APPENDIX A

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PART ONE: OKLAHOMA STATUTES

27A O.S. § 1-1-202. State environmental agencies – Powers, duties and responsibilities

A. Each state environmental agency shall:

1. Be responsible for fully implementing and enforcing the laws and rules within its jurisdictional areas of environmental responsibility;

2. Utilize and enforce the Oklahoma Water Quality Standards established by the Oklahoma Water Resources Board;

3. Seek to strengthen relationships between state, regional, local and federal environmental planning, development and management programs;

4. Specifically facilitate cooperation across jurisdictional lines of authority with other state environmental agencies regarding programs to resolve environmental concerns;

5. Cooperate with all state environmental agencies, other state agencies and local or federal governmental entities to protect, foster, and promote the general welfare, and the environment and natural resources of this state;

6. Have the authority to engage in environmental and natural resource information dissemination and education activities within their respective areas of environmental jurisdiction; and

7. Participate in every hearing conducted by the Oklahoma Water Resources Board for the consideration, adoption or amendment of the classification of waters of the state and standards of purity and quality thereof, and shall have the opportunity to present written comment to the members of the Oklahoma Water Resources Board at the same time staff recommendations are submitted to those members for Board review and consideration.

27A O.S. § 1-3-101. State environmental agencies – Jurisdictional areas of environmental responsibilities

A. The provisions of this section specify the jurisdictional areas of responsibility for each state environmental agency and state agencies with limited environmental responsibility. The jurisdictional areas of environmental responsibility specified in this section shall be in addition to those otherwise provided by law and assigned to the specific state environmental agency; provided that any rule, interagency agreement or executive order enacted or entered into prior to the effective date of this section which conflicts with the assignment of jurisdictional environmental responsibilities specified by this section is hereby superseded. The provisions of this subsection shall not nullify any financial obligation arising from services rendered pursuant to any interagency agreement or executive order entered into prior to July 1, 1993, nor nullify any obligations or agreements with private persons or parties entered into with any state environmental agency before July 1, 1993.

B. Department of Environmental Quality. The Department of Environmental Quality shall have the following jurisdictional areas of environmental responsibility:

1. All point source discharges of pollutants and storm water to waters of the state which originate from municipal, industrial, commercial, mining,

transportation and utilities, construction, trade, real estate and finance, services, public administration, manufacturing and other sources, facilities and activities, except as provided in subsections D and E of this section;

2. All nonpoint source discharges and pollution except as provided in subsections D, E and F of this section;

3. Technical lead agency for point source, nonpoint source and storm water pollution control programs funded under Section 106 of the federal Clean Water Act, for areas within the Department's jurisdiction as provided in this subsection;

4. Surface water and groundwater quality and protection and water quality certifications;

5. Waterworks and wastewater works operator certification;

6. Public and private water supplies;

7. Underground injection control pursuant to the federal Safe Drinking Water Act and 40 CFR Parts 144 through 148, except for:

a. Class II injection wells,

b. Class V injection wells utilized in the remediation of groundwater associated with underground or aboveground storage tanks regulated by the Corporation Commission,

c. those wells used for the recovery, injection or disposal of mineral brines as defined in the Oklahoma Brine Development Act regulated by the Commission, and

d. any aspect of any CO_2 sequestration facility, including any associated CO_2 injection well, over which the Commission is given jurisdiction pursuant to the Oklahoma Carbon Capture and Geologic Sequestration Act;

8. Notwithstanding any other provision in this section or other environmental jurisdiction statute, sole and exclusive jurisdiction for air quality under the federal Clean Air Act and applicable state law, except for indoor air quality and asbestos as regulated for worker safety by the federal Occupational Safety and Health Act and by Chapter 11 of Title 40 of the Oklahoma Statutes;

9. Hazardous waste and solid waste, including industrial, commercial and municipal waste;

10. Superfund responsibilities of the state under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 and amendments thereto, except the planning requirements of Title III of the Superfund Amendment and Reauthorization Act of 1986;

11. Radioactive waste and all regulatory activities for the use of atomic energy and sources of radiation except for electronic products used for diagnosis by diagnostic x-ray facilities and electronic products used for bomb detection by public safety bomb squads within law enforcement agencies of this state or within law enforcement agencies of any political subdivision of this state;

12. Water, waste, and wastewater treatment systems including, but not limited to, septic tanks or other public or private waste disposal systems;

13. Emergency response as specified by law;

14. Environmental laboratory services and laboratory certification;

15. Hazardous substances other than branding, package and labeling requirements;

16. Freshwater wellhead protection;

17. Groundwater protection for activities subject to the jurisdictional areas of environmental responsibility of the Department;

18. Utilization and enforcement of Oklahoma Water Quality Standards and implementation documents;

19. Environmental regulation of any entity or activity, and the prevention, control and abatement of any pollution, not subject to the specific statutory authority of another state environmental agency;

20. Development and maintenance of a computerized information system relating to water quality pursuant to Section 1-4-107 of this title; and

21. Development and promulgation of a Water Quality Standards Implementation Plan pursuant to Section 1-1-202 of this title for its jurisdictional area of environmental responsibility.

27A O.S. § 2-3-101. Creation - Powers and duties - Disclosure of interests - Employee classification - Programs - Departmental offices and divisions - Annual report - Environmental Quality Report - Environmental services contracts

A. There is hereby created the Department of Environmental Quality.

B. Within its jurisdictional areas of environmental responsibility, the Department of Environmental Quality, through its duly designated employees or representatives, shall have the power and duty to:

1. Perform such duties as required by law; and

2. Be the official agency of the State of Oklahoma, as designated by law, to cooperate with federal agencies for point source pollution, solid waste, hazardous materials, pollution, Superfund, water quality, hazardous waste, radioactive waste, air quality, drinking water supplies, wastewater treatment and any other program authorized by law or executive order.

C. Any employee of the Department in a technical, supervisory or administrative position relating to the review, issuance or enforcement of permits pursuant to this Code who is an owner, stockholder, employee or officer of, or who receives compensation from, any corporation, partnership, or other business or entity which is subject to regulation by the Department of Environmental Quality shall disclose such interest to the Executive Director. Such disclosure shall be submitted for Board review and shall be made a part of the Board minutes available to the public. This subsection shall not apply to financial interests occurring by reason of an employee's participation in the Oklahoma State Employees Deferred Compensation Plan or publicly traded mutual funds.

D. The Executive Director, Deputy Director, and all other positions and employees of the Department at the Division Director level or higher shall be in the unclassified service.

E. The following programs are hereby established within the Department of Environmental Quality:

1. An air quality program which shall be responsible for air quality;

2. Water programs which shall be responsible for water quality, including, but not limited to point source and nonpoint source pollution within the jurisdiction of the Department, public and private water supplies, public and private wastewater treatment, water protection and discharges to waters of the state;

3. Land protection programs which shall be responsible for hazardous waste, solid waste, radiation, and municipal, industrial, commercial and other waste within its jurisdictional areas of environmental responsibility pursuant to Section 1-3-101 of this title; and

4. Special projects and services programs which shall be responsible for duties related to planning, interagency coordination, technical assistance programs, laboratory services and laboratory certification, recycling, education and dissemination of information.

F. Within the Department there are hereby created:

1. The complaints program which shall be responsible for intake processing, investigation, mediation and conciliation of inquiries and complaints received by the Department and which shall provide for the expedient resolution of complaints within the jurisdiction of the Department; and

2. The customer assistance program which shall be responsible for advising and providing to licensees, permittees and those persons representing businesses or those persons associated with and representing local political subdivisions desiring a license or permit, the necessary forms and the information necessary to comply with the Oklahoma Environmental Quality Code. The customer assistance program shall coordinate with other programs of the Department to assist businesses and municipalities in complying with state statutes and rules governing environmental areas.

The customer assistance program shall also be responsible for advising and providing assistance to persons desiring information concerning the Department's rules, laws, procedures, licenses or permits, and forms used to comply with the Oklahoma Environmental Quality Code.

G. The Department shall be responsible for holding administrative hearings as defined in Section 2-1-102 of this title and shall provide support services related to them, including, but not limited to, giving required notices, maintaining the docket, scheduling hearings, and maintaining legal records.

27A O.S. § 2-3-104. Complaints Program

A. The complaints program shall, in addition to the responsibilities specified by Section 2-3-101 of this title, refer, upon written request, all complaints in which one of the complainants remains unsatisfied with the Department's resolution of said complaint to an outside source trained in mediation. Complainants and persons named in the complaint shall be made aware that participation in the mediation process conducted by the outside source is completely voluntary and confidential.

Fulfillment of any agreements reached in mediation shall be up to the parties of the dispute. Participation in the mediation process shall not hinder or interfere with any enforcement action taken by the Department. Mediation may run parallel to any enforcement action. Participation by a complainant in the mediation process shall not preclude such complainants from seeking other relief provided by law.

27A O.S. § 2-3-202. Powers and duties of Department

A. Within its jurisdictional areas of responsibility, the Department, acting through the Executive Director, or persons authorized by law, rule or designated by the Executive Director to perform such acts, shall have the power and duty to:

1. Access any premises at any reasonable time upon presentation of identification for purposes of administering this Code, and the right to apply to and obtain from a judge of the district court, an administrative or other warrant as necessary to enforce such access;

2. Determine and assess administrative penalties, take or request civil action, request criminal prosecution or take other administrative or civil action as specifically authorized by this Code or other law against any person or entity who has violated any of the provisions of this Code, rules promulgated thereunder, or any permit, license or order issued pursuant thereto;

3. Investigate or cause to be investigated alleged violations of this Code, rules promulgated thereunder, or permits, licenses or orders issued pursuant thereto;

4. Conduct investigations, inquiries and inspections, including but not limited to, the review of records and the collection of samples for laboratory analyses;

5. Conduct hearings and issue subpoenas according to the Administrative Procedures Act, this Code and rules promulgated by the Board, and file contempt proceedings against any person disobeying or refusing to comply with such subpoena;

6. Advise, consult, cooperate and enter into agreements with agencies of the state, municipalities and counties, industries, other states and the federal government, and other persons;

7. Enter into agreements for, accept, administer and use, disburse and administer grants of money, personnel and property from the federal government or any department or agency thereof, or from any state or state agency, or from any other source, to promote and carry on in this state any program relating to environmental services or pollution control;

8. Require the establishment and maintenance of records and reports, and the installation, use, and maintenance of monitoring equipment or methods, and the provision of such information to the Department upon request;

9. Establish a system of training for all personnel who render review and inspection services in order to assure uniform statewide application of law and rules;

10. Enforce the provisions of this Code and rules promulgated thereunder and orders, permits and licenses issued pursuant thereto;

11. Charge and receive fees pursuant to fee schedules promulgated by the Board;

12. Register persons, property and activities as required by this Code or rules promulgated by the Board;

13. Conduct studies, research and planning of programs and functions, pursuant to the authority granted by this Code;

14. Collect and disseminate information and engage in environmental education activities relating to the provisions of this Code;

15. Provide a toll-free hot line for environmental complaints;

16. Enter into interagency agreements;

17. Sell films, educational materials and other items produced by the Department and sell, exchange or otherwise dispose of obsolete personal property belonging to the Department unless otherwise required by terms of federal grants;

18. Provide administrative and support services to the Board and the Councils as necessary to assist them in the performance of their duties; and

19. Exercise all incidental powers which are necessary and proper to implement and administer the purposes of this Code.

B. The provisions of this part shall extend to all programs administered by the Department regardless of whether the statutes creating such program are codified in Title 27A of the Oklahoma Statutes.

