

MARK S. COLEMAN
Executive Director



FRANK KEATING
Governor

State of Oklahoma
DEPARTMENT OF ENVIRONMENTAL QUALITY

April 10, 1997

Richard Bangart
Office of State Programs
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555-0001

Dear Mr. *Richard* Bangart:

Attached is Oklahoma's proposed adoption of 10 CFR 20 by reference for your review as part of our movement towards becoming an Agreement State. This draft will be presented to our Radiation Management Advisory Council for their approval at their next scheduled meeting on June 5, 1997. We would appreciate it if you could expedite the review process so that any comments your office may have would be in our hands by May 19. This will give us some time to respond before the Council meeting. Before going to the Legislature and Governor for final approval, Oklahoma procedures require that the Environmental Quality Board approve all rules. It is planned that the adoption of Subchapter 20 will be presented to the Board at a meeting in September 1997.

This rulemaking is intended to adopt the existing NRC rules by reference. Accompanying rules make specific provisions governing the applicability of these rules to x-ray machines and NARM. The only specific difference affecting Agreement State regulations is in the definition of "person". The state statute defining terms used by the entire agency includes a definition of "person" which supersedes any definition promulgated by rule. Our review of the two definitions shows them to be compatible and comparable for the purposes of Agreement State regulations. The statutory definition, found at Title 27A of the Oklahoma Statutes at Section 2-1-102(11), is enclosed for your review.

To aid you in planning your activities, these are our future plans: We expect to adopt all other NRC regulations by reference in one package. We have already shared a first draft of this with the Radiation Management Advisory Council, and will receive their reactions at the June 5 meeting. After that meeting we will send a draft to you, and would hope to receive your comments in time to present them to the Council at the September 4 meeting. If the Council responds favorably, we will ask them to approve the adoption-by-reference at a December 4 meeting. They will then be sent to the Environmental Quality Board at a meeting to be held in January 1998.

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Under Oklahoma procedures, these rules will become codified after a period for review by the legislature, and after the Governor signs them. This will probably take place in March of 1998. Of course, the adoption-by-reference will be written in such a way that rules covering byproduct, source, and special nuclear materials do not become effective until the Agreement comes into effect.

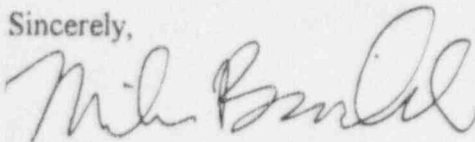
Finally, we will complete a draft application packet after receiving from your office the material you promised in our March meeting, including the correspondence over from Massachusetts, program standards, etc. I hope to submit a complete packet to you by early Fall of 1997.

I look forward to moving forward on this project. As discussed at our meeting, I still believe it would be advantageous to work for a target date for Agreement Status of December 1998 if possible. I am interested in your thoughts on how the schedule I am proposing will affect that possibility. I realize it is an ambitious schedule, but also am confident that our use of adoption-by-reference should greatly speed and ease your review of our rules. In any event, we do not intend to allow this aggressive schedule to lead us into a situation where we compromise the goal of an adequate and compatible state program.

If we are to have any prospect of meeting this target, any statutory changes will have to be made in the 1998 legislative session. This will begin approximately February of 1998, and conclude approximately May of that year. NRC previously did a review of Oklahoma statutes, and I understand that they found them to be adequate. I would encourage you to schedule any additional review necessary in such a way that you can inform us of any necessary changes by November 1997. This will give us time to ensure that they are adopted in the 1998 session.

Naturally, I encourage you or your staff to contact me for any needed discussions on this matter. I look forward to seeing you in Tacoma.

Sincerely,

A handwritten signature in dark ink, appearing to read "Mike Broderick". The signature is fluid and cursive, with the first name "Mike" written in a larger, more prominent script than the last name "Broderick".

Mike Broderick
Environmental Program Administrator

27A § 2-1-102 ENVIRONMENT AND NATURAL RESOURCES

6. "Enforcement hearing" means an individual proceeding conducted pursuant to the Administrative Procedures Act, this Code and rules promulgated thereunder, for the purpose of enforcing the provisions of this Code, rules promulgated thereunder and orders, permits or licenses issued pursuant thereto. The term "administrative hearing" shall mean the same as "enforcement hearing" when held for enforcement purposes. An "enforcement hearing" shall be a quasi-judicial proceeding;

7. "Environment" includes the air, land, wildlife, and waters of the state;

8. "Executive Director" means the Executive Director of the Department of Environmental Quality;

9. "Industrial wastewater treatment permit" shall mean permits issued by the Department after July 1, 1993, under Section 2-6-501 of Title 27A of the Oklahoma Statutes, and waste disposal permits issued on or before June 30, 1993, by the Oklahoma Water Resources Board for land application of industrial waste or surface impoundments or disposal systems for industrial waste or wastewater;

10. "Nonpoint source" means the contamination of the environment with a pollutant for which the specific point of origin may not be well defined;

11. "Person" means an individual, association, partnership, firm, company, public trust, corporation, joint-stock company, trust, estate, municipality, state or federal agency, other governmental entity, any other legal entity or an agent, employee, representative, assignee or successor thereof;

12. "Pollution" means the presence in the environment of any substance, contaminant or pollutant, or any other alteration of the physical, chemical or biological properties of the environment or the release of any liquid, gaseous or solid substance into the environment in quantities which are or will likely create a nuisance or which render or will likely render the environment harmful or detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life, or to property;

13. "Public meeting" means a formal public forum, held by the Department when authorized by the provisions of this Code, and conducted by a presiding officer pursuant to the requirements of this Code and rules promulgated thereunder, at which an opportunity is provided for the presentation of oral and written views within reasonable time limits as determined by the presiding officer. Views expressed at a "public meeting" shall be limited to the topic or topics specified by this Code for such meeting. "Public meeting" shall mean a "public hearing" when held pursuant to requirements of the Code of Federal Regulations or the Oklahoma Pollutant Discharge Elimination System Act,¹ and shall be synonymous with "formal public meeting" and "informal public meeting" as used within the context of this Code and rules promulgated thereunder. A "public meeting" shall not be a quasi-judicial proceeding;

14. "State environmental agency" includes the:

- a. Oklahoma Water Resources Board,
- b. Oklahoma Corporation Commission,
- c. State Department of Agriculture,
- d. Oklahoma Conservation Commission,
- e. Department of Wildlife Conservation,
- f. Department of Mines,
- g. Department of Public Safety,
- h. Department of Labor,
- i. Department of Environmental Quality, and
- j. Department of Civil Emergency Management; and

15. "Waters of the state" means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, irrigation systems, storm sewers and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion thereof, and shall include under all circumstances the waters of the United

ENVIRONMENT AND NATURAL RESOURCES

States which are contained within the boundaries of, flow to, or are within the state or any portion thereof.

Added by Laws 1993, c. 145, § 13, eff. July 1, 1993. Amended eff. July 1, 1993.

¹ Section 2-1-101 et seq. of this title.

² Title 75, § 250 et seq.

³ Section 2-6-201 et seq. of this title.

ARTICLE II. ENVIRONMENTAL QUALITY BOARD

PART 1. ENVIRONMENTAL QUALITY

§ 2-2-101. Environmental Quality Board— ty—Composition—Terms—Appoi- ings—Travel expenses—Powers mulgation of rules

A. There is hereby created the Environmental Quality interests of the State of Oklahoma which shall consist of appointed by the Governor with the advice and consent of the

B. To be eligible for appointment to the Board a person shall

1. Be a citizen of the United States;
2. Be a resident of this state;
3. Be a qualified elector of this state; and
4. Not have been convicted of a felony pursuant to the laws of any other state or the laws of the United States.

