



NEW YORK CITY DEPARTMENT OF  
HEALTH AND MENTAL HYGIENE  
Thomas Farley, MD, MPH  
*Commissioner*

Office of Radiological  
Health

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December 14, 2012

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 sheet for RATS ID 2008-1.

The proposed revisions will be made available for public comment in April, 2013 with a request for comments by June, 2013. We request NRC's comments by February, 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>
• 2008-1	Occupational Dose Records, Labeling Containers, and the Total Effective Dose Equivalent Parts – 19 and 20	NYC Health Code Article 175 - §§175.02; .03 and .04

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 [tlickerm@health.nyc.gov](mailto:tlickerm@health.nyc.gov), or Gene Miskin, Director of ORH at 212-313-5233 or [gmiskin@health.nyc.gov](mailto:gmiskin@health.nyc.gov)

Sincerely,



Tobias A. Lickerman  
 Chief of Radioactive Materials Division  
 New York City Office of Radiological Health

Enclosures:  
 As stated.

## ARTICLE 175 AMENDMENT

### Occupational Dose Records, Labeling Containers, and the Total Effective Dose Equivalent

NRC RATS ID # 2008-1

– MARKED UP SECTIONS–

§175.01 Applicability and inapplicability, communications.

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§175.02 Definitions.

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

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(255) "This Code" means Article 175 and all other parts of the New York City Health Code applicable to licensees and registrants or other persons subject to the provisions of Article 175.

(256) "Total effective dose equivalent" (TEDE) means the sum of the ~~deep-effective~~ dose equivalent (for external exposures) and the committed effective dose equivalent (for internal exposures).

(257) "Total organ dose equivalent" (TODE) means the sum of the deep dose equivalent and the committed dose equivalent to the organ receiving the highest dose as described in §175.03(k)(7)(i)(F) of this Code.

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§175.03 Standards for protection against radiation.

(a) **General provisions.**

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**(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:

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(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) When the external exposure is determined by measurement with an external personal monitoring device, the deep-dose equivalent must be used in place of the effective dose equivalent, unless the effective dose equivalent is determined by a dosimetry method approved by the NRC. The assigned deep 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

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**(5) Determination of prior occupational dose.** (i) For each individual who may enter the licensee's or registrant's restricted area and is likely to receive, in a year, an annual occupational dose requiring monitoring pursuant to §175.03(f)(2), the licensee or registrant shall:

- (A) determine the occupational radiation dose received during the current year; and
- (B) request, in writing, the records of lifetime cumulative occupational radiation dose.

(ii) Prior to permitting an individual to participate in a planned special exposure, the licensee or registrant shall determine:

- (A) the internal and external doses from all previous planned special exposures; and
- (B) all doses in excess of the limits, (including doses received during accidents and emergencies), received during the lifetime of the individual; and
- (C) all lifetime cumulative occupational radiation doses.

(iii) In complying with the requirements of §175.03(c)(5)(i) or (ii) of this section, a licensee or registrant may:

(A) accept, as a record of the occupational dose that the individual received during the current year, a written signed statement from the individual, or from the individual's most recent employer for work involving radiation exposure, that discloses the nature and the amount of any occupational dose that the individual may have received during the current year; and

(B) accept, as the record of lifetime cumulative radiation dose, an up-to-date form RAD-4, "Cumulative Occupational Radiation Exposure History," or equivalent, signed by the individual and countersigned by an appropriate official of the most recent employer for work involving radiation exposure, or the individual's current employer, if the individual is not employed by the licensee or registrant; and

(C) obtain reports of the individual's dose equivalent(s) from the most recent employer for work involving radiation exposure, or the individual's current employer, (if the individual is not employed by the licensee or registrant); by telephone, telegram, facsimile, or letter. The licensee or registrant shall request a written verification of the dose data if the authenticity of the transmitted report cannot be established.

(iv) \*\*\*

(v) \*\*\*

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(vi) The licensee or registrant shall retain the records on form RAD-4, "Cumulative Occupational Radiation Exposure History," or equivalent until the Department authorizes their disposition. The licensee or registrant shall retain records used in preparing form RAD-4 or equivalent for 3 years after the record is made. This includes records required under the standards for protection against radiation in effect prior to January 1, 1994.

**(6) Planned special exposures.**

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**(k) Records.**

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**(38) Maintenance of records.**

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

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

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**(m) Exemptions and variances.**

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**(n) Additional requirements.**

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§175.04 Notices, instructions and reports to workers; inspections.