27A O.S. § 2-3-501. Sampling, inspecting and investigating conditions relating to pollution or damage to natural resource - Power to enter - Federal Superfund sites - Record and reports - Administrative warrants

A. Any duly authorized representative of the Department of Environmental Quality shall have the power to enter at reasonable times upon any private or public property for the purpose of sampling, inspecting and investigating conditions relating to pollution, damage to natural resources or the possible pollution of any air, land or waters of the state or the environment or relating to any other environmental or permitting responsibility authorized by law.

B. If the property to be entered has been identified on the federal National Priority List as a Superfund site or otherwise identified for an action under the federal Comprehensive Environmental Response, Compensation and Liability Act (CERCLA, 42 U.S.C., Section 9601 et seq.) and the Department of Environmental Quality has been designated by the United States Environmental Protection Agency as lead agency for CERCLA activities at the site, any duly authorized representative of the Department shall have the power, in addition to the powers listed in subsection A of this section, to enter for purposes of conducting those CERCLA activities or to prevent unreasonable interference with such activities or remedies. The Department may seek administrative or judicial remedies for any person's refusal to allow, or interference with, entry for this purpose.

C. The Department may require the establishment and maintenance of records and reports relating to any activity regulated by the Department. Copies of such records shall be submitted to the Department on request. Any authorized

representative of the Department shall be allowed access and may examine such reports or records.
D. The Department may apply to and obtain from a judge of the district court, an order authorizing an administrative warrant to enforce access to premises for sampling, investigation, inquiry and inspection under the provisions of this Code and the rules promulgated by the Board. Failure to obey an administrative warrant of the district court may be punished by the district court as a contempt of court.
E. The Executive Director may appoint commissioned peace officers, certified by the Council on Law Enforcement Education and Training, to investigate environmental crimes. Peace officers who become employed under this section who have service credit in the Oklahoma Law Enforcement Retirement System may, within thirty (30) days after becoming employed, elect to continue membership in the Oklahoma Law Enforcement Retirement System; otherwise they shall be eligible to enroll only in the Oklahoma Public Employees Retirement System.

27A O.S. § 2-3-502. Notice of Code violation - Administrative remedies, compliance - Penalties, corrective action
A. If upon inspection or investigation, or whenever the Department determines that there are reasonable grounds to believe that any person is in violation of this Code or any rule promulgated thereunder or of any order, permit or license issued pursuant thereto, the Department may give written notice to the alleged violator of the specific violation and of the alleged violator's duty to correct such violation immediately or within a set time period or both and that the failure to do so will result in the issuance of a compliance order.
B. In addition to any other remedies provided by law, the Department may, after service of the notice of violation, issue a proposed compliance order to such person. A proposed compliance order shall become a final order unless, no later than fifteen (15) days after the order is served, any respondent named therein requests an administrative enforcement hearing.

1. The proposed compliance order may, pursuant to subsection K of this section:

   a. assess an administrative penalty for past violations of this Code, rules promulgated thereunder, or the terms and conditions of permits or licenses issued pursuant thereto, and
   b. propose the assessment of an administrative penalty for each day the respondent fails to comply with the compliance order.

2. Such proposed order may specify compliance requirements and schedules, or mandate corrective action, or both.

C. Failure to comply with a final compliance order, in part or in whole, may result in the issuance of an assessment order assessing an administrative penalty as authorized by law, or a supplementary order imposing additional requirements, or both. Any proposed order issued pursuant to this subsection shall become final unless, no later than seven (7) days after its service, any respondent named therein requests an administrative enforcement hearing.

D. Notwithstanding the provisions of subsection A and B of this section, the Executive Director, after notice and opportunity for an administrative hearing, may revoke, modify or suspend the holder's permit or license in part or in whole for cause, including but not limited to the holder's:

1. Flagrant or consistent violations of this Code, of rules promulgated thereunder or of final orders, permits or licenses issued pursuant thereto;

2. Reckless disregard for the protection of the public and the environment as demonstrated by noncompliance with environmental laws and rules resulting in endangerment of human health or the environment; or

3. Actions causing, continuing, or contributing to the release or threatened release of pollutants or contaminants to the environment.

E. Whenever the Department finds that an emergency exists requiring immediate action to protect the public health or welfare or the environment, the Executive Director may without notice or hearing issue an order, effective upon issuance, reciting the existence of such an emergency and requiring that such action be taken as deemed necessary to meet the emergency. Any person to whom such an order is directed shall comply therewith immediately but may request an administrative enforcement hearing thereon within fifteen (15) days after the order is served. Such hearing shall be held by the Department within ten (10) days after receipt of the request. On the basis of the hearing record, the Executive Director shall sustain or modify such order.

F. Except as otherwise expressly provided by law, any notice of violation, order, or other instrument issued by or pursuant to authority of the Department may be served on any person affected thereby personally, by publication, or by mailing a copy of the notice, order, or other instrument by certified mail return-receipt requested directed to such person at his last-known post office address as shown by the files or records of the Department. Proof of service shall be made as in the case of service of a summons or by publication in a civil action. Such proof of service shall be filed in the Office of Administrative Hearings.

G. Every certificate or affidavit of service made and filed shall be prima facie evidence of the facts therein stated. A certified copy thereof shall have like force and effect.

H. 1. The administrative hearings provided for in this section shall be conducted as individual proceedings in accordance with, and a record thereof maintained pursuant to, Article II of the Administrative Procedures Act, this Code and rules promulgated thereunder. When a hearing is timely requested by a respondent pursuant to this section, the Department shall promptly conduct such hearing.

2. Such hearing shall be conducted by an Administrative Law Judge or by the Executive Director. When an Administrative Law Judge holds the hearing, such Judge shall prepare a proposed order and shall:

a. serve it on the parties, by regular mail, and may offer an opportunity for parties to file exceptions to the proposed order before a final order is entered in the event the Executive Director does not review the record, and

b. present the proposed order, the exceptions, if any, and the record of the matter to the Executive Director, or

c. present the proposed order and the record of the matter to the Executive Director for review and entry of a final order for any default, failure to appear at the hearing or if the parties by written stipulation waive compliance with subparagraph a of this paragraph.

3. For administrative proceedings conducted by an Administrative Law Judge pursuant to this section, the Executive Director may adopt, amend or reject any findings or conclusions of the Administrative Law Judge or exceptions of any party and issue a final order accordingly, or may in his discretion remand the proceeding for additional argument or the introduction of additional evidence at a hearing held for the purpose. A final order shall not be issued by the Executive Director until after:

a. the opportunity for exceptions has lapsed without receiving exceptions, or after exceptions, briefs and oral arguments, if any, are made, or

b. review of the record by the Executive Director.

4. Any order issued by the Department shall become final upon service.

I. Any party aggrieved by a final order may petition the Department for rehearing, reopening or reconsideration within ten (10) days from the date of the entry of the final order. Any party aggrieved by a final order, including the Attorney General on behalf of the state, may, pursuant to the Administrative Procedures Act, petition for a judicial review thereof.

J. If the Attorney General seeks redress on behalf of the state, as provided for in subsection I of this section, the Executive Director is empowered to appoint a special counsel for such proceedings.

K. 1. Unless specified otherwise in this Code, any penalty assessed or proposed in an order shall not exceed Ten Thousand Dollars ($10,000.00) per day of noncompliance.

2. The determination of the amount of an administrative penalty shall include, but not be limited to, the consideration of such factors as the nature, circumstances and gravity of the violation or violations, the economic benefit, if any, resulting to the respondent from the violation, the history of such violations and respondent's degree of culpability and good faith compliance efforts. For purposes of this section, each day, or part of a day, upon which such violation occurs shall constitute a separate violation.

L. Notwithstanding the provisions of subsections A and B of this section, the Department may, within three (3) years of discovery, apply for the assessment of an administrative penalty for any violation of this Code, or rules promulgated thereunder or permits or licenses issued pursuant thereto.

M. Any order issued pursuant to this section may require that corrective action be taken. If corrective action must be taken on adjoining property, the owner of such

adjoining property shall not give up any right to recover damages from the responsible party by allowing corrective action to occur.

N. Inspections, investigations, administrative enforcement hearings and other administrative actions or proceedings pursuant to the Code shall not be the basis for delaying judicial proceedings between private parties involving the same subject matter.

27A O.S. § 2-3-503. Notice of complaint - Opportunity to provide written information pertinent to complaint

If the Department undertakes an enforcement action as a result of a complaint, the Department shall notify the complainant of the enforcement action by mail and offer the complainant an opportunity to provide written information pertinent to the complaint within fourteen (14) calendar days after the date of the mailing.

27A O.S. § 2-3-504. Violation of Code, order, permit or license or rule - Penalties and remedies

A. Except as otherwise specifically provided by law, any person who violates any of the provisions of, or who fails to perform any duty imposed by, the Oklahoma Environmental Quality Code or who violates any order, permit or license issued by the Department of Environmental Quality or rule promulgated by the Environmental Quality Board pursuant to this Code:

1. Shall be guilty of a misdemeanor and upon conviction thereof may be punished by a fine of not less than Two Hundred Dollars ($200.00) for each violation and not more than Ten Thousand Dollars ($10,000.00) for each violation or by imprisonment in the county jail for not more than six (6) months or by both such fine and imprisonment;

2. May be punished in civil proceedings in district court by assessment of a civil penalty of not more than Ten Thousand Dollars ($10,000.00) for each violation;

3. May be assessed an administrative penalty pursuant to Section 2-3-502 of this title not to exceed Ten Thousand Dollars ($10,000.00) per day of noncompliance; or

4. May be subject to injunctive relief granted by a district court. A district court may grant injunctive relief to prevent a violation of, or to compel a compliance with, any of the provisions of this Code or any rule promulgated thereunder or order, license or permit issued pursuant to this Code.

B. Nothing in this part shall preclude the Department from seeking penalties in district court in the maximum amount allowed by law. The assessment of penalties in an administrative enforcement proceeding shall not prevent the subsequent assessment by a court of the maximum civil or criminal penalties for violations of this Code.

C. Any person assessed an administrative or civil penalty shall be required to pay, in addition to such penalty amount and interest thereon, attorneys fees and costs associated with the collection of such penalties.

D. For purposes of this section, each day or part of a day upon which such violation occurs shall constitute a separate violation.

E. The Attorney General or the district attorney of the appropriate district court of Oklahoma may bring an action in a court of competent jurisdiction for the prosecution of a violation by any person of a provision of this Code or any rule promulgated thereunder, or order, license or permit issued pursuant thereto.