C. The Board shall be composed of:

1. One member who shall be a certified or registered environmental professional with experience in environmental professional experience in environmental control, who shall not be an employee of any unit of government;
2. One member who shall be selected from industry in general to be employed as a manufacturing executive carrying on a manufacturing business in this state;
3. One member who shall be selected from the hazardous waste management industry in this state;
4. One member who shall be selected from the solid waste industry in this state;
5. One member who shall be well versed in recreational, residential water usage;
6. One member who shall be selected from the petroleum industry by the Department of Environmental Quality;
7. One member who shall be selected from the agriculture industry by the Department of Environmental Quality;
8. One member who shall be selected from the conservation industry by the Department of Environmental Quality;
9. Three members who shall be citizen members of any state or local environmental organization;
10. One member who shall be a member of the local government; and
11. One member who shall be from a rural water district or local government of this state.

D. The length of initial appointments shall be as follows:

1. Two members' terms shall expire on January 31, 1995;
2. Two members' terms shall expire on January 31, 1996;

6. "Enforcement hearing" means an individual proceeding conducted pursuant to the Administrative Procedures Act, this Code and rules promulgated thereunder, for the purpose of enforcing the provisions of this Code, rules promulgated thereunder and orders, permits or licenses issued pursuant thereto. The term "administrative hearing" shall mean the same as "enforcement hearing" when held for enforcement purposes. An "enforcement hearing" shall be a quasi-judicial proceeding;

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ENVIRONMENT AND NATURAL RESOURCES

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TITLE 252. DEPARTMENT OF ENVIRONMENTAL QUALITY
CHAPTER 400. RADIATION MANAGEMENT
SUBCHAPTER 17. X-RAY FLUORESCENCE INSTRUMENTS USED FOR LEAD-BASED PAINT
DETECTION

252:400-17-37. Compliance required

(a) ~~Duty to comply.~~ Individuals subject to the requirements of this Chapter shall comply with the requirements of the Oklahoma Environmental Quality Code, 27A O.S. § 2-1-101 *et seq.*, and rules promulgated by the Board (including the Radiation Management Act and this Chapter), the conditions of the LBP XRF general permit and authorizations, and final orders issued by the DEQ. Special emphasis should be given to the radiation safety standards in Subchapter 9 of this Chapter.

(b) ~~Failure to comply.~~ Failure to comply with any such law, rule, LBP XRF authorization or order, or any fraud or misrepresentation used to obtain an LBP XRF authorization may result in administrative enforcement and penalties, denial of LBP XRF applications, suspension or revocation of the LBP XRF authorization, and/or civil or criminal prosecution in accordance with Part 5 of Article III of the Oklahoma Environmental Quality Code, 27A:2-3-501 *et seq.*

AMENDED AND RENUMBERED TO 252:400-1-6.

252:400-17-53. Radiation exposure limits

(a) ~~Annual radiation occupational exposure limits.~~ Individual exposure levels to occupational exposures shall be monitored by means of personal dosimeters or other accepted means. Occupational monitoring data on each individual shall be analyzed at least quarterly. No individual worker shall operate or handle an LBP XRF instrument in any one calendar year after exposure to the maximum limits specified in this subsection. For employer determinations of prior occupational doses, see 10 CFR 20.2104 as incorporated by 252:400-9-1-1.

(1) ~~Occupational dose limit for LBP XRF operators and other handlers.~~ In no case shall any individual worker be exposed to more than a whole body dose of 5 rems, an eye dose equivalent to 15 rems or a dose to the skin or extremities of 50 rem of radiation per calendar year.

(2) ~~Occupational dose limit for minors.~~ The annual occupational dose limit for minors is 10 percent of the dose limits in paragraph (1) of this subsection.

(3) ~~Dose to an embryo/fetus by reason of occupational dose.~~ The occupational dose for a pregnant woman cannot exceed 0.5 rem per year.

(b) ~~Dose limits for individual members of the public.~~ The total effective dose equivalent to individual members of the public from the operation of an LBP XRF instrument shall not exceed 0.1 rem in a calendar year or 0.002 rem in any one hour.

(c) ~~Alternative exposure limits.~~ For alternate limits see Subparts C and D of 10 CFR 20 as incorporated by 252:400-9-1-1.

See Subchapter 20.

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APPENDIX A. CONVENTIONAL THREE-BLADE DESIGN RADIATION SYMBOL
REVOKED. [See Radiation Symbol, 10 CFR 20.1901.]

APPENDIX B. ELEMENTS

REVOKED. [See Appendix B to 10 CFR 20: Annual Limits on Intake (ALIs) and Derived Air Concentrations (DACs) of Radionuclides for Occupational Exposure; Effluent Concentrations; Concentrations for Release to Sewerage.]

APPENDIX C.

REVOKED. [See Appendix C to 10 CFR 20: Quantities of Licensed Material Requiring Labeling.]

TITLE 252. DEPARTMENT OF ENVIRONMENTAL QUALITY
CHAPTER 400. RADIATION MANAGEMENT
SUBCHAPTER 20. STANDARDS FOR PROTECTION AGAINST RADIATION

252:400-20-1. Purpose and general provisions

(a) **Purpose.** This Subchapter incorporates Title 10, Part 20 of the Code of Federal Regulations (10 CFR 20) in part. See Subchapter 1, Part 3, for interpretation and interfacing criteria.

(b) **Applicability and exceptions.** This Subchapter applies to all persons possessing source(s) of ionizing radiation under the jurisdiction of the DEQ except no person shall be subject to this Subchapter for activities conducted in this state which are licensed by the United States Nuclear Regulatory Commission (NRC). The limits in this Subchapter do not apply to doses due to background radiation, due to any medical administration the individual has received, or due to voluntary participation in medical research programs. Nothing in this Subchapter shall be interpreted as limiting the intentional exposure of patients to radiation for the purpose of medical diagnosis or therapy.

(c) **Definitions.** See 10 CFR 20.1003, 20.1004 and 20.1005; 252:400-1-2; 252:400-1-31. For purposes of this Subchapter:

(1) Definitions incorporated from 10 CFR 20 shall control when in conflict with other Subchapters' definitions for the same terms.

(2) The term "licensed material" as used in 10 CFR 20 means any radioactive material under the jurisdiction of the DEQ.

(d) **Relationship to Subchapter 9.** Subchapter 9 requirements supplement this Subchapter.

252:400-20-2. 10 CFR 20 incorporations

The following provisions of 10 CFR 20 are incorporated by reference in their entirety unless specified otherwise:

(1) In Subpart A, General Provisions:

(A) § 20.1001(b) - Purpose.

(B) § 20.1003 - Definitions [All but person and license.]

(C) § 20.1004 - Units of radiation dose.

(D) § 20.1005 - Units of radioactivity.

(E) § 20.1008 (b) through (e) - Implementation

(2) In Subpart B, § 20.1101, Radiation Protection Programs.

(3) In Subpart C, Occupational Dose Limits:

(A) § 20.1201 - Occupational dose limits for adults.

(B) § 20.1202 - Compliance...summation of external/internal doses.

(C) § 20.1203 - Determination of external dose from airborne radioactive material.

(D) § 20.1204 - Determination of internal exposure.

(E) § 20.1206 - Planned special exposures.

(F) § 20.1207 - Occupational dose limits for minors.

(G) § 20.1208 - Dose to embryo/fetus.

(4) In Subpart D, Radiation Dose Limits for Individual Members of the Public.

(A) § 20.1301 (a), (b), (c) and (e) - Dose limits for individual members of the public.

(B) § 20.1302 - Compliance with dose limits for individual members of the public.

(5) In Subpart F, Surveys and Monitoring:

(A) § 20.1501 - General.

(B) § 20.1502 - Conditions requiring individual monitoring of external and internal occupational dose.

(6) In Subpart G, Control of Exposure From External Sources in Restricted Areas:

(A) § 20.1601 - Control of access to high radiation areas.

(B) § 20.1602 - Control of access to very high radiation areas.

(7) In Subpart H, Respiratory Protection and Controls to Restrict Internal Exposure in Restricted Areas:

(A) § 20.1701 - Use of process or other engineering controls.

(B) § 20.1702 - Use of other controls.

(C) § 20.1703 - Use of individual respiratory protection equipment.

(D) § 20.1704 - Further restrictions on the use of respiratory protection equipment.

(8) In Subpart I, Storage and Control of Licensed Material:

(A) § 20.1801 - Security of stored material.

(B) § 20.1802 - Control of material not in storage.