**(a) Purpose and scope.**

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**(d) Notification and reports to workers. (1) Radiation exposure data for an individual** \*\*\*

(2) Each licensee and/or registrant shall advise each worker annually of the worker's exposure to radiation or radioactive material as shown in records maintained by the licensee and/or registrant pursuant to §175.03(k)(9) of this Code.

(3) Each licensee and/or registrant shall make dose information available to workers as shown in records maintained by the licensee and/or registrant under the provisions of 10 CFR 20.2106. The licensee shall provide an annual report to each individual monitored under 10 CFR 20.1502 of the dose received in that monitoring year if:

(i) The individual's occupational dose exceeds 1 mSv (100 mrem) TEDE or 1 mSv (100 mrem) to any individual organ or tissue; or

(ii) The individual engaged or formerly engaged in activities controlled by the licensee or registrant requests his or her annual dose report.

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~~licensee and/or registrant shall furnish a report of the worker's exposure to sources of radiation at the request of the worker formerly engaged in activities controlled by the licensee or registrant.~~ The report shall include the dose record for each year the worker was required to be monitored pursuant to §175.03(f)(2) of this Code, or the equivalent provisions of previous versions. Such report shall be furnished within thirty (30) days from the date of the request, or within thirty (30) days after the dose of the individual has been determined by the licensee or registrant, whichever is later. The report shall cover the period of time that the worker's activities involved exposure to sources of radiation and shall include the dates and locations of licensed or registered (including certified registrations) activities.

(4) When a licensee and/or registrant is required pursuant to ~~§175.03(f)(3)~~ (10 CFR §§20.2203 or 20.2204) to report to the Department any exposure of an identified occupationally exposed individual, or an identified member of the public to radiation or radioactive material, the licensee and/or registrant shall also provide the individual a report on the exposure data included ~~therein~~ in the report to the Department. Such reports shall be transmitted at a time not later than the transmittal to the Department.

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(5) At the request of a worker \*\*\*



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>exposure of an individual to radiation or radioactive material, the licensee shall also provide the individual a report on his or her exposure data included in the report to the Commission. This report must be transmitted no later than the transmittal to the Commission.</p>			
§20.1003	<p>Definition: Total Effective Dose Equivalent (TEDE)</p>	§175.02	A	<p><b>In § 20.1003, the definition of <i>Total Effective Dose Equivalent (TEDE)</i> is revised to read as follows:</b></p> <p><i>Total Effective Dose Equivalent (TEDE)</i> means the sum of the effective dose equivalent (for external exposures) and the committed effective dose equivalent (for internal exposures).</p>			
§20.1201	<p>Occupational Dose Limits for Adults</p>	§175.03 (c)(1)(iii)	A	<p><b>In § 20.1201, paragraph (c) is revised to read as follows:</b></p> <p>(c) When the external exposure is determined by measurement with an external personal monitoring device, the deep-dose equivalent must</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
				<p>be used in place of the effective dose equivalent, unless the effective dose equivalent is determined by a dosimetry method approved by the NRC. The assigned deep-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. 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.</p>			
§20.1905 (g)	Exemptions to Labeling Requirements	N/A	<p>NRC  (***)please note  <b>Part 20.1905 (a) –</b></p>	<p><b>In § 20.1905 paragraph (g) is added to read as follows:</b>  (g) Containers holding</p>			

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			<b>(f) still remains a Compatibility Category A only the newly added paragraph (g) is a Compatibility Category NRC)</b>	licensed material (other than sealed sources that are either specifically or generally licensed) at a facility licensed under Parts 50 or 52 of this chapter, not including non-power reactors, that are within an area posted under the requirements in § 20.1902 if the containers are: (1) Conspicuously marked (such as by providing a system of color coding of containers) commensurate with the radiological hazard; (2) Accessible only to individuals who have sufficient instruction to minimize radiation exposure while handling or working in the vicinity of the containers; and (3) Subject to plant procedures to ensure they are appropriately labeled, as specified at § 20.1904 before being removed from the posted area.			
§20.2104	Determination of Prior Occupational Dose	§175.03 (c)(5)	D	N/A	N/A		
§20.2205	Reports to	§175.04	C	<b>Section 20.2205 is revised to</b>			

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
	Individuals of Exceeding Dose Limits	(d)(4)		<p><b>read as follows:</b></p> <p>When a licensee is required by §§ 20.2203 or 20.2204 to report to the Commission any exposure of an identified occupationally exposed individual, or an identified member of the public, to radiation or radioactive material, the licensee shall also provide the individual a report on his or her exposure data included in the report to Commission. This report must be transmitted no later than the transmittal to the Commission.</p>			