F. 1. Any action for injunctive relief to redress or restrain a violation by any person of this Code or of any rule promulgated thereunder, or order, license, or permit issued pursuant thereto or for recovery of any administrative or civil penalty assessed pursuant to this Code may be brought by:

a. the district attorney of the appropriate district court of the State of Oklahoma,

b. the Attorney General on behalf of the State of Oklahoma, or

c. the Department on behalf of the State of Oklahoma.

2. The court shall have jurisdiction to determine said action, and to grant the necessary or appropriate relief, including but not limited to mandatory or prohibitive injunctive relief, interim equitable relief, and punitive damages.

3. In any judicial action in which the Department seeks injunctive relief and alleges by verified petition that:

a. the defendant's actions or omissions constitute a violation of the Code or a rule, order, license or permit, and

b. the actions or omissions present an imminent and substantial endangerment to health or the environment if allowed to continue during the pendency of the action,

the Department shall be entitled to obtain a temporary order or injunction to prohibit such acts or omissions to the extent they present an imminent and substantial endangerment to health or the environment. Such temporary order or injunction shall remain in effect during the pendency of the judicial action until superseded or until such time as the court finds that the criteria of subparagraphs a and b of this paragraph no longer exist. If a temporary order or injunction has been issued without prior hearing, the court shall schedule a hearing within twenty (20) days after issuance of the temporary order to determine whether the temporary order should be lifted and a preliminary injunction should issue. The Department shall bear the burden of proof at such hearing.

4. It shall be the duty of the Attorney General and district attorney to bring such actions, if requested by the Executive Director of the Department.

G. Except as otherwise provided by law, administrative and civil penalties shall be paid into the Department of Environmental Quality Revolving Fund.

H. In determining the amount of a civil penalty the court shall consider such factors as the nature, circumstances and gravity of the violation or violations, the economic benefit, if any, resulting to the defendant from the violation, the history of such violations, any good faith efforts to comply with the applicable requirements, the economic impact of the penalty on the defendant, the defendant's degree of culpability, and such other matters as justice may require.

I. In addition to or in lieu of any administrative enforcement proceedings available to the Department, the Department may take or request civil action or request criminal prosecution, or both, as provided by law for any violation of this Code, rules promulgated thereunder, or orders issued, or conditions of permits, licenses, certificates or other authorizations prescribed pursuant thereto.

27A O.S. § 2-10-201. Rules - Fees

A. The Board of Environmental Quality is directed and empowered to promulgate rules for solid waste management including but not limited to:

1. The permitting, posting of security, construction, operation, closure, maintenance and remediation of solid waste disposal sites;

2. Disposal of solid waste in ways that are environmentally safe and sanitary, as well as economically feasible;

3. Authorizing variances from the specific requirements of a particular rule provided that the applicant for a variance has demonstrated that compliance with the rule will be met by substituted technology which equals or exceeds the protection accorded by the particular rule and that the variance will not result in a hazard to the health, environment and safety of the people of this state or their property. The grant of any variance shall be upon express condition that, in the event of the failure of the substituted technology to conform to the requirements of law and rules, the applicant shall be required to incorporate the technology, process or procedure established under the rules;

4. Requiring the submission of laboratory reports or analyses performed by certified laboratories for the purposes of compliance monitoring and testing and for other purposes required for the regulation of sludge pursuant to Part 4 of this Article;

5. The transportation of solid waste. Such rules shall not be more stringent than those of the United States Department of Transportation or the United States Interstate Commerce Commission;

6. Applicant disclosure; and

7. The regulation of borrow areas for soils to be used in solid waste disposal sites. Regulatory authority over such borrow areas shall be exclusive to the Board and the Department of Environmental Quality.

B. Rules shall be promulgated in compliance with the Administrative Procedures Act. Notice of any proposed changes to such rules shall be given to the Oklahoma Municipal League, the County Commissioners Association, and such citizens as have requested to be notified and shall advise them of an opportunity to comment thereon before the adoption of such rules.

27A O.S. § 2-10-202. Powers and duties of Department of Environmental Quality

A. The Department of Environmental Quality shall have the power and duty to:

1. Advise, consult and cooperate with other agencies and instrumentalities of the state, other states and the federal government and with affected groups and

industries in the formulation of plans and the implementation of the solid waste disposal program;

2. Administer and make available such loans and grants from the federal government and from other sources as may be available to the Department for the planning, construction, and operation of solid waste disposal sites;

3. Develop a statewide integrated solid waste management plan with input from the public, municipal and county governments and regional solid waste planning and management entities;

4. Review and act upon applications for solid waste disposal site permits, inspect construction, operation, closure and maintenance of solid waste disposal sites and establish standards for and oversee the remediation of contaminated soils resulting from releases or spills associated with transit or other activities not subject to permitting requirements and not subject to the jurisdiction of another state environmental agency;

5. Perform investigations and inspections which it deems necessary to ensure compliance with the Oklahoma Environmental Quality Code, the Oklahoma Solid Waste Management Act and rules promulgated thereunder and orders, permits and licenses issued pursuant thereto;

6. Provide technical assistance to solid waste planning units, public solid waste management service entities, political subdivisions, business and industry, and the general public to promote development and implementation of recycling activities to meet the goals of the Oklahoma Solid Waste Management Act;

7. Establish and maintain, or cause to be established and maintained, in cooperation with the Department of Commerce, a database for tracking markets for materials which are being or could be recovered from the municipal solid waste stream in Oklahoma. The database shall contain information including but not limited to the names and addresses of buyers and sellers of secondary materials relevant to Oklahoma, market prices, and specifications required by buyers;

8. Establish an office for local solid waste systems development and coordination; and

9. Establish a certification program for control officers employed by regional solid waste management districts within this state or governments or county government instrumentalities within this state who are responsible for the investigation and enforcement of the laws of this state relating to illegal dumps. Such certified control officers shall have the authority to investigate and report violations to the proper authority pursuant to the provisions of Section 1761.1 of Title 21 of the Oklahoma Statutes.

27A O.S. § 2-10-303.1. Availability of administrative permit hearing

In accordance with the provisions of Section 2-14-304 of this title, an administrative permit hearing shall be available on a proposed permit which is based on a Tier III solid waste permit application for a new permit or for the major modification of an existing permit involving a fifty percent (50%) or more increase in permitted capacity for storage, treatment or disposal including but not limited to incineration.

27A O.S. § 2-10-501. Nonhazardous industrial solid waste landfills–Permit—Restrictions

A. The Department of Environmental Quality may issue a permit for a landfill disposal site, which is not a hazardous waste facility, which accepts unspecified nonhazardous industrial solid waste, only under the following circumstances:

1. The landfill is located outside of areas of principal groundwater resource or recharge areas as determined and mapped by the Oklahoma Geological Survey or is on a proposed site on property owned or operated by a person who also owns or operates a hazardous waste facility or solid waste facility, on or contiguous to property on which a hazardous waste facility or solid waste facility is operating pursuant to a permit and the site is designed to meet the most environmentally protective solid waste rules promulgated by the Environmental Quality Board and includes a leachate collection system; or

2. The landfill complies with all siting and public participation requirements as though the solid waste landfill were a hazardous waste landfill; or

3. The site is proposed and designed as a nonhazardous industrial solid waste landfill which will be owned, operated, or owned and operated by an industry or manufacturer for its exclusive noncommercial use; or

4. The landfill is owned or operated by a municipality or is a privately owned landfill which regularly serves one or more municipalities and which has been accepting nonhazardous industrial solid waste under approval of the Department.

B. The provisions of this section shall apply to all pending applications for which final agency action has not been taken, future permit applications and facilities which are not fully operational.

C. Except as otherwise provided in subsection A of this section, the Department shall not allow a solid waste disposal site to accept any nonhazardous industrial solid waste type unless:

1. Said site is permitted by the Department to accept such waste type;

2. The landfill is owned or operated by a municipality or is a privately owned landfill which regularly serves one or more municipalities and which has been accepting nonhazardous industrial solid waste under approval of the Department; or

3. The site is proposed, designed, and permitted as a nonhazardous industrial solid waste monofill.

D. 1. New landfills which accept nonhazardous industrial solid waste shall not be constructed nor shall such existing landfills be expanded which are located within a seismic impact zone unless the applicant demonstrates that all containment structures, including liners, leachate collection systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site.

2. No nonhazardous industrial solid waste landfill shall be located within five (5) miles of a known epicenter of an earthquake of more than 4.0 on the Richter

Scale or a number V on the modified Mercalli Scale as recorded by the Oklahoma Geological Survey.

3. Landfill disposal sites that only receive ash generated by the burning of coal for the purpose of generating electricity by electric utilities and independent power producers are subject to paragraph 1 of this subsection. Otherwise, paragraphs 1 and 2 of this subsection shall not apply to a nonhazardous industrial solid waste landfill which is owned or operated by:

a. an industry or manufacturer and utilized for such industry's or manufacturer's exclusive noncommercial use, or

b. a municipality, or is a privately owned landfill which regularly serves one or more municipalities, and which has been accepting nonhazardous industrial solid waste under approval of the Department.

E. 1. Except as otherwise provided by this subsection, the Department shall not issue, amend or modify a permit to allow a solid waste landfill to accept more than one type of nonhazardous industrial solid waste for disposal unless said landfill is equipped with a composite liner and a leachate collection system designed and constructed in compliance with rules promulgated by the Board.

2. Any landfill which is owned, operated, or owned and operated by an industry or manufacturer and utilized for such industry's or manufacturer's exclusive noncommercial use may be required to install a composite liner and a leachate collection system as determined to be necessary by the Department on a case-by-case basis.

3. The Department shall not require composite liners and leachate collection systems for any nonhazardous industrial solid waste landfill initially licensed by the Department prior to July 1, 1992, which is owned and operated by an industry or manufacturer and utilized for such industry's or manufacturer's exclusive noncommercial use.

F. No limitation shall be placed on the percentage of nonhazardous industrial solid waste that may be accepted for disposal at solid waste landfills which have a composite liner and a leachate collection system designed and constructed in compliance with rules promulgated by the Board.

G. Solid waste disposal site operators shall submit to the Department an itemized monthly report of the type, quantity and source of nonhazardous industrial solid waste accepted the previous month. Solid waste disposal sites that are owned and operated by an industry or manufacturer which are utilized for such industry's or manufacturer's exclusive noncommercial use are not required to submit monthly reports to the Department but shall maintain in the operating record information regarding the type and quantity of nonhazardous industrial waste accepted each month. Information maintained in the operating record shall be made available to the Department upon request.

H. 1. Before sending waste identified as nonhazardous industrial solid waste for disposal in an Oklahoma solid waste landfill, a certification that the waste is not a hazardous waste as such term is defined in the Oklahoma Hazardous Waste

Management Act1 shall be submitted to the Department. Such certification shall be made by:

a. the original generator,

b. a person who identifies and is under contract with a generator and whose activities under the contract cause the waste to be generated,

c. a party to a remediation project under an order of the Department or under the auspices of the Oklahoma Energy Resources Board or other agencies of other states, or

d. a person responding to an environmental emergency.

2. The Department may require the certifier to substantiate the certification by appropriate means, when it is reasonable to believe such waste may be hazardous. Such substantiation may include Material Safety Data Sheets, an explanation of specific technical process knowledge adequate to identify that the waste is not a hazardous waste, or laboratory analysis.

I. Any generator seeking to exclude a specific nonhazardous industrial solid waste, which is also an inert waste, from the provisions of this section may petition the Department for a regulatory exclusion. The generator shall demonstrate to the satisfaction of the Department that the waste is inert and that it may be properly disposed.

J. Unless otherwise specified in this section, by January 1, 1993, solid waste landfills existing on the effective date of this section which are required by this section to utilize composite liners and leachate collection systems and are not doing so shall cease to accept nonhazardous industrial solid waste.

K. Notwithstanding any other provision of the Oklahoma Solid Waste Management Act, no solid waste permit shall be required for an incineration facility burning nonhazardous solid waste for the purpose of disposing of the waste if:

1. The incinerator has an air quality permit from the Department;

2. Storage of waste at the site prior to incineration is limited to the lesser of twenty (20) tons or the volume reasonably expected to be incinerated within ten (10) days, considering the nature of the waste and the manufacturer's approved charge rate for the incinerator;

3. The waste is stored at a location and managed in a manner which minimizes the risk of a release, exposure or other incident which could threaten human health or the environment, including the storage of liquids within adequate secondary containment;

4. All ashes and residues from the incineration process are managed in accordance with applicable statutes and rules; and

5. a. The incinerator is owned and operated by a business or industry for the incineration of its own waste exclusively, or

b. The waste feed rate of the incinerator does not exceed five (5) tons per day.

27A O.S. § 2-14-102. Intent

It is the intent of the Oklahoma Legislature that the Oklahoma Uniform Environmental Permitting Act provide for uniform permitting provisions regarding notices and public participation opportunities that apply consistently and uniformly to applications for permits and other permit authorizations issued by the Department of Environmental Quality.

27A O.S. § 2-14-103. Definitions

For the purposes of the Oklahoma Uniform Environmental Permitting Act:

1. "Application" means a document or set of documents, filed with the Department of Environmental Quality for the purpose of receiving a permit or the modification, amendment or renewal thereof from the Department. "Application" includes any subsequent additions, revisions or modifications submitted to the Department which supplement, correct or amend a pending application;

2. "Council" means any advisory council authorized by the Legislature to recommend rules to the Environmental Quality Board;

3. "Draft permit" means a draft document prepared by the Department after it has found a Tier II or III application for a permit to be administratively and technically complete, pursuant to the requirements of the Oklahoma Environmental Quality Code and rules promulgated thereunder, and that such application may warrant the issuance, modification or renewal of the permit;

4. "Permit" means a permission required by law and issued by the Department, the application for which has been classified as Tier I, II or III by the Board. The term "permit" includes but is not limited to:

   a. specific types of permits and other Department authorizations including certifications, registrations, licenses and plan approvals, and

   b. an approved variance from a promulgated rule; however, for existing facilities the Department may require additional notice and public participation opportunities for variances posing the potential for increased risk;

5. "Process meeting" means a meeting open to the public which is held by the Department to explain the permitting process and the public participation opportunities applicable to a specific Tier III application;

6. "Proposed permit" means a document, based on a draft permit and prepared by the Department after consideration of comments received on the draft permit, which indicates the Department's decision to issue a final permit pending the outcome of an administrative permit hearing, if any;

7. "Qualified interest group" means any organization with twenty-five or more members who are Oklahoma residents;

8. "Response to comments" means a document prepared by the Department after its review of timely comments received on a draft denial or draft permit pursuant to public comment opportunities which:

a. specifies any provisions of the draft permit that were changed in the proposed or final permit and the reasons for such changes, and

b. briefly describes and responds to all significant comments raised during the public comment period or formal public meeting about the draft denial or draft permit;

9. "Tier I" means a basic process of permitting which includes application, notice to the landowner and Department review. For the Tier I process a permit shall be issued or denied by a technical supervisor of the reviewing Division, a local representative of the Department, or the chief engineer of the Department provided such authority has been delegated thereto by the Executive Director;

10. "Tier II" means a secondary process of permitting which includes:

a. the Tier I process,

b. published notice of application filing,

c. preparation of draft permit or draft denial,

d. published notice of draft permit or draft denial and opportunity for a formal public meeting, and

e. public meeting, if any.

For the Tier II process, a permit shall be issued or denied by the Director of the reviewing Division or the chief engineer of the Department provided such authority has been delegated thereto by the Executive Director; and

11. "Tier III" means an expanded process of permitting which includes:

a. the Tier II process except the notice of filing shall also include an opportunity for a process meeting,

b. preparation of the Department's response to comments, and

c. denial of application, or

d. preparation of a proposed permit, published notice of availability of proposed permit and response to comments and of opportunity for an administrative permit hearing; and administrative permit hearing if any.

For the Tier III process a permit shall be issued or denied by the Executive Director.

27A O.S. § 2-14-104. Applicability.

A. The Oklahoma Uniform Environmental Permitting Act shall apply to applications filed with the Department on or after July 1, 1996.

B. Applications subject to the Oklahoma Uniform Environmental Permitting Act shall continue to be subject to additional or more comprehensive notice and public participation opportunities set forth in rules of the Board promulgated pursuant to federal requirements for individual state permitting programs.

27A O.S. § 2-14-201. Rules for implementation

A. The Board shall have the authority to promulgate rules to implement the Oklahoma Uniform Environmental Permitting Act for each tier which will to the greatest extent possible:

1. Enable applicants to follow a consistent application process;
2. Ensure that uniform public participation opportunities are offered;
3. Provide for uniformity in notices required of applicants; and
4. Set forth procedural application requirements.

B. Such rules shall:

1. Designate applications as Tier I, II or III. In making such determinations, the Board and each recommending Council shall consider information and data offered on:

a. the significance of the potential impact of the type of activity on the environment,
b. the amount, volume and types of waste proposed to be accepted, stored, treated, disposed, discharged, emitted or land applied,
c. the degree of public concern traditionally connected with the type of activity,
d. the federal classification, if any, for such proposed activity, operation or type of site or facility, and
e. any other factors relevant to such determinations;

2. For purposes of this section, the Board and each recommending Council shall ensure that such designations are consistent with any analogous classifications set forth in applicable federal programs.

C. Such rules shall for each tier:

1. Set forth uniform procedures for filing an application;

2. Contain specific uniform requirements for each type of notice required by the Oklahoma Uniform Environmental Permitting Act; provided, however, that if notice and public participation opportunities are required, such requirements shall not exceed those set forth for the tier unless required otherwise by applicable federal regulations promulgated as rules of the Board or a holding of the Oklahoma Supreme Court;

3. Contain other provisions needed to implement and administer this article; and

4. Designate positions to which the Executive Director may delegate, in writing, the power and duty to issue, renew, amend, modify and deny permits.

D. Such rules shall be adopted by the Board by March 1, 1996.

27A O.S. § 2-14-202. Department of Environmental Quality - Powers and duties

A. The Department is hereby authorized to implement and enforce the provisions of the Oklahoma Uniform Environmental Permitting Act and rules promulgated thereunder.

B. In addition to authority under the Oklahoma Environmental Quality Code, the Department shall have the power and duty to:

1. Evaluate applications for administrative and technical completeness pursuant to requirements of the Code and rules promulgated thereunder and, when

necessary to determine such completeness, request changes, revisions, corrections, or supplemental submissions;

2. Evaluate notices related to applications for sufficiency of content and compliance and require that omissions or inaccuracies be cured;

3. Consider timely and relevant comments received;

4. Prepare responses to comments, draft and final denials, and draft, proposed and final permits;

5. Cooperate with federal agencies as is required for federal review or oversight of state permitting programs;

6. Consolidate processes related to multiple, pending applications filed by the same applicant for the same facility or site in accordance with rules of the Board; and

7. Otherwise exercise all incidental powers as necessary and proper to implement the provisions of the Oklahoma Uniform Environmental Permitting Act and rules promulgated thereunder.

27A O.S. § 2-14-301. Notice requirements

A. Upon filing a Tier II or III application with the Department, the applicant shall publish notice of the filing as legal notice in one newspaper local to the proposed new site or existing facility. The publication shall identify locations where the application may be reviewed, including a location in the county where the proposed new site or existing facility is located.

B. For Tier III applications, the publication shall also include notice of a thirty-day opportunity to request, or give the date, time and place for, a process meeting on the permitting process. If the Department receives timely request and determines that a significant degree of public interest in the application exists, it shall schedule and hold such meeting. The applicant shall be entitled to attend the meeting and may make a brief presentation on the permit request. Any local community meeting to be held by the applicant on the proposed facility or activity for which a permit is sought may, with the agreement of the Department and the applicant, be combined with the process meeting authorized by this paragraph.

C. The provisions of this section shall not stay the Department's review of the application.

27A O.S. § 2-14-302. Draft denial or draft permit - Notice requirements - Public review

A. Upon conclusion of its technical review of a Tier II or III application within the permitting timeframes established by rules promulgated by the Board, the Department shall prepare a draft denial or draft permit.

1. Notice of a draft denial shall be given by the Department and notice of a draft permit shall be given by the applicant.

2. Notice of the draft denial or draft permit shall be published as legal notice in one newspaper local to the proposed new site or existing facility. The notice shall identify places where the draft denial or draft permit may be reviewed, including a

location in the county where the proposed new site or existing facility is located, and shall provide for a set time period for public comment and for the opportunity to request a formal public meeting on the respective draft denial or draft permit. Such time period shall be set at thirty (30) days after the date the notice is published unless a longer time is required by federal regulations promulgated as rules by the Board. In lieu of the notice of opportunity to request a public meeting, notice of the date, time, and place of a public meeting may be given, if previously scheduled.

B. Upon the publication of notice of a draft permit, the applicant shall make the draft permit and the application, except for proprietary provisions otherwise protected by law, available for public review at a location in the county where the proposed new site or existing facility is located.

27A O.S. § 2-14-303. Public meeting - Procedure

The Department shall expeditiously schedule and hold a formal public meeting if the Department receives written timely request for such meeting, pursuant to the provisions of Section 2-14-302 of this title, and determines there is a significant degree of public interest in the draft denial or draft permit.

1. Notice of the meeting shall be given to the public at least thirty (30) days prior to the meeting date.

2. The public meeting shall be held at a location convenient to and near the proposed new site or existing facility not more than one hundred twenty (120) days after the date notice of the draft denial or draft permit was published.

3. At the meeting, any person may submit oral or written statements and data concerning the draft permit. Reasonable limits may be set upon the time allowed for oral statements.

4. The public comment period shall automatically be extended to the close of the public meeting. Upon good cause shown, the presiding officer may extend the comment period further to a date certain by so stating at the meeting.

5. Such meeting shall not be a quasi-judicial proceeding.

6. The applicant or a representative of the applicant shall be present at the meeting to respond to questions.

27A O.S. § 2-14-304. Issuance or denial of final permit - Administrative procedures

A. For draft permits or draft denials for Tier II applications on which no comment or public meeting request was timely received and on which no public meeting was held, the final permit shall be issued or denied.

B. For draft permits or draft denials for Tier II applications on which comment or a public meeting request was timely received or on which a public meeting was held, the Department, after considering the comments, shall prepare a response to comments and issue the draft permit as is or as amended or make final denial.

The response to comments shall be prepared within ninety (90) days after the close of the public comment period unless extended by the Executive Director upon a determination that additional time is required due to circumstances outside the

control of the Department. Such circumstances may include, but shall not be limited to, an act of God, a substantial and unexpected increase in the number of applications filed, additional review duties imposed on the Department from an outside source, or outside review by a federal agency.

C. For a draft permit for a Tier III application, after the public comment period and the public meeting, if any, the Department shall prepare a response to comments and either issue a final denial in accordance with paragraph 2 of this subsection or prepare a proposed permit.

1. When a proposed permit is prepared, the applicant shall publish notice, as legal notice in one newspaper local to the proposed new site or existing facility, of the Department's tentative decision to issue the permit. Such notice shall identify the places where the proposed permit and the Department's response to comments may be reviewed, including a location in the county where the proposed new site or existing facility is located and shall offer a twenty-day opportunity to request an administrative hearing to participate in as a party. The opportunity to request a hearing shall be available to the applicant and any person or qualified interest group who claims to hold a demonstrable environmental interest and who alleges that the construction or operation of the proposed facility or activity would directly and adversely affect such interest.

If no written administrative hearing request is received by the Department by the end of twenty (20) days after the publication date of the notice, the final permit shall be issued.

2. If the Department's final decision is to deny the permit, it shall give notice to the applicant and issue a final denial in accordance with subsection F of this section.

D. When an administrative hearing is timely requested on a proposed permit in accordance with subsection C of this section, all timely requests shall be combined in a single hearing. The hearing shall be a quasi-judicial proceeding and shall be conducted by an Administrative Law Judge in accordance with Article 2 of the Administrative Procedures Act, the Code and rules promulgated by the Environmental Quality Board.

1. The applicant shall be a party to the hearing.

2. The Department shall schedule a prehearing conference within sixty (60) days after the end of the hearing request period.

3. The Department shall move expeditiously to an evidentiary proceeding in which parties shall have the right to present evidence before the Department on whether the proposed permit and the technical data, models and analyses, and information in the application upon which the proposed permit is based are in substantial compliance with applicable provisions of the Code and rules promulgated thereunder and whether the proposed permit should be issued as is, amended and issued, or denied.

4. Failure of any party to participate in the administrative proceeding with good faith and diligence may result in a default judgment with regard to that party;

provided however, that no final permit shall be issued solely on the basis of any such judgment.

E. If the Department decides to reverse its initial draft decision, it shall withdraw the draft denial or draft permit and prepare a draft permit or draft denial, as appropriate. Notice of the withdrawal of the original draft and preparation of the revised draft shall be given as provided in Section 2-14-302 of this title. The Department shall then re-open the comment period and provide additional opportunity for a formal public meeting on the revised draft as described in Section 2-14-303 of this title.

F. Upon final issuance or denial of a permit for a Tier III application, the Department shall provide public notice of the final permit decision and the availability of the response to comments, if any.

G. Any appeal of a Tier III final permit decision or any final order connected therewith shall be made in accordance with the provisions of the Code and the Administrative Procedures Act.

H. Any applicant, within ten (10) days after final denial of the application for a new original permit on which no final order was issued, may petition the Department for reconsideration on the grounds stated in subsection A of Section 317 of Title 75 of the Oklahoma Statutes as if the denial was an order. Disposition of the petition shall be by order of the Executive Director according to subsections B and D of Section 317 of Title 75 of the Oklahoma Statutes.

45 O.S. § 940. Fly ash or other material from coal combustion, power-generating facilities and kiln dust generated by cement-producing entities - Solid waste permit exemption

A. All fly ash, bottom ash or any other such material produced by coal combustion, power-generating facilities shall be exempt from all solid waste permitting requirements pursuant to Title 27A of the Oklahoma Statutes, provided such ash is constructively reutilized, or disposed of in any active or inactive coal mining operation subject to the provisions contained in Title 45 of the Oklahoma Statutes. The disposal of fly ash, bottom ash or any other such material generated by the burning of coal for the purpose of generating electricity by electric utilities and independent power producers in any noncoal mining operation shall be subject to the solid waste permitting requirements in Title 27A of the Oklahoma Statutes.

PART TWO: CHAPTER 517

CHAPTER 517. DISPOSAL OF COAL COMBUSTION RESIDUALS FROM ELECTRIC UTILITIES

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[Authority: 27A O.S., §§ 1-3-101, 2-2-101, 2-10-201, and 2-10-301(D)]
[Source: Codified 9-15-16]

SUBCHAPTER 1. GENERAL PROVISIONS

Section	
252:517-1-1.	Scope and purpose
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252:517-1-1. Scope and purpose

(a) **Applicability.** This Chapter applies to owners and operators of new and existing landfills and surface impoundments, including any lateral expansions of such units that dispose or otherwise engage in solid waste management of CCR generated from the combustion of coal at electric utilities and independent power producers. Unless otherwise provided in this Chapter, these requirements also apply to disposal units located off-site of the electric utility or independent power producer. This Chapter also applies to any practice that does not meet the definition of a beneficial use of CCR.

(b) **Applicability to inactive CCR surface impoundments.** This Chapter also applies to inactive CCR surface impoundments at active electric utilities or independent power producers, regardless of the fuel currently used at the facility to produce electricity.

(c) **Cessation of landfill operations.** This Chapter does not apply to CCR landfills that have ceased receiving CCR prior to October 19, 2015.

(d) **Cessation of electricity production.** This Chapter does not apply to electric utilities or independent power producers that have ceased producing electricity prior to October 19, 2015.

(e) **Exceptions.** This Chapter does not apply to wastes, including fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated at facilities that are not part of an electric utility or independent power producer, such as manufacturing facilities, universities, and hospitals. This Chapter also does not apply to fly ash, bottom ash, boiler slag, and flue gas desulfurization materials, generated primarily from the combustion of fuels (including other fossil fuels) other than coal, for the purpose of generating electricity unless the fuel burned consists of more than fifty percent (50%) coal on a total heat input or mass input basis, whichever results in the greater mass feed rate of coal.

(f) **Beneficial use exception.** This Chapter does not apply to practices that meet the definition of a beneficial use of CCR.

(g) **Coal mine exception.** This Chapter does not apply to CCR placement at active or abandoned underground or surface coal mines.

(h) **Municipal solid waste landfill exception.** This Chapter does not apply to municipal solid waste landfills that receive CCR.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-1-2. Applicability of other regulations

Compliance with the requirements of this Chapter does not affect the need for the owner or operator of a CCR landfill, CCR surface impoundment, or lateral expansion of a CCR unit

to comply with all other applicable federal, state, tribal, or local laws or other requirements.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-1-3. Definitions

The following words or terms, when used in this Chapter, shall have the following meaning, unless the context clearly indicates otherwise. Any term not defined in this Chapter shall be defined as set forth in OAC 252:517-1-4.

"Acre foot" means the volume of one acre of surface area to a depth of one foot.

"Active facility" or **"active electric utilities"** or **"independent power producers"** means any facility subject to the requirements of this Chapter in operation on October 19, 2015. An electric utility or independent power producer is in operation if it is generating electricity that is provided to electric power transmission systems or to electric power distribution systems on or after October 19, 2015. An off-site CCR unit is in operation if it is accepting or managing CCR on or after October 19, 2015.

"Active life" or **"in operation"** means the period of operation beginning with the initial placement of CCR in the CCR unit and ending at completion of closure activities in accordance with OAC 252:517-15-7.

"Active portion" means that part of the CCR unit that has received or is receiving CCR or non-CCR waste and that has not completed closure in accordance with OAC 252:517-15-7.

"Aquifer" means a geologic formation, group of formations, or portion of a formation capable of yielding usable quantities of groundwater to wells or springs.

"Area-capacity curves" means graphic curves which readily show the reservoir water surface area, in acres, at different elevations from the bottom of the reservoir to the maximum water surface, and the capacity or volume, in acre-feet, of the water contained in the reservoir at various elevations.

"Areas susceptible to mass movement" means those areas of influence (i.e., areas characterized as having an active or substantial possibility of mass movement) where, because of natural or human-induced events, the movement of earthen material at, beneath, or adjacent to the CCR unit results in the downslope transport of soil and rock material by means of gravitational influence. Areas of mass movement include, but are not limited to, landslides, avalanches, debris slides and flows, soil fluctuation, block sliding, and rock fall.

"Beneficial use of CCR" means the CCR meet all of the following conditions:

(A) The CCR must provide a functional benefit;

(B) The CCR must substitute for the use of a virgin material, conserving natural resources that would otherwise need to be obtained through practices, such as extraction;

(C) The use of the CCR must meet relevant product specifications, regulatory standards or design standards when available, and when such standards are not available, the CCR is not used in excess quantities; and

(D) When unencapsulated use of CCR involving placement on the land of 12,400 tons or more in non-roadway applications, the user must demonstrate and keep records, and provide such documentation upon request, that environmental releases to groundwater, surface water, soil and air are comparable to or lower than those from analogous products made without CCR, or that environmental releases to groundwater, surface water, soil and air will be at or below relevant regulatory and health-based benchmarks for human and ecological receptors during use.

"CLIMOCS" means the following publication of the Oklahoma Climatological Survey: Shafer, Mark A., CLIMOCS: A Climatological Summary of 168 Oklahoma Cooperative Stations, Oklahoma Climatological Survey, February 1993, 184 pp.

"Closed" means placement of CCR in a CCR unit has ceased, and the owner or operator has completed closure of the CCR unit in accordance with OAC 252:517-15-7 and has initiated post-closure care in accordance with OAC 252:517-15-9.

"Coal combustion residuals (CCR)" means fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated from burning coal for the purpose of generating electricity by electric utilities and independent power producers.

"CCR fugitive dust" means solid airborne particulate matter that contains or is derived from CCR, emitted from any source other than a stack or chimney.

"CCR landfill" or **"landfill"** means an area of land or an excavation that receives CCR and which is not a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground or surface coal mine, or a cave. For purposes of this Chapter, a CCR landfill also includes sand and gravel pits and quarries that receive CCR, CCR piles, and any practice that does not meet the definition of a beneficial use of CCR.

"CCR pile" or **"pile"** means any non-containerized accumulation of solid, non-flowing CCR that is placed on the land. CCR that is beneficially used off-site is not a CCR pile.

"CCR surface impoundment" or **"impoundment"** means a natural topographic depression, man-made excavation, or diked area, which is designed to hold an accumulation of CCR and liquids, and the unit treats, stores, or disposes of CCR.

"CCR unit" means any CCR landfill, CCR surface impoundment, or lateral expansion of a CCR unit, or a combination of more than one of these units, based on the context of the paragraph(s) in which it is used. This term includes both new and existing units, unless otherwise specified.

"Dike" means an embankment, berm, or ridge of either natural or man-made materials used to prevent the movement of liquids, sludges, solids, or other materials.

"Displacement" means the relative movement of any two sides of a fault measured in any direction.

"Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any solid waste as defined in Section 27A O.S. § 2-10-103 into or on any land or water so that such solid waste, or constituent thereof, may enter the environment or be emitted into the air or discharged

into any waters, including groundwaters. For purposes of this Chapter, disposal does not include the storage or the beneficial use of CCR.

"Downstream toe" means the junction of the downstream slope or face of the CCR surface impoundment with the ground surface.

"Encapsulated beneficial use" means a beneficial use of CCR that binds the CCR into a solid matrix that minimizes its mobilization into the surrounding environment.

"Existing CCR landfill" means a CCR landfill that receives CCR both before and after October 19, 2015, or for which construction commenced prior to October 19, 2015 and receives CCR on or after October 19, 2015. A CCR landfill has commenced construction if the owner or operator has obtained the federal, state, and local approvals or permits necessary to begin physical construction and a continuous on-site, physical construction program had begun prior to October 19, 2015.

"Existing CCR surface impoundment" means a CCR surface impoundment that receives CCR both before and after October 19, 2015, or for which construction commenced prior to October 19, 2015 and receives CCR on or after October 19, 2015. A CCR surface impoundment has commenced construction if the owner or operator has obtained the federal, state, and local approvals or permits necessary to begin physical construction and a continuous on-site, physical construction program had begun prior to October 19, 2015.

"Facility" means all contiguous land, and structures, other appurtenances, and improvements on the land, used for treating, storing, disposing, or otherwise conducting solid waste management of CCR. A facility may consist of several treatment, storage, or disposal operational units (e.g., one or more landfills, surface impoundments, or combinations of them).

"Factor of safety (Safety factor)" means the ratio of the forces tending to resist the failure of a structure to the forces tending to cause such failure as determined by accepted engineering practice.

"Fault" means a fracture or a zone of fractures in any material along which strata on one side have been displaced with respect to that on the other side.

"Flood hydrograph" means a graph showing, for a given point on a stream, the discharge, height, or other characteristic of a flood as a function of time.

"Freeboard" means the vertical distance between the lowest point on the crest of the impoundment dike and the surface of the waste contained therein.

"Free liquids" means liquids that readily separate from the solid portion of a waste under ambient temperature and pressure.

"Groundwater" means water below the land surface in a zone of saturation.

"Hazard potential classification" means the possible adverse incremental consequences that result from the release of water or stored contents due to failure of the diked CCR surface impoundment or mis-operation of the diked CCR surface impoundment or its appurtenances. The hazardous potential classifications include high hazard potential CCR surface impoundment, significant hazard potential CCR surface impoundment, and low hazard potential CCR surface impoundment, which terms mean:

(A) High hazard potential CCR surface impoundment means a diked surface impoundment where failure or mis-operation will probably cause loss of human life.

(B) Low hazard potential CCR surface impoundment means a diked surface impoundment where failure or mis-operation results in no probable loss of human life and low economic and/or environmental losses. Losses are principally limited to the surface impoundment owner's property.

(C) Significant hazard potential CCR surface impoundment means a diked surface impoundment where failure or mis-operation results in no probable loss of human life, but can cause economic loss, environmental damage, disruption of lifeline facilities, or impact other concerns.

"Height" means the vertical measurement from the downstream toe of the CCR surface impoundment at its lowest point to the lowest elevation of the crest of the CCR surface impoundment.

"Holocene" means the most recent epoch of the Quaternary period, extending from the end of the Pleistocene Epoch, at 11,700 years before present, to present.

"Hydraulic conductivity" means the rate at which water can move through a permeable medium (i.e., the coefficient of permeability).

"Inactive CCR surface impoundment" means a CCR surface impoundment that no longer receives CCR on or after October 19, 2015 and still contains both CCR and liquids on or after October 19, 2015.

"Incised CCR surface impoundment" means a CCR surface impoundment which is constructed by excavating entirely below the natural ground surface, holds an accumulation of CCR entirely below the adjacent natural ground surface, and does not consist of any constructed diked portion.

"Inflow design flood" means the flood hydrograph that is used in the design or modification of the CCR surface impoundments and its appurtenant works.

"In operation" means the same as active life.

"Karst terrain" means an area where karst topography, with its characteristic erosional surface and subterranean features, is developed as the result of dissolution of limestone, dolomite, or other soluble rock. Characteristic physiographic features present in karst terranes include, but are not limited to, dolines, collapse shafts (sinkholes), sinking streams, caves, seeps, large springs, and blind valleys.

"Lateral expansion" means a horizontal expansion of the waste boundaries of an existing CCR landfill or existing CCR surface impoundment made after October 19, 2015.

"Liquefaction factor of safety" means the factor of safety (safety factor) determined using analysis under liquefaction conditions.

"Lithified earth material" means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by

crystallization of magma or by induration of loose sediments. This term does not include man-made materials, such as fill, concrete, and asphalt, or unconsolidated earth materials, soil, or regolith lying at or near the earth surface.

"Maximum horizontal acceleration in lithified earth material" means the maximum expected horizontal acceleration at the ground surface as depicted on a seismic hazard map, with a 98% or greater probability that the acceleration will not be exceeded in 50 years, or the maximum expected horizontal acceleration based on a site- specific seismic risk assessment.

"New CCR landfill" means a CCR landfill or lateral expansion of a CCR landfill that first receives CCR or commences construction after October 19, 2015. A new CCR landfill has commenced construction if the owner or operator has obtained permits necessary to begin physical construction and a continuous on-site, physical construction program had begun after October 19, 2015. Overfills are also considered new CCR landfills.

"New CCR surface impoundment" means a CCR surface impoundment or lateral expansion of an existing or new CCR surface impoundment that first receives CCR or commences construction after October 19, 2015. A new CCR surface impoundment has commenced construction if the owner or operator has obtained the permits necessary to begin physical construction and a continuous on-site, physical construction program had begun after October 19, 2015.

"Operator" means the person(s) responsible for the overall operation of a CCR unit.

"Overfill" means a new CCR landfill constructed over a closed CCR surface impoundment.

"Owner" means the person(s) who owns a CCR unit or part of a CCR unit.

"Permit boundary" means the outermost edge of the area described by legal description in the owner/operator's permit. The permitted boundary includes the area in the buffer zone.

"Poor foundation conditions" mean those areas where features exist which indicate that a natural or human-induced event may result in inadequate foundation support for the structural components of an existing or new CCR unit. For example, failure to maintain static and seismic factors of safety as required in OAC 252:517-11-4(e) and OAC 252:517-11-5(e) would cause a poor foundation condition.

"Probable maximum flood" means the flood that may be expected from the most severe combination of critical meteorologic and hydrologic conditions that are reasonably possible in the drainage basin.

"Qualified person" means a person or persons trained to recognize specific appearances of structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or safety of the CCR unit by visual observation and, if applicable, to monitor instrumentation.

"Qualified professional engineer" means an individual who is licensed as a Professional Engineer in the state of Oklahoma by the State Board of Registration for Professional Engineers and Land Surveyors.

"Recognized and generally accepted good engineering practices" means engineering maintenance or operation activities based on established codes, widely accepted standards, published technical reports, or a practice widely recommended throughout the industry. Such practices generally detail approved ways to perform specific engineering, inspection, or mechanical integrity activities.

"Representative sample" means a sample of a universe or whole (e.g., waste pile, lagoon, and groundwater) which can be expected to exhibit the average properties of the universe or whole.

"Retrofit" means to remove all CCR and contaminated soils and sediments from the CCR surface impoundment, and to ensure the unit complies with the requirements in OAC 252:517-11-3.

"Run-off" means any rainwater, leachate, or other liquid that drains over land from any part of a CCR landfill or lateral expansion of a CCR landfill.

"Run-on" means any rainwater, leachate, or other liquid that drains over land onto any part of a CCR landfill or lateral expansion of a CCR landfill.

"Sand and gravel pit or quarry" means an excavation for the extraction of aggregate, minerals or metals. The term sand and gravel pit and/or quarry does not include subsurface or surface coal mines.

"Seismic factor of safety" means the factor of safety (safety factor) determined using analysis under earthquake conditions using the peak ground acceleration for a seismic event with a 2% probability of exceedance in 50 years, equivalent to a return period of approximately 2,500 years, based on the U.S. Geological Survey (USGS) seismic hazard maps for seismic events with this return period for the region where the CCR surface impoundment is located.

"Seismic impact zone" means an area having a 2% or greater probability that the maximum expected horizontal acceleration, expressed as a percentage of the earth's gravitational pull (g), will exceed 0.10 g in 50 years.

"Slope protection" means engineered or non-engineered measures installed on the upstream or downstream slope of the CCR surface impoundment to protect the slope against wave action or erosion, including but not limited to rock riprap, wooden pile, or concrete revetments, vegetated wave berms, concrete facing, gabions, geotextiles, or fascines.

"Solid waste management or management" means the systematic administration of the activities which provide for the collection, source separation, storage, transportation, processing, treatment, or disposal of solid waste.

"State Director" means the Executive Director of the DEQ or designee.

"Static factor of safety" means the factor of safety (safety factor) determined using analysis under the long-term, maximum storage pool loading condition, the maximum surcharge pool loading condition, and under the end-of-construction loading condition.

"Structural components" mean liners, leachate collection and removal systems, final covers, run-on and run-off systems, inflow design flood control systems, and any other component used in the construction and operation of the CCR unit that is necessary to ensure the integrity of the unit and that the contents of the unit are not released into the environment.

"Unstable area" means a location that is susceptible to natural or human-induced events or forces capable of impairing the integrity, including structural components of some or all of the CCR unit that are responsible for preventing releases from such unit. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and karst terrains.

"Uppermost aquifer" means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary. Upper limit is measured at a point nearest to the natural ground surface to which the aquifer rises during the wet season.

"Waste boundary" means a vertical surface located at the hydraulically downgradient limit of the CCR unit. The vertical surface extends down into the uppermost aquifer.

"Wetlands" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-1-4. Terms not defined by Act or rule

Any term not defined in the Oklahoma Solid Waste Management Act, or in this Chapter shall be defined by:

(1) the Dictionary of Geological Terms, Latest Revised Edition, American Geological Institute;

(2) EPA RCRA Groundwater Monitoring Technical Enforcement Guidance Document;

(3) its generally accepted scientific meaning; or

(4) its standard dictionary meaning.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-1-5. Test methods and map scale

(a) **Test methods.** All testing required for compliance with this Chapter shall utilize industry-standard methods and procedures, unless alternatives are approved in advance by the DEQ.

(1) **Engineering test methods.** All engineering tests shall be in accordance with the latest published ASTM test procedures.

(2) **Water sampling/analyses.** Water sampling and analyses methods shall be in accordance with EPA approved procedures.

(b) **Map scales.** Map scale requirements of Subchapter 3, Parts 5 and 7 do not apply when the DEQ has approved the use of alternative map scales or published maps.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-1-6. Severability

The provisions of this Chapter are severable. If any part or provision is held void by a court of competent jurisdiction, the decision of that court shall not affect or impair any of the remaining parts or provisions of this Chapter.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-1-7. Permits

(a) **Permit required.** All CCR units must be permitted in accordance with the rules of this Chapter.

(b) **Existing CCR landfill permits.**

(1) **Existing permits.** Permits for active CCR landfills issued under previous rules, and those in the post-closure monitoring period on the effective date of this Chapter, remain in effect.

(2) **Permit upgrades.** Within 180 days of the effective date of this Chapter, or unless a specific date is provided, the owner/operator of the CCR landfill shall submit a permit modification application to the DEQ to ensure compliance with requirements of this Chapter.

(c) **Existing CCR impoundment permits.** Existing CCR impoundments permitted under OAC 252:616 must be permitted in accordance with the rules of this Chapter upon expiration of the existing permit or no later than October 19, 2018, whichever occurs first.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

SUBCHAPTER 3. PERMIT PROVISIONS AND APPLICATIONS

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PART 1. GENERAL PROVISIONS

252:517-3-1. Duration of permit

(a) **Life of site.** Permits shall be issued for the life of the CCR unit, subject to the limitations of (b) of this Section.

(b) **Commencement of construction and operation.** DEQ may specify timelines within permits for commencement of construction and operation of new CCR units.

(c) **Cessation of operations.** If a permitted active CCR unit ceases to accept waste for 30 days or more without prior notice to the DEQ, the facility is deemed to be in the process of final closure.

(d) **Suspended operations.** Development or operations of a CCR unit may be suspended. To do so, the owner/operator must:

(1) provide prior written notice to the DEQ of the intent to suspend development or operations;

(2) renew such notice annually;

(3) if site development or operations remain suspended for more than one year, perform closure and post-closure activities in accordance with the approved closure and post-closure plans, and Subchapter 15 of this Chapter; and

(4) post full financial assurance in accordance with Subchapter 17 of this Chapter and the approved cost estimates.

(e) **Resuming operations.** If facility operations cease pursuant to (c) or (d) of this Section, then prior to resuming such operations, the permit must be modified if, in the opinion of the DEQ, the permit does not comply with all current laws and regulations.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-2. Permit transfer

(a) **Transfer required.** If the ownership of a CCR unit is assumed by a new entity, the permit must be transferred from the previous owner/operator ("transferor") to the new owner/operator ("transferee").

(b) **Exception.** Changes in corporate ownership from majority stock transfers do not require a permit transfer. However, such changes require notice to DEQ and submittal of an approved disclosure statement meeting the requirements of OAC 252:517-3-3(g).

(c) **Transfer requirements.** Permits may be transferred from the transferor to the transferee upon the following conditions:

(1) the transferor has submitted a written request to DEQ for transfer of the permit to the transferee;

(2) the transferee has submitted an approved disclosure statement meeting the requirements of OAC 252:517-3-3(g);

(3) the transferee has, if required, established an approved financial assurance mechanism in an appropriate amount and appropriately funded;

(4) the transferee has agreed in writing to comply with:

(A) all permit conditions;

(B) approved plans and specifications;

(C) the Oklahoma Solid Waste Management Act, as applicable;

(D) the rules in this Chapter; and

(E) any final orders issued pursuant thereto;

(5) the transferee has complied with OAC 252:517-3-4; and

(6) the facility meets the compliance requirements of OAC 252:4-7-15. In lieu of demonstrating substantial compliance, the parties to the transfer may enter into a Consent Order with DEQ to schedule compliance.

(d) **Transferor responsible.** Until such time as DEQ approves transfer of the permit to the transferee, the transferor shall remain responsible for the operation of the facility.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-3. General requirements

(a) **All permit applications.** All permit applications are subject to the Oklahoma Uniform Environmental Permitting Act as well as the requirements of this Subchapter.

(b) **New permit applications.** Applicants requesting a permit for a new CCR unit, lateral expansion of an existing CCR unit, or existing CCR surface impoundments without a solid waste permit shall submit a permit application to the DEQ meeting the requirements of this Subchapter.

(c) **Modifications required.**

(1) The permit must be modified before making any changes to the approved design, construction, or operation of CCR units.

(2) The modification application shall contain any maps, drawings, plans or other documents identified in this Subchapter to ensure the modification will be in compliance with the applicable requirements of this Chapter.

(d) **Administrative correction.** The DEQ may make administrative corrections to the permit.

(e) **Tier I and II permit modifications.** Applicants requesting a Tier I or Tier II modification of an existing permit shall submit a permit modification application to the DEQ meeting the applicable requirements of this Subchapter, but are not required to comply with OAC 252:517-3-4, unless otherwise required by statute.

(f) **Tier III permit modifications.** Applicants requesting a Tier III modification of an existing permit shall submit a permit modification application to the DEQ meeting the applicable requirements of this Subchapter, and comply with OAC 252:517-3-4.

(g) **Disclosure statement.** Persons submitting a permit application for a new CCR unit, or the transfer of an existing solid waste permit, are subject to the disclosure statement requirements of 27A O.S. §§ 2-10-103 and 2-10-302.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-4. Oath required

The applicant shall sign the permit application under oath on forms provided by the DEQ.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-5. Legal right to property

(a) **Right of access.** The permit application for a new CCR unit, or expansion of the permit boundaries of an existing CCR unit, must contain:

(1) a true and correct copy of a legal document filed in the county in which the facility is located, demonstrating that the applicant possesses a legal right to access and use the property in the manner for which the permit is sought, including any on- or off-site soil borrow areas, throughout the life of the site and the required post-closure monitoring period; and

(2) a certification, by affidavit, that the applicant owns the real property, has a current lease or easement which is given to accomplish the permitted purpose, or has provided legal notice to the landowner.

(b) **Option for use.** If an option for right of access is predicated upon the issuance of a permit prior to the exercise of that option, then the applicant must submit a copy of the option with the permit application. Once the permit has been issued, the applicant must comply with (a) of this Section prior to beginning construction.

(c) **Easement to the DEQ.** Unless the property owner is a unit of government, a temporary easement shall be executed allowing the DEQ and/or its contractors the right to access the property to perform closure, post-closure monitoring, or corrective action in the event of default by the owner/operator.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-6. Permit applications

(a) **New applications.** A permit application for a new CCR unit and an existing surface impoundment without a solid waste permit shall include all information required by the Oklahoma Uniform Environmental Permitting Act, including:

(1) the owner/operator's name, mailing address and phone number;

(2) the name by which the facility will be known, the mailing address of the facility, the street address of the facility (if different from the mailing address), and the facility phone number;

(3) a disclosure statement completed in accordance with OAC 252:517-3-3(g);

(4) a legal description, by metes and bounds; section, township, and range, or parts thereof; or book and page number of plat records for platted property, of:

(A) the proposed permit boundary;

(B) the proposed waste processing and/or disposal areas; and

(C) both on- and off-site soil borrow areas, if applicable;

(5) latitude and longitude of all corners of the permit boundary and the facility entrance;

(6) the location of the site from the nearest town or city;

(7) a description of all processing, storage and disposal operations and units;

(8) the types of road construction and materials to be used to ensure that all access roads within the site are passable during inclement weather by normal vehicular traffic;

(9) a list of anticipated heavy equipment to be used in the construction and operation of the site;

(10) maps and drawings as required by Part 3 of this Subchapter; and

(11) data, plans, and specifications for the following:

(A) a demonstration the proposed facility meets the location restrictions of Subchapter 5 of this Chapter;

(B) an operational plan describing how compliance with the operational requirements of Subchapter 13 of this Chapter, as applicable to the proposed facility, will be achieved;

(C) a plan describing how compliance with the stormwater management requirements of Subchapter 13 of this Chapter will be achieved;

(D) plans for closure of the facility in accordance with Subchapter 15 of this Chapter; and

(E) a plan for achieving compliance with the aesthetic enhancement requirements of OAC 252:517-3-7; and

(12) establishment of financial assurance in accordance with Subchapter 17 of this Chapter.

(b) **Information not identified.** The DEQ may require the applicant to submit additional data, revise design specifications or propose environmental safeguards as necessary to meet DEQ rules for the protection of human health and the environment.

(c) **Permit modification applications.** An applicant requesting a modification to an existing permit shall submit information identified in this Part related to the proposed modification.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-7. Aesthetic enhancement

Applications for new permits or expansions of an existing permit boundary, shall include plans to enhance the visual harmony of the new CCR unit or the expansion area with the surrounding area, and reduce the transmission of dust and noise from the facility. Such plans may include placement of berms, fences, shrubbery, trees, or other such materials to achieve the desired result.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

PART 3. REQUIRED MAPS AND DRAWINGS

252:517-3-31. General requirements

(a) **Applicability.** The maps and designs identified in this Part shall be submitted with permit applications for:

(1) all new CCR units;

(2) expansions of permit boundaries of existing CCR units;

(3) lateral expansions of existing CCR units; and

(4) any other modification to an existing permit where the data originally submitted would be made ambiguous, inaccurate, or out of date by the proposed modification.

(b) **Illegible.** The permit application will be considered administratively incomplete if any maps or drawings submitted are not legible.

(c) **Map sequence.** All maps and designs shall be submitted in the permit application in the sequence identified.

(d) **Map scale.** Unless otherwise identified, all maps submitted as part of a permit application shall be prepared at a scale of one inch equals one hundred feet (1" = 100'). An alternative scale may be used with approval of the DEQ.

(e) **Map details.**

(1) All maps shall show as a minimum, legend, title, north arrow, permit boundary, buffer zone, and boundaries of waste disposal or processing areas.

(2) If applicable, the locations of groundwater monitoring wells and gas monitoring probes shall be identified.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-32. General location map

The permit application shall include a county highway map published by the Oklahoma Department of Transportation showing the facility location. If the facility is located within a municipality and a municipal map with better information is available, then it may be used.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-33. Flood plain map

The permit application shall include a flood plain map from one of the following sources depicting the limits and elevations of any 100-year flood plain on or within one mile of the permit boundary of the proposed facility or expansion area:

(1) Flood Insurance Rate maps published by the Federal Emergency Management Agency, or maps prepared by the U.S. Army Corps of Engineers, Flood Plain Management Services;

(2) Maps of Flood Prone Areas published by the U.S. Geological Survey; or

(3) Site specific determinations by the U.S. Army Corps of Engineers at the request of the applicant.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-34. Quadrangle topographic map

(a) **Required map.** The permit application shall include an original U.S. Geological Survey 7.5 minute series topographic quadrangle map.

(1) If 7.5 minute series maps have not been printed, then 15 minute series may be used.

(2) If the CCR unit is located on the edge of the quadrangle, then adjoining maps shall be provided.

(b) **Required details.** The quadrangle topographic map shall clearly depict:

(1) the location of the facility permit boundaries;

(2) access routes within one mile of the facility;

(3) homes and buildings within one mile of the facility;

(4) public water and wastewater collection, treatment, and distribution facilities within one mile of the facility;

(5) receiving waters and surface variations within one mile of the facility; and

(6) water wells, including private and municipal, potable and irrigation water within one mile of the facility.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-35. Existing contour map

(a) **Required map.** The permit application shall include a constructed map showing the topographic contours prior to any operations at the facility.

(b) **Contour intervals.** The contour interval on the map shall not be greater than two feet.

(c) **Required details.** The existing contour map shall show the location and quantities of surface drainage entering and exiting the facility, and the locations of all boreholes with their surface elevations.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-36. Site map

(a) **Required map.** The permit application shall include a site map, which may be the existing contour map.

(b) **Required details.** The site map shall show the following, as applicable to the facility:

(1) the dimensions of the permit boundary as indicated by legal description;

(2) the receiving processing, storage or disposal areas;

(3) buffer zones;

(4) the locations and surface elevations of each borehole, monitor well, test well, monitoring site, test pit, sampling site and permanent benchmarks;

(5) the surface and top of casing elevations for each monitoring well;

(6) the surface drainage, including location of diversion ditches, dikes, dams, pits, ponds, lagoons, berms, terraces and other relevant information;

(7) the location of fencing and gates, utility lines, pipelines, and easements;

(8) the access roads into and on the site;

(9) employee and equipment shelters; and

(10) on- and off-site soil borrow areas.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-37. Design drawings

The permit application shall include, as necessary, design drawings and specifications for:

(1) receiving, processing, storage or disposal areas;

(2) liner construction;

(3) leachate collection systems;

(4) typical well installation;

(5) dike sections;

(6) drainage channels;

(7) groundwater monitoring wells and piezometers;

(8) retention structures or other groundwater and surface water protection measures; and

(9) any other design drawings or specifications necessary to describe the proposed activities for the facility.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-38. Groundwater resource and usage map

(a) **Required map.** The permit application shall include a groundwater resource and usage map, made to a scale of 1:6000 (1 inch = 500 feet).

(b) **Required details.** The map shall show the following:

(1) the location, total depth and ground water elevation of all known private water wells within a radius of one mile of the proposed site boundary;

(2) the location, total depth and ground water elevation of all public water supply wells within a radius of two miles of the proposed site boundary; and

(3) recharge and discharge areas and the description of ground water quality within a three mile radius of the proposed site boundary.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-39. Surface geologic map

The permit application shall include a site-specific areal geologic map depicting the lithologic units of the ground surface, made to a scale of no smaller than 1:1200 (1 inch = 100 feet).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-40. Highest groundwater contour map

(a) **Required map.** The permit application shall include a groundwater contour map developed from the information obtained during the groundwater study required in Part 5 of OAC 252:517-7.

(b) **Required details.** The groundwater contour map shall depict:

(1) the groundwater contours, at two foot intervals, of the highest groundwater elevation ever recorded at each borehole, piezometer or well across the site. The highest elevation shall be based on the groundwater levels recorded during the subsurface investigation or any other record of groundwater elevation measurements; and

(2) the locations of all proposed monitoring wells, boreholes, and piezometers, and the surface elevations of each.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-41. Potentiometric surface map

(a) **Required map.** The permit application shall include an actual groundwater potentiometric surface map developed from the information obtained during the groundwater study required in Part 5 of OAC 252:517-7.

(b) **Required details.** The potentiometric surface map shall depict:

(1) groundwater elevation contours at two foot intervals as measured in a single time event reflecting the highest average water level elevation across the site during the 12-month monitoring period; and

(2) the locations of all proposed monitoring wells, boreholes, and piezometers, and surface elevations of each.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-42. Site-specific cross sections

(a) **Required map.** The permit application shall include two site-specific cross sections constructed from subsurface borehole logs and other site-specific information, such as water well logs, oil and gas well logs, outcrops at or near the site, and geophysical surveys.

(b) **Orientation.** The first cross section shall be oriented parallel to the dip of the underlying strata and the second oriented perpendicular to the dip of the strata. If this is not possible, the cross- sections shall be oriented at 90 degrees from each other.

(c) **Required details.** Each cross section shall include:

(1) the borehole logs and other sources of information displayed relative to mean sea level on the cross section;

(2) the depth, thickness and areal extent of each stratigraphic unit;

(3) lithology of significant formations or strata, and unconsolidated sediment type;

(4) structural features (faults and folds);

(5) stratigraphic contact between formations or strata, and unconsolidated sediments;

(6) zones of hydraulic conductivity greater than 1×10^{-3} cm/sec;

(7) fracture zones;

(8) potentiometric surfaces of all confined and unconfined saturated zones;

(9) location, depth and producing zone of water wells that could be used in the construction of the cross section;

(10) the surface upon which the waste will be placed;

(11) soils or strata encountered by the boreholes suitable for use as liner material;

(12) intervals and results of both in-situ and laboratory hydraulic conductivity tests;

(13) surface water drainage features, such as: dikes, levees, or trenches;

(14) the existing ground surface and final cover;

(15) monitor wells or piezometers; and

(16) a legend that includes vertical and horizontal scales and a map showing the location of the boreholes and other information used to construct the cross section.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-43. Fill cross section map

(a) **Required map.** The permit application shall include a fill cross section map.

(b) **Required details.** A grid system shall be established and typical cross sections plotted along the principal axis and along the minor axis.

(1) A cross section locator map shall show the grid system superimposed over the site plan with each cross-section labeled. This drawing may be at any convenient scale and labeled accordingly.

(2) Cross section drawings shall depict the elevation(s) of the top of any dikes or levees, the final cover, wastes, ground surface, the top of liner, the bottom of excavations, the side slopes of trenches and fill areas, groundwater monitor wells, gas wells or vents, and recorded initial and static water levels.

(3) The scale shall be 1:600 (1 inch = 50 feet) horizontal and 1:60 (1 inch = 5 feet) vertical.

(4) Soil borings may also be shown on the profile.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-44. Excavation contour map

The permit application shall include an excavation contour map showing:

(1) contours, at two foot intervals, of the bottom of the proposed excavation;

(2) the anticipated progression of the construction; and

(3) the locations and final depth of the boreholes.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-45. Top of liner contour map

(a) **Required map.** The permit application shall include a top of liner contour map showing:

(1) contours, at two foot intervals, of the top of the liner; and

(2) the locations of the proposed monitor wells.

(b) **Liner construction.** Details of liner construction may be provided on this map or as a separate drawing.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-3-46. Completion map

(a) **Required map.** The permit application shall include a completion map showing how the new CCR unit or lateral expansion of a CCR unit is expected to look when it is completed, including final contours.

(b) **Required details.** The completion map shall include the permit boundary, disposal boundary, buffer zone, groundwater monitoring well locations, the leachate removal locations, permanent surface drainage structures and aesthetic enhancements.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

SUBCHAPTER 5. LOCATION RESTRICTIONS

Section	
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252:517-5-1. Placement above the uppermost aquifer

(a) **Applicability.** New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must be constructed with a base that is located no less than 1.52 meters (five feet) above the upper limit of the uppermost aquifer, or must demonstrate that there will not be an intermittent, recurring, or sustained hydraulic connection between any portion of the base of the CCR unit and the uppermost aquifer due to normal fluctuations in groundwater elevations (including the seasonal high water table). The owner or operator must demonstrate by the dates specified in paragraph (c) of this Section that the CCR unit meets the minimum requirements for placement above the uppermost aquifer.

(b) **PE certification.** The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the demonstration meets the requirements of paragraph (a) of this Section.

(c) **Compliance dates; DEQ approval required.** The owner or operator of the CCR unit must complete the demonstration required by paragraph (a) of this Section by the date specified in either paragraph (c)(1) or (2) of this Section.

(1) For an existing CCR surface impoundment, the owner or operator must complete the demonstration no later than October 17, 2018.

(2) For a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit, the owner or operator must complete the demonstration no later than the date of initial receipt of CCR in the CCR unit.

(3) The owner or operator has completed the demonstration required by paragraph (a) of this Section when the demonstration is approved by the DEQ and placed in the facility's operating record as required by OAC 252:517-19-1(e).

(4) An owner or operator of an existing CCR surface impoundment who fails to demonstrate compliance with the requirements of paragraph (a) of this Section by the date specified in paragraph (c)(1) of this Section is subject to the requirements of OAC 252:517-15-6(b)(1).

(5) An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing

compliance with the requirements of paragraph (a) of this Section is prohibited from placing CCR in the CCR unit.

(6) The owner or operator must submit the demonstrations to DEQ for approval.

(d) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(e), the notification requirements specified in OAC 252:517-19-2(e), and the internet requirements specified in OAC 252:517-19-3(e).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-5-2. Wetlands

(a) **Applicability.** New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must not be located in wetlands, as defined in this Chapter, unless the owner or operator demonstrates by the dates specified in paragraph (c) of this Section that the CCR unit meets the requirements of paragraphs (a)(1) through (5) of this Section.

(1) Where applicable under Section 404 of the Clean Water Act or applicable state wetlands laws, a clear and objective rebuttal of the presumption that an alternative to the CCR unit is reasonably available that does not involve wetlands.

(2) The construction and operation of the CCR unit will not cause or contribute to any of the following:

(A) A violation of any applicable state or federal water quality standard;

(B) A violation of any applicable toxic effluent standard or prohibition under Section 307 of the Clean Water Act; and

(C) Jeopardize the continued existence of endangered or threatened species or result in the destruction or adverse modification of a critical habitat, protected under the Endangered Species Act of 1973;

(3) The CCR unit will not cause or contribute to significant degradation of wetlands by addressing all of the following factors:

(A) Erosion, stability, and migration potential of native wetland soils, muds and deposits used to support the CCR unit;

(B) Erosion, stability, and migration potential of dredged and fill materials used to support the CCR unit;

(C) The volume and chemical nature of the CCR;

(D) Impacts on fish, wildlife, and other aquatic resources and their habitat from release of CCR;

(E) The potential effects of catastrophic release of CCR to the wetland and the resulting impacts on the environment; and

(F) Any additional factors, as necessary, to demonstrate that ecological resources in the wetland are sufficiently protected.

(4) To the extent required under Section 404 of the Clean Water Act or applicable state wetlands laws, steps have been taken to attempt to achieve no net loss of wetlands (as defined by acreage and function) by first avoiding impacts to wetlands to the maximum extent reasonable as required by paragraphs (a)(1) through (3) of this Section, then minimizing unavoidable impacts to the maximum extent reasonable, and finally offsetting remaining unavoidable wetland impacts through all appropriate and reasonable compensatory mitigation actions (e.g., restoration of existing degraded wetlands or creation of man-made wetlands); and

(5) Sufficient information is available to make a reasoned determination with respect to the demonstrations in paragraphs (a)(1) through (4) of this Section.

(b) **PE certification.** The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the demonstration meets the requirements of paragraph (a) of this Section.

(c) **Compliance dates; DEQ approval required.** The owner or operator of the CCR unit must complete the demonstrations required by paragraph (a) of this Section by the date specified in