste generator, waste collector, waste processor, and disposal facility operator, shall comply with the requirements specified in section III of appendix G to 10 CFR Part 20.</p>			
Appendix F To Part 20	Appendix F		N/A	Appendix F Removed			