(9) In Subpart J, Precautionary Procedures:

- 1 (A) § 20.1901 - Caution signs.
- 2 (B) § 20.1902 - Posting requirements.
- 3 (C) § 20.1903 - Exceptions to posting requirements.
- 4 (D) § 20.1904 - Labeling containers.
- 5 (E) § 20.1905 - Exemptions to labeling requirements.
- 6 (F) § 20.1906 - Procedures for receiving and opening packages.
- 7 (10) In Subpart K, Waste Disposal:
- 8 (A) § 20.2001 - General requirements.
- 9 (B) § 20.2002 - Method for obtaining approval of proposed disposal procedures.
- 10 (C) § 20.2003 - Disposal by release into sanitary sewerage.
- 11 (D) § 20.2004(a)(2) and (3) - Treatment or disposal by incineration.
- 12 (E) § 20.2005 - Disposal of specific wastes.
- 13 (F) § 20.2006 - Transfer for disposal and manifests. [Effective through February 28, 1998 per 56 FR
- 14 23403, May 21, 1991 as amended at 60 FR 20185, April 25, 1995].]
- 15 (G) § 20.2006 - Transfer for disposal and manifests. [Effective beginning March 1, 1998 per 60 FR 15663,
- 16 March 27, 1995].]
- 17 (H) § 20.2007 - Compliance with environmental and health protection regulations.
- 18 (11) In Subpart L, Records:
- 19 (A) § 20.2101 - General provisions.
- 20 (B) § 20.2102 - Records of radiation protection programs.
- 21 (C) § 20.2103 - Records of surveys.
- 22 (D) § 20.2104 - Determination of prior occupational dose.
- 23 (E) § 20.2105 - Records of planned special exposures.
- 24 (F) § 20.2106 - Records of individual monitoring results.
- 25 (G) § 20.2107 - Records of dose to individual members of the public.
- 26 (H) § 20.2108 - Records of waste disposal.
- 27 (I) § 20.2110 - Form of records.
- 28 (12) In Subpart M, Reports:
- 29 (A) § 20.2201 - Reports of theft or loss of licensed material.
- 30 (B) § 20.2202 - Notification of incidents.
- 31 (C) § 20.2203 (a), (b) and (d) - Reports of exposures, radiation levels, and concentrations of radioactive
- 32 material exceeding the limits.
- 33 (D) § 20.2204 - Reports of planned special exposures.
- 34 (E) § 20.2205 - Reports to individuals of exceeding dose limits.
- 35 (13) In Subpart N, Exemptions and Additional Requirements:, § 20.2302 - Additional requirements.
- 36 (14) Appendices to Part 20:
- 37 (A) Appendix A. Protection Factors for Respirators.
- 38 (B) Appendix B.
- 39 (i) Table 1. Annual limits on intake (ALIs) and derived air concentration (DACs) of radionuclides
- 40 for occupational exposure.
- 41 (ii) Table 2. Effluent concentrations.
- 42 (iii) Table 3. Concentrations for release to sewerage.
- 43 (C) Appendix C. Quantities of Licensed Material Requiring Labeling.
- 44 (D) Appendix F. Requirements for low-level waste transfer for disposal at land disposal facilities and
- 45 manifests.
- 46 (E) Appendix G. Requirements for licensed low-level waste transfer for disposal at land disposal facilities
- 47 and manifests. [Effective beginning March 1, 1998 (60 FR 15664, March 27, 1995, and for IIIE, 60 FR
- 48 25983, May 16, 1995).]
- 49
- 50

TITLE 252. DEPARTMENT OF ENVIRONMENTAL QUALITY
CHAPTER 400. RADIATION MANAGEMENT
SUBCHAPTER 9. SUPPLEMENTAL STANDARDS
FOR PROTECTION AGAINST RADIATION

252:400-9-1. Purpose

This Subchapter applies to all DEQ permittees and licensees and establishes standards for protection against radiation hazards that are supplemental to the provisions of Subchapter 20.

252:400-9-2. Radiation dose limits

See Subchapter 20.

252:400-9-3. Determination of accumulated occupational dose

See Subchapter 20.

252:400-9-4. Exposure of individuals to concentrations of radioactive material in restricted areas

See Subchapter 20.

252:400-9-5. Exposure of minors

See Subchapter 20.

252:400-9-6. Permissible levels of radiation from external sources in unrestricted areas

See Subchapter 20.

252:400-9-7. Concentration of radioactivity in effluents to unrestricted areas

See Subchapter 20.

252:400-9-8. Orders requiring furnishing of bioassay services

See Subchapter 20.

252:400-9-9. (RESERVED)

252:400-9-10. Surface contamination limits for facilities and equipment

[AMENDED AND RENUMBERED TO 252:400-1-50.]

252:400-9-11. Surveys

(a) General. See Subchapter 20.

(b) Survey records content. For each survey conducted, a survey record must identify the surveyor and report preparer, give the date and exact location of the survey, uniquely identify the survey instrument(s) used, and describe results of the survey and any corrective actions taken.

(c) Calibration requirements. Each radiation survey instrument used to make physical radiation surveys shall be calibrated:

- (1) By a person who has been trained and has demonstrated competence in calibration;
- (2) At intervals not to exceed 12 months unless a more restrictive time interval is specified in another Subchapter of this Chapter;
- (3) After each survey instrument repair or servicing other than battery replacement;
- (4) For the types of radiation used and at energies appropriate for use as specified by this Chapter or, if not specified, that are standard for the particular type of instrument being calibrated;
- (5) At an accuracy within plus or minus 20 percent of the true radiation level; and
- (6) Appropriate for the task at hand and in accordance with good health physics practice.

1 **252:400-9-12. Personnel monitoring**

2 See Subchapter 20.

3
4 **252:400-9-13. Caution signs, labels and signals; control device testing**

5 See Subchapter 20. Also, these supplemental control requirements apply to any permittee whose x-
6 ray equipment produces a high radiation area into which humans can enter.

7 (1) The controls required by 10 CFR 20.1601(a)(1) shall be constructed in such a manner that the
8 primary radiation cannot be reactivated until all entrances have been secured, and the radiation on-off
9 control is reset at the control panel.

10 (2) The controls required by 10 CFR 20.1601(a)(1) shall be constructed in such a manner that when
11 the warning device is activated, it shall be necessary to shut off the x-ray equipment and secure all
12 tripped entrances prior to being able to de-activate the alarm system.

13 (3) Control devices required by 10 CFR 20.1601(a)(1) and (2) shall be tested for proper operation
14 at intervals not to exceed six months. If such testing indicates failure of the device, corrective action
15 shall be taken immediately to restore the control device to proper working order.

16 (4) Each permittee or licensee shall maintain records showing the results of control device testing and
17 corrective actions taken which includes testing date(s) and name(s) of tester(s).

18
19 **252:400-9-14. Exceptions from posting and labeling requirements**

20 See Subchapter 20.

21
22 **252:400-9-15. (RESERVED)**

23
24 **252:400-9-16. Storage and control of sources of radiation**

25 See Subchapter 20.

26
27 **252:400-9-17. Procedures for picking up, receiving, and opening packages**

28 See Subchapter 20.

29
30 **252:400-9-18. General requirements for waste disposal**

31 See Subchapter 20.

32
33 **252:400-9-19. Restriction on proposed disposal procedure**

34 See Subchapter 20 relating to alternative disposal methods. The DEQ will not approve any
35 application for a license to receive radioactive material from other persons for disposal on land not owned
36 by a state or the federal government.

37
38 **252:400-9-20. Disposal by release into sanitary sewage systems** See Subchapter 20.

39
40 **252:400-9-21. Disposal by burial in soil**

41 No licensee shall dispose of radioactive material in soil except by burial as specifically approved by
42 the DEQ pursuant to Subchapter 20.

43
44 **252:400-9-22. Disposal by incineration**

45 See Subchapter 20.

46
47 **252:400-9-23. Disposal by release into septic tanks**

48 See Subchapter 20.

49
50 **252:400-9-24. Disposal of specific wastes**

51 See Subchapter 20.

1 252:400-9-25. Waste classification for near-surface land disposal [REVOKED]
2

3 252:400-9-26. Radioactive waste characteristics [REVOKED]
4

5 252:400-9-27. Labeling of wastes [REVOKED]
6

7 252:400-9-28. Transfer for disposal and manifests
8

9 See Subchapter 20.

10 252:400-9-29. Records of surveys, radiation monitoring, and
11 disposal

12 See Subchapter 20.
13

14 252:400-9-30. Reports of theft or loss of sources of radiation or radioactive materials
15

16 See Subchapter 20.

17 252:400-9-31. Notification of incidents
18

19 See Subchapter 20.

20 252:400-9-32. (RESERVED)
21

22 252:400-9-33. Reports of overexposures and levels and concentrations in excess of limits
23

24 See Subchapter 20.

25 252:400-9-34. (RESERVED)
26

27 252:400-9-35. Vacating premises [AMENDED AND RENUMBERED TO 252:400-1-50.]
28

29 252:400-9-36. Notifications and reports to individuals
30

31 See Subchapter 20.
32
33
34

TITLE 252. DEPARTMENT OF ENVIRONMENTAL QUALITY
CHAPTER 400. RADIATION MANAGEMENT
SUBCHAPTER 1. GENERAL PROVISIONS

PART 1. PURPOSE, APPLICABILITY, DEFINITIONS AND GENERAL REQUIREMENTS

252:400-1-1. Purpose

No amendments proposed at this time.

252:400-1-2. Definitions

No amendments proposed at this time.

252:400-1-3. Exemptions from the regulatory requirements

No amendments proposed at this time.

252:400-1-4. General regulatory requirements

No amendments proposed at this time.

252:400-1-5. Records and reporting

All records and reports required by this Chapter must be clear and legible. Records shall be maintained for a minimum of three (3) years unless a longer period of time is specified. Electronic media capable of producing accurate and complete records throughout the required retention period may be used; however, the DEQ may require printed documents for its reviews.

252:400-1-6. Compliance required

A person's duty to comply with this Chapter also extends to applicable laws of the Oklahoma Environmental Quality Code (Chapter 2 of Title 27A of the Oklahoma Statutes including the Oklahoma Radiation Management Act, § 2-9-101 *et seq.*) and rules promulgated thereunder, and any radiation authorizations and final orders issued to him by the DEQ. Failing to comply; knowingly making any false statement, representation or certification in, or omitting material data from, any application for a radiation authorization or in any notice, analyses or report required by this Chapter; or altering any sample or knowingly rendering inaccurate any monitoring device or control required to be maintained by this Chapter may result in administrative penalties, denial of applications, suspension or revocation of authorizations, and/or civil or criminal prosecution. [Moved and amended from 400-17-37.]

SUBCHAPTER 1. GENERAL PROVISIONS, con't.
PART 3. INCORPORATION BY REFERENCE

252:400-1-30. Reference to 10 CFR

When reference is made to Title 10 of the Code of Federal Regulations (10 CFR), it shall mean, unless otherwise specified, the radiation management regulations, published in the January 1, 1996 Code of Federal Regulations as regulations of the U.S. Nuclear Regulatory Commission. [See the applicable Subchapters for listings of incorporated 10 CFR provisions by number and title.]

252:400-1-31. Terminology related to 10 CFR

Unless specified otherwise, these 10 CFR terms shall be interpreted as follows to interface incorporated provisions with state use:

(1) "Commission" or the "Nuclear Regulatory Commission" means the Oklahoma Department of Environmental Quality (DEQ);

(2) "Commissioner" or "Regional Administrator" or "Administrator" means the Executive Director of the DEQ;

(3) "License" means any final radiation management permit authorization issued by the DEQ and includes permit, license, certification and registrations;

(4) "Licensee" means the holder of a final radiation management permit authorization issued by the DEQ or any person subject to radiation management requirements of this Chapter;

(5) "NRC Operation Center" means the DEQ hotline, 1-800/522-0206.

252:400-1-32. CFR Forms

In lieu of the NRC forms required by 10 CFR provisions incorporated in this Chapter, persons reporting to the DEQ may use comparable computer-generated forms or available DEQ-prepared forms.

252:400-1-33. Inclusion of CFR citations

When a provision of the Code of Federal Regulations is specifically incorporated by reference, all other 10 CFR provisions cited therein that apply to activities within the jurisdiction of the DEQ are also incorporated by reference.

252:400-1-34. Inconsistencies or duplications

Whenever an incorporated 10 CFR provision is inconsistent with or duplicates another rule of this Chapter, the incorporated federal requirements will prevail unless the other rule is more stringent or does not apply to byproduct, source, or special nuclear material.

PART 5. PROPERTY RELEASE STANDARDS

252:400-1-50. Standards for premises to be vacated

(a) Notice. Each DEQ permittee or licensee shall, no less than 30 days before vacating or relinquishing possession or control of premises which may have been contaminated with radioactive material as a result of his activities, notify the DEQ in writing of intent to vacate.

(b) Unrestricted area standard. The permittee or licensee shall decontaminate the premises to a degree consistent with the requirements for subsequent unrestricted use and in compliance with subsection (c) of this section.

(c) Surface contamination limits for facilities and equipment. Prior to vacating any facility or releasing areas or equipment for unrestricted use, each DEQ permittee or licensee shall ensure that radioactive contamination has been removed to levels as low as reasonably achievable. In no case shall the licensee vacate a facility or release areas or equipment for unrestricted use until radioactive surface contamination levels are below the limits specified in Appendix D of this Chapter.

R33
04/14/97

EXECUTIVE TASK MANAGEMENT SYSTEM

<<< PRINT SCREEN UPDATE FORM >>>

TASK # - 7S104

DATE- 04/14/97

MAIL CTRL. - 1997

TASK STARTED - 04/14/97

TASK DUE - 05/16/97

TASK COMPLETED - / /

TASK DESCRIPTION - LTR TO BANGART FROM MIKE BRODERICK RE OKLAHOMA'S
PROPOSED ADOPTION OF 10 CFR 20 NEED COMMENTS

REQUESTING OFF. - OK

REQUESTER - BRODERICK

WITS - 0 FYP - N

PROG. -

PERSON -

STAFF LEAD -

PROG. AREA -

PROJECT STATUS -

DUE TO OKLAHOMA: 5/19/97

PLANNED ACC. - N

LEVEL CODE - 1

Assign PML

cc: RLB
PHL
BGA

MARK S. COLEMAN
Executive Director



FRANK KEATING
Governor

State of Oklahoma
DEPARTMENT OF ENVIRONMENTAL QUALITY

April 10, 1997

Richard Bangart
Office of State Programs
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555-0001

Dear Mr. *Richard* Bangart:

Attached is Oklahoma's proposed adoption of 10 CFR 20 by reference for your review as part of our movement towards becoming an Agreement State. This draft will be presented to our Radiation Management Advisory Council for their approval at their next scheduled meeting on June 5, 1997. We would appreciate it if you could expedite the review process so that any comments your office may have would be in our hands by May 19. This will give us some time to respond before the Council meeting. Before going to the Legislature and Governor for final approval, Oklahoma procedures require that the Environmental Quality Board approve all rules. It is planned that the adoption of Subchapter 20 will be presented to the Board at a meeting in September 1997.

This rulemaking is intended to adopt the existing NRC rules by reference. Accompanying rules make specific provisions governing the applicability of these rules to x-ray machines and NARM. The only specific difference affecting Agreement State regulations is in the definition of "person". The state statute defining terms used by the entire agency includes a definition of "person" which supersedes any definition promulgated by rule. Our review of the two definitions shows them to be compatible and comparable for the purposes of Agreement State regulations. The statutory definition, found at Title 27A of the Oklahoma Statutes at Section 2-1-102(11), is enclosed for your review.

To aid you in planning your activities, these are our future plans: We expect to adopt all other NRC regulations by reference in one package. We have already shared a first draft of this with the Radiation Management Advisory Council, and will receive their reactions at the June 5 meeting. After that meeting we will send a draft to you, and would hope to receive your comments in time to present them to the Council at the September 4 meeting. If the Council responds favorably, we will ask them to approve the adoption-by-reference at a December 4 meeting. They will then be sent to the Environmental Quality Board at a meeting to be held in January 1998.

9706060348 11PP1

Under Oklahoma procedures, these rules will become codified after a period for review by the legislature, and after the Governor signs them. This will probably take place in March of 1998. Of course, the adoption-by-reference will be written in such a way that rules covering byproduct, source, and special nuclear materials do not become effective until the Agreement comes into effect.

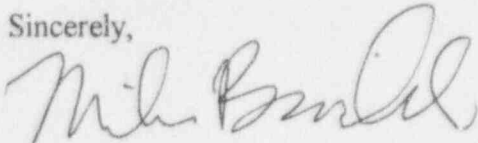
Finally, we will complete a draft application packet after receiving from your office the material you promised in our March meeting, including the correspondence over from Massachusetts, program standards, etc. I hope to submit a complete packet to you by early Fall of 1997.

I look forward to moving forward on this project. As discussed at our meeting, I still believe it would be advantageous to work for a target date for Agreement Status of December 1998 if possible. I am interested in your thoughts on how the schedule I am proposing will affect that possibility. I realize it is an ambitious schedule, but also am confident that our use of adoption-by-reference should greatly speed and ease your review of our rules. In any event, we do not intend to allow this aggressive schedule to lead us into a situation where we compromise the goal of an adequate and compatible state program.

If we are to have any prospect of meeting this target, any statutory changes will have to be made in the 1998 legislative session. This will begin approximately February of 1998, and conclude approximately May of that year. NRC previously did a review of Oklahoma statutes, and I understand that they found them to be adequate. I would encourage you to schedule any additional review necessary in such a way that you can inform us of any necessary changes by November 1997. This will give us time to ensure that they are adopted in the 1998 session.

Naturally, I encourage you or your staff to contact me for any needed discussions on this matter. I look forward to seeing you in Tacoma.

Sincerely,

A handwritten signature in cursive script, appearing to read "Mike Broderick".

Mike Broderick
Environmental Program Administrator

27A § 2-1-102 ENVIRONMENT AND NATURAL RESOURCES

6. "Enforcement hearing" means an individual proceeding conducted pursuant to the Administrative Procedures Act, this Code and rules promulgated thereunder, for the purpose of enforcing the provisions of this Code, rules promulgated thereunder and orders, permits or licenses issued pursuant thereto. The term "administrative hearing" shall mean the same as "enforcement hearing" when held for enforcement purposes. An "enforcement hearing" shall be a quasi-judicial proceeding;

7. "Environment" includes the air, land, wildlife, and waters of the state;

8. "Executive Director" means the Executive Director of the Department of Environmental Quality;

9. "Industrial wastewater treatment permit" shall mean permits issued by the Department after July 1, 1993, under Section 2-6-501 of Title 27A of the Oklahoma Statutes, and waste disposal permits issued on or before June 30, 1993, by the Oklahoma Water Resources Board for land application of industrial waste or surface impoundments or disposal systems for industrial waste or wastewater;

10. "Nonpoint source" means the contamination of the environment with a pollutant for which the specific point of origin may not be well defined;

11. "Person" means an individual, association, partnership, firm, company, public trust, corporation, joint-stock company, trust, estate, municipality, state or federal agency, other governmental entity, any other legal entity or an agent, employee, representative, assignee or successor thereof;

12. "Pollution" means the presence in the environment of any substance, contaminant or pollutant, or any other alteration of the physical, chemical or biological properties of the environment or the release of any liquid, gaseous or solid substance into the environment in quantities which are or will likely create a nuisance or which render or will likely render the environment harmful or detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life, or to property;

13. "Public meeting" means a formal public forum, held by the Department when authorized by the provisions of this Code, and conducted by a presiding officer pursuant to the requirements of this Code and rules promulgated thereunder, at which an opportunity is provided for the presentation of oral and written views within reasonable time limits as determined by the presiding officer. Views expressed at a "public meeting" shall be limited to the topic or topics specified by this Code for such meeting. "Public meeting" shall mean a "public hearing" when held pursuant to requirements of the Code of Federal Regulations or the Oklahoma Pollutant Discharge Elimination System Act,³ and shall be synonymous with "formal public meeting" and "informal public meeting" as used within the context of this Code and rules promulgated thereunder. A "public meeting" shall not be a quasi-judicial proceeding;

14. "State environmental agency" includes the:

- Oklahoma Water Resources Board,
- Oklahoma Corporation Commission,
- State Department of Agriculture,
- Oklahoma Conservation Commission,
- Department of Wildlife Conservation,
- Department of Mines,
- Department of Public Safety,
- Department of Labor,
- Department of Environmental Quality, and
- Department of Civil Emergency Management; and

15. "Waters of the state" means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, storm sewers and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion thereof, and shall include under all circumstances the waters of the United

ENVIRONMENT AND NATURAL RESOURCES

States which are contained within the boundaries of, flow through, or border upon this state or any portion thereof.

Added by Laws 1993, c. 145, § 13, eff. July 1, 1993. Amended eff. July 1, 1993.

¹ Section 2-1-101 et seq. of this title.

² Title 75, § 250 et seq.

³ Section 2-6-201 et seq. of this title.

ARTICLE II. ENVIRONMENTAL QUALITY BOARD

PART 1. ENVIRONMENTAL QUALITY

§ 2-2-101. Environmental Quality Board— ty—Composition—Terms—Appoi- ings—Travel expenses—Powers mulgation of rules

A. There is hereby created the Environmental Quality interests of the State of Oklahoma which shall consist of and be appointed by the Governor with the advice and consent of the Senate.

B. To be eligible for appointment to the Board a person shall:

- Be a citizen of the United States;
- Be a resident of this state;
- Be a qualified elector of this state; and
- Not have been convicted of a felony pursuant to the laws of any other state or the laws of the United States.

C. The Board shall be composed of:

- One member who shall be a certified or registered environmental professional experienced in environmental control, who shall not be an employee of any unit of government;
- One member who shall be selected from industry in general who shall be employed as a manufacturing executive carrying on a manufacturing business in this state;
- One member who shall be selected from the hazardous waste industry;
- One member who shall be selected from the solid waste industry;
- One member who shall be well versed in recreational, residential water usage;
- One member who shall be selected from the petroleum industry by the Department of Environmental Quality;
- One member who shall be selected from the agriculture industry by the Department of Environmental Quality;
- One member who shall be selected from the conservation industry;
- Three members who shall be citizen members of any state or local environmental organization;
- One member who shall be a member of the local government;
- One member who shall be from a rural water district or local government of this state.

D. The length of initial appointments shall be as follows:

- Two members' terms shall expire on January 31, 1995;
- Two members' terms shall expire on January 31, 1996;

6. "Enforcement hearing" means an individual proceeding conducted pursuant to the Administrative Procedures Act, this Code and rules promulgated thereunder, for the purpose of enforcing the provisions of this Code, rules promulgated thereunder and orders, permits or licenses issued pursuant thereto. The term "administrative hearing" shall mean the same as "enforcement hearing" when held for enforcement purposes. An "enforcement hearing" shall be a quasi-judicial proceeding;

7. "Environment" includes the air, land, wildlife, and waters of the state;

8. "Executive Director" means the Executive Director of the Department of Environmental Quality;

9. "Industrial wastewater treatment permit" shall mean permits issued by the Department after July 1, 1993, under Section 2-6-501 of Title 27A of the Oklahoma Statutes, and waste disposal permits issued on or before June 30, 1993, by the Oklahoma Water Resources Board for land-application of industrial waste or surface impoundments or disposal systems for industrial waste or wastewater;

10. "Nonpoint source" means the contamination of the environment with a pollutant for which the specific point of origin may not be well defined;

11. "Person" means an individual, association, partnership, firm, company, public trust, corporation, joint-stock company, trust, estate, municipality, state or federal agency, other governmental entity, any other legal entity or an agent, employee, representative, assignee or successor thereof;

12. "Pollution" means the presence in the environment of any substance, contaminant or pollutant, or any other alteration of the physical, chemical or biological properties of the environment or the release of any liquid, gaseous or solid substance into the environment in quantities which are or will likely create a nuisance or which render or will likely render the environment harmful or detrimental or injurious to public health, safety or welfare, or to domestic, commercial, industrial, agricultural, recreational, or other legitimate beneficial uses, or to livestock, wild animals, birds, fish or other aquatic life, or to property;

13. "Public meeting" means a formal public forum, held by the Department when authorized by the provisions of this Code, and conducted by a presiding officer pursuant to the requirements of this Code and rules promulgated thereunder, at which an opportunity is provided for the presentation of oral and written views within reasonable time limits as determined by the presiding officer. Views expressed at a "public meeting" shall be limited to the topic or topics specified by this Code for such meeting. "Public meeting" shall mean a "public hearing" when held pursuant to requirements of the Code of Federal Regulations or the Oklahoma Pollutant Discharge Elimination System Act,¹ and shall be synonymous with "formal public meeting" and "informal public meeting" as used within the context of this Code and rules promulgated thereunder. A "public meeting" shall not be a quasi-judicial proceeding;

14. "State environmental agency" includes the:

- a. Oklahoma Water Resources Board,
- b. Oklahoma Corporation Commission,
- c. State Department of Agriculture,
- d. Oklahoma Conservation Commission,
- e. Department of Wildlife Conservation,
- f. Department of Mines,
- g. Department of Public Safety,
- h. Department of Labor,
- i. Department of Environmental Quality, and
- j. Department of Civil Emergency Management; and

15. "Waters of the state" means all streams, lakes, ponds, marshes, watercourses, waterways, wells, springs, irrigation systems, drainage systems, storm sewers and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion thereof, and shall include under all circumstances the waters of the United

States which are contained within the boundaries of, flow through, or border upon this state or any portion thereof.

Added by Laws 1993, c. 145, § 13, eff. July 1, 1993. Amended eff. July 1, 1993.

¹ Section 2-1-101 et seq. of this title.

² Title 75, § 250 et seq.

³ Section 2-6-301 et seq. of this title.

ARTICLE II. ENVIRONMENTAL QUALITY BOARD

PART 1. ENVIRONMENTAL QUALITY

§ 2-2-101. Environmental Quality Board— Composition—Terms—Appointments—Travel expenses—Powers and duties—Promulgation of rules

A. There is hereby created the Environmental Quality Board, which shall consist of five members appointed by the Governor with the advice and consent of the Senate.

B. To be eligible for appointment to the Board a person shall:

1. Be a citizen of the United States;
2. Be a resident of this state;
3. Be a qualified elector of this state; and
4. Not have been convicted of a felony pursuant to the laws of this state or the laws of the United States.

C. The Board shall be composed of:

1. One member who shall be a certified or registered environmental professional with experience in environmental control, who shall not be an employee of any unit of government;
2. One member who shall be selected from industry in general, who shall be employed as a manufacturing executive carrying on a manufacturing business in this state;
3. One member who shall be selected from the hazardous waste management industry in this state;
4. One member who shall be selected from the solid waste industry in this state;
5. One member who shall be well versed in recreational, residential water usage;
6. One member who shall be selected from the petroleum industry by the Department of Environmental Quality;
7. One member who shall be selected from the agriculture industry by the Department of Environmental Quality;
8. One member who shall be selected from the conservation industry by the Department of Environmental Quality;
9. Three members who shall be citizen members of any state or local governmental organization;
10. One member who shall be a member of the local government of a town; and
11. One member who shall be from a rural water district organization in this state.

D. The length of initial appointments shall be as follows:

1. Two members' terms shall expire on January 31, 1995;
2. Two members' terms shall expire on January 31, 1996;

TITLE 252. DEPARTMENT OF ENVIRONMENTAL QUALITY
CHAPTER 400. RADIATION MANAGEMENT
SUBCHAPTER 17. X-RAY FLUORESCENCE INSTRUMENTS USED FOR LEAD-BASED PAINT DETECTION

252:400-17-37. Compliance required

~~(a) Duty to comply.~~ Individuals subject to the requirements of this Chapter shall comply with the requirements of the Oklahoma Environmental Quality Code, 27A O.S. § 2-1-101 *et seq.*, and rules promulgated by the Board (including the Radiation Management Act and this Chapter), the conditions of the LBP XRF general permit and authorizations, and final orders issued by the DEQ. Special emphasis should be given to the radiation safety standards in Subchapter 9 of this Chapter.

~~(b) Failure to comply.~~ Failure to comply with any such law, rule, LBP XRF authorization or order, or any fraud or misrepresentation used to obtain an LBP XRF authorization may result in administrative enforcement and penalties, denial of LBP XRF applications, suspension or revocation of the LBP XRF authorization, and/or civil or criminal prosecution in accordance with Part 5 of Article III of the Oklahoma Environmental Quality Code, 27A:2-3-501 *et seq.*

AMENDED AND RENUMBERED TO 252:400-1-6.

252:400-17-53. Radiation exposure limits

~~(a) Annual radiation occupational exposure limits.~~ Individual exposure levels to occupational exposures shall be monitored by means of personal dosimeters or other accepted means. Occupational monitoring data on each individual shall be analyzed at least quarterly. No individual worker shall operate or handle an LBP XRF instrument in any one calendar year after exposure to the maximum limits specified in this subsection. For employer determinations of prior occupational doses, see 10 CFR 20.2104 as incorporated by 252:400-9-1-1.

~~(1) Occupational dose limit for LBP XRF operators and other handlers.~~ In no case shall any individual worker be exposed to more than a whole body dose of 5 rems, an eye dose equivalent to 15 rems or a dose to the skin or extremities of 50 rem of radiation per calendar year.

~~(2) Occupational dose limit for minors.~~ The annual occupational dose limit for minors is 10 percent of the dose limits in paragraph (1) of this subsection.

~~(3) Dose to an embryo/fetus by reason of occupational dose.~~ The occupational dose for a pregnant woman cannot exceed 0.5 rem per year.

~~(b) Dose limits for individual members of the public.~~ The total effective dose equivalent to individual members of the public from the operation of an LBP XRF instrument shall not exceed 0.1 rem in a calendar year or 0.002 rem in any one hour.

~~(c) Alternative exposure limits.~~ For alternate limits see Subparts C and D of 10 CFR 20 as incorporated by 252:400-9-1-1.

See Subchapter 20.

=====
APPENDIX A. CONVENTIONAL THREE-BLADE DESIGN RADIATION SYMBOL
REVOKED. [See Radiation Symbol, 10 CFR 20.1901.]

APPENDIX B. ELEMENTS

REVOKED. [See Appendix B to 10 CFR 20: Annual Limits on Intake (ALIs) and Derived Air Concentrations (DACs) of Radionuclides for Occupational Exposure; Effluent Concentrations; Concentrations for Release to Sewerage.]

APPENDIX C.

REVOKED. [See Appendix C to 10 CFR 20: Quantities of Licensed Material Requiring Labeling.]

TITLE 252. DEPARTMENT OF ENVIRONMENTAL QUALITY
CHAPTER 400. RADIATION MANAGEMENT
SUBCHAPTER 20. STANDARDS FOR PROTECTION AGAINST RADIATION

252:400-20-1. Purpose and general provisions

(a) **Purpose.** This Subchapter incorporates Title 10, Part 20 of the Code of Federal Regulations (10 CFR 20) in part. See Subchapter 1, Part 3, for interpretation and interfacing criteria.

(b) **Applicability and exceptions.** This Subchapter applies to all persons possessing source(s) of ionizing radiation under the jurisdiction of the DEQ except no person shall be subject to this Subchapter for activities conducted in this state which are licensed by the United States Nuclear Regulatory Commission (NRC). The limits in this Subchapter do not apply to doses due to background radiation, due to any medical administration the individual has received, or due to voluntary participation in medical research programs. Nothing in this Subchapter shall be interpreted as limiting the intentional exposure of patients to radiation for the purpose of medical diagnosis or therapy.

(c) **Definitions.** See 10 CFR 20.1003, 20.1004 and 20.1005; 252:400-1-2; 252:400-1-31. For purposes of this Subchapter:

(1) Definitions incorporated from 10 CFR 20 shall control when in conflict with other Subchapters' definitions for the same terms.

(2) The term "licensed material" as used in 10 CFR 20 means any radioactive material under the jurisdiction of the DEQ.

(d) **Relationship to Subchapter 9.** Subchapter 9 requirements supplement this Subchapter.

252:400-20-2. 10 CFR 20 incorporations

The following provisions of 10 CFR 20 are incorporated by reference in their entirety unless specified otherwise:

(1) In Subpart A, General Provisions:

(A) § 20.1001(b) - Purpose.

(B) § 20.1003 - Definitions [All but person and license.]

(C) § 20.1004 - Units of radiation dose.

(D) § 20.1005 - Units of radioactivity.

(E) § 20.1008 (b) through (e) - Implementation

(2) In Subpart B, § 20.1101, Radiation Protection Programs.

(3) In Subpart C, Occupational Dose Limits:

(A) § 20.1201 - Occupational dose limits for adults.

(B) § 20.1202 - Compliance...summation of external/internal doses.

(C) § 20.1203 - Determination of external dose from airborne radioactive material.

(D) § 20.1204 - Determination of internal exposure.

(E) § 20.1206 - Planned special exposures.

(F) § 20.1207 - Occupational dose limits for minors.

(G) § 20.1208 - Dose to embryo/fetus.

(4) In Subpart D, Radiation Dose Limits for Individual Members of the Public.

(A) § 20.1301 (a), (b), (c) and (e) - Dose limits for individual members of the public.

(B) § 20.1302 - Compliance with dose limits for individual members of the public.

(5) In Subpart F, Surveys and Monitoring:

(A) § 20.1501 - General.

(B) § 20.1502 - Conditions requiring individual monitoring of external and internal occupational dose.

(6) In Subpart G, Control of Exposure From External Sources in Restricted Areas:

(A) § 20.1601 - Control of access to high radiation areas.

(B) § 20.1602 - Control of access to very high radiation areas.

(7) In Subpart H, Respiratory Protection and Controls to Restrict Internal Exposure in Restricted Areas:

(A) § 20.1701 - Use of process or other engineering controls.

(B) § 20.1702 - Use of other controls.

(C) § 20.1703 - Use of individual respiratory protection equipment.

(D) § 20.1704 - Further restrictions on the use of respiratory protection equipment.

(8) In Subpart I, Storage and Control of Licensed Material:

(A) § 20.1801 - Security of stored material.

(B) § 20.1802 - Control of material not in storage.

(9) In Subpart J, Precautionary Procedures:

- 1 (A) § 20.1901 - Caution signs.
- 2 (B) § 20.1902 - Posting requirements.
- 3 (C) § 20.1903 - Exceptions to posting requirements.
- 4 (D) § 20.1904 - Labeling containers.
- 5 (E) § 20.1905 - Exemptions to labeling requirements.
- 6 (F) § 20.1906 - Procedures for receiving and opening packages.
- 7 (10) In Subpart K, Waste Disposal:
- 8 (A) § 20.2001 - General requirements.
- 9 (B) § 20.2002 - Method for obtaining approval of proposed disposal procedures.
- 10 (C) § 20.2003 - Disposal by release into sanitary sewerage.
- 11 (D) § 20.2004(a)(2) and (3) - Treatment or disposal by incineration.
- 12 (E) § 20.2005 - Disposal of specific wastes.
- 13 (F) § 20.2006 - Transfer for disposal and manifests. [Effective through February 28, 1998 per 56 FR
- 14 23403, May 21, 1991 as amended at 60 FR 20185, April 25, 1995].]
- 15 (G) § 20.2006 - Transfer for disposal and manifests. [Effective beginning March 1, 1998 per 60 FR 15663,
- 16 March 27, 1995].]
- 17 (H) § 20.2007 - Compliance with environmental and health protection regulations.
- 18 (11) In Subpart L, Records:
- 19 (A) § 20.2101 - General provisions.
- 20 (B) § 20.2102 - Records of radiation protection programs.
- 21 (C) § 20.2103 - Records of surveys.
- 22 (D) § 20.2104 - Determination of prior occupational dose.
- 23 (E) § 20.2105 - Records of planned special exposures.
- 24 (F) § 20.2106 - Records of individual monitoring results.
- 25 (G) § 20.2107 - Records of dose to individual members of the public.
- 26 (H) § 20.2108 - Records of waste disposal.
- 27 (I) § 20.2110 - Form of records.
- 28 (12) In Subpart M, Reports:
- 29 (A) § 20.2201 - Reports of theft or loss of licensed material.
- 30 (B) § 20.2202 - Notification of incidents.
- 31 (C) § 20.2203 (a), (b) and (d) - Reports of exposures, radiation levels, and concentrations of radioactive
- 32 material exceeding the limits.
- 33 (D) § 20.2204 - Reports of planned special exposures.
- 34 (E) § 20.2205 - Reports to individuals of exceeding dose limits.
- 35 (13) In Subpart N, Exemptions and Additional Requirements:, § 20.2302 - Additional requirements.
- 36 (14) Appendices to Part 20:
- 37 (A) Appendix A. Protection Factors for Respirators.
- 38 (B) Appendix B.
- 39 (i) Table 1. Annual limits on intake (ALIs) and derived air concentration (DACs) of radionuclides
- 40 for occupational exposure.
- 41 (ii) Table 2. Effluent concentrations.
- 42 (iii) Table 3. Concentrations for release to sewerage.
- 43 (C) Appendix C. Quantities of Licensed Material Requiring Labeling.
- 44 (D) Appendix F. Requirements for low-level waste transfer for disposal at land disposal facilities and
- 45 manifests.
- 46 (E) Appendix G. Requirements for licensed low-level waste transfer for disposal at land disposal facilities
- 47 and manifests. [Effective beginning March 1, 1998 (60 FR 15664, March 27, 1995, and for IIIE, 60 FR
- 48 25983, May 16, 1995).]
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TITLE 252. DEPARTMENT OF ENVIRONMENTAL QUALITY
CHAPTER 400. RADIATION MANAGEMENT
SUBCHAPTER 9. SUPPLEMENTAL STANDARDS
FOR PROTECTION AGAINST RADIATION

252:400-9-1. Purpose

This Subchapter applies to all DEQ permittees and licensees and establishes standards for protection against radiation hazards that are supplemental to the provisions of Subchapter 20.

252:400-9-2. Radiation dose limits

See Subchapter 20.

252:400-9-3. Determination of accumulated occupational dose

See Subchapter 20.

252:400-9-4. Exposure of individuals to concentrations of radioactive material in restricted areas

See Subchapter 20.

252:400-9-5. Exposure of minors

See Subchapter 20.

252:400-9-6. Permissible levels of radiation from external sources in unrestricted areas

See Subchapter 20.

252:400-9-7. Concentration of radioactivity in effluents to unrestricted areas

See Subchapter 20.

252:400-9-8. Orders requiring furnishing of bioassay services

See Subchapter 20.

252:400-9-9. (RESERVED)

252:400-9-10. Surface contamination limits for facilities and equipment

[AMENDED AND RENUMBERED TO 252:400-1-50.]

252:400-9-11. Surveys

(a) General. See Subchapter 20.

(b) Survey records content. For each survey conducted, a survey record must identify the surveyor and report preparer, give the date and exact location of the survey, uniquely identify the survey instrument(s) used, and describe results of the survey and any corrective actions taken.

(c) Calibration requirements. Each radiation survey instrument used to make physical radiation surveys shall be calibrated:

(1) By a person who has been trained and has demonstrated competence in calibration;

(2) At intervals not to exceed 12 months unless a more restrictive time interval is specified in another Subchapter of this Chapter;

(3) After each survey instrument repair or servicing other than battery replacement;

(4) For the types of radiation used and at energies appropriate for use as specified by this Chapter or, if not specified, that are standard for the particular type of instrument being calibrated;

(5) At an accuracy within plus or minus 20 percent of the true radiation level; and

(6) Appropriate for the task at hand and in accordance with good health physics practice.

1 **252:400-9-12. Personnel monitoring**

2 See Subchapter 20.

3
4 **252:400-9-13. Caution signs, labels and signals; control device testing**

5 See Subchapter 20. Also, these supplemental control requirements apply to any permittee whose x-
6 ray equipment produces a high radiation area into which humans can enter.

7 (1) The controls required by 10 CFR 20.1601(a)(1) shall be constructed in such a manner that the
8 primary radiation cannot be reactivated until all entrances have been secured, and the radiation on-off
9 control is reset at the control panel.

10 (2) The controls required by 10 CFR 20.1601(a)(1) shall be constructed in such a manner that when
11 the warning device is activated, it shall be necessary to shut off the x-ray equipment and secure all
12 tripped entrances prior to being able to de-activate the alarm system.

13 (3) Control devices required by 10 CFR 20.1601(a)(1) and (2) shall be tested for proper operation
14 at intervals not to exceed six months. If such testing indicates failure of the device, corrective action
15 shall be taken immediately to restore the control device to proper working order.

16 (4) Each permittee or licensee shall maintain records showing the results of control device testing and
17 corrective actions taken which includes testing date(s) and name(s) of tester(s).

18
19 **252:400-9-14. Exceptions from posting and labeling requirements**

20 See Subchapter 20.

21
22 **252:400-9-15. (RESERVED)**

23
24 **252:400-9-16. Storage and control of sources of radiation**

25 See Subchapter 20.

26
27 **252:400-9-17. Procedures for picking up, receiving, and opening packages**

28 See Subchapter 20.

29
30 **252:400-9-18. General requirements for waste disposal**

31 See Subchapter 20.

32
33 **252:400-9-19. Restriction on proposed disposal procedure**

34 See Subchapter 20 relating to alternative disposal methods. The DEQ will not approve any
35 application for a license to receive radioactive material from other persons for disposal on land not owned
36 by a state or the federal government.

37
38 **252:400-9-20. Disposal by release into sanitary sewage systems** See Subchapter 20.

39
40 **252:400-9-21. Disposal by burial in soil**

41 No licensee shall dispose of radioactive material in soil except by burial as specifically approved by
42 the DEQ pursuant to Subchapter 20.

43
44 **252:400-9-22. Disposal by incineration**

45 See Subchapter 20.

46
47 **252:400-9-23. Disposal by release into septic tanks**

48 See Subchapter 20.

49
50 **252:400-9-24. Disposal of specific wastes**

51 See Subchapter 20.

1 252:400-9-25. Waste classification for near-surface land disposal [REVOKED]

2
3 252:400-9-26. Radioactive waste characteristics [REVOKED]

4
5 252:400-9-27. Labeling of wastes [REVOKED]

6
7 252:400-9-28. Transfer for disposal and manifests

8 See Subchapter 20.

9
10 252:400-9-29. Records of surveys, radiation monitoring, and
11 disposal

12 See Subchapter 20.

13
14 252:400-9-30. Reports of theft or loss of sources of radiation or radioactive materials

15 See Subchapter 20.

16
17 252:400-9-31. Notification of incidents

18 See Subchapter 20.

19
20 252:400-9-32. (RESERVED)

21
22 252:400-9-33. Reports of overexposures and levels and concentrations in excess of limits

23 See Subchapter 20.

24
25 252:400-9-34. (RESERVED)

26
27 252:400-9-35. Vacating premises [AMENDED AND RENUMBERED TO 252:400-1-50.]

28
29 252:400-9-36. Notifications and reports to individuals

30 See Subchapter 20.

TITLE 252. DEPARTMENT OF ENVIRONMENTAL QUALITY
CHAPTER 400. RADIATION MANAGEMENT
SUBCHAPTER 1. GENERAL PROVISIONS

PART 1. PURPOSE, APPLICABILITY, DEFINITIONS AND GENERAL REQUIREMENTS

252:400-1-1. Purpose

No amendments proposed at this time.

252:400-1-2. Definitions

No amendments proposed at this time.

252:400-1-3. Exemptions from the regulatory requirements

No amendments proposed at this time.

252:400-1-4. General regulatory requirements

No amendments proposed at this time.

252:400-1-5. Records and reporting

All records and reports required by this Chapter must be clear and legible. Records shall be maintained for a minimum of three (3) years unless a longer period of time is specified. Electronic media capable of producing accurate and complete records throughout the required retention period may be used; however, the DEQ may require printed documents for its reviews.

252:400-1-6. Compliance required

A person's duty to comply with this Chapter also extends to applicable laws of the Oklahoma Environmental Quality Code (Chapter 2 of Title 27A of the Oklahoma Statutes including the Oklahoma Radiation Management Act, § 2-9-101 *et seq.*) and rules promulgated thereunder, and any radiation authorizations and final orders issued to him by the DEQ. Failing to comply; knowingly making any false statement, representation or certification in, or omitting material data from, any application for a radiation authorization or in any notice, analyses or report required by this Chapter; or altering any sample or knowingly rendering inaccurate any monitoring device or control required to be maintained by this Chapter may result in administrative penalties, denial of applications, suspension or revocation of authorizations, and/or civil or criminal prosecution. [Moved and amended from 400-17-37.]

SUBCHAPTER 1. GENERAL PROVISIONS, con't.

PART 3. INCORPORATION BY REFERENCE

252:400-1-30. Reference to 10 CFR

When reference is made to Title 10 of the Code of Federal Regulations (10 CFR), it shall mean, unless otherwise specified, the radiation management regulations, published in the January 1, 1996 Code of Federal Regulations as regulations of the U.S. Nuclear Regulatory Commission. [See the applicable Subchapters for listings of incorporated 10 CFR provisions by number and title.]

252:400-1-31. Terminology related to 10 CFR

Unless specified otherwise, these 10 CFR terms shall be interpreted as follows to interface incorporated provisions with state use:

(1) "Commission" or the "Nuclear Regulatory Commission" means the Oklahoma Department of Environmental Quality (DEQ);

(2) "Commissioner" or "Regional Administrator" or "Administrator" means the Executive Director of the DEQ;

(3) "License" means any final radiation management permit authorization issued by the DEQ and includes permit, license, certification and registrations;

(4) "Licensee" means the holder of a final radiation management permit authorization issued by the DEQ or any person subject to radiation management requirements of this Chapter;

(5) "NRC Operation Center" means the DEQ hotline, 1-800/522-0206.

252:400-1-32. CFR Forms

In lieu of the NRC forms required by 10 CFR provisions incorporated in this Chapter, persons reporting to the DEQ may use comparable computer-generated forms or available DEQ-prepared forms.

252:400-1-33. Inclusion of CFR citations

When a provision of the Code of Federal Regulations is specifically incorporated by reference, all other 10 CFR provisions cited therein that apply to activities within the jurisdiction of the DEQ are also incorporated by reference.

252:400-1-34. Inconsistencies or duplications

Whenever an incorporated 10 CFR provision is inconsistent with or duplicates another rule of this Chapter, the incorporated federal requirements will prevail unless the other rule is more stringent or does not apply to byproduct, source, or special nuclear material.

PART 5. PROPERTY RELEASE STANDARDS

252:400-1-50. Standards for premises to be vacated

(a) Notice. Each DEQ permittee or licensee shall, no less than 30 days before vacating or relinquishing possession or control of premises which may have been contaminated with radioactive material as a result of his activities, notify the DEQ in writing of intent to vacate.

(b) Unrestricted area standard. The permittee or licensee shall decontaminate the premises to a degree consistent with the requirements for subsequent unrestricted use and in compliance with subsection (c) of this section.

(c) Surface contamination limits for facilities and equipment. Prior to vacating any facility or releasing areas or equipment for unrestricted use, each DEQ permittee or licensee shall ensure that radioactive contamination has been removed to levels as low as reasonably achievable. In no case shall the licensee vacate a facility or release areas or equipment for unrestricted use until radioactive surface contamination levels are below the limits specified in Appendix D of this Chapter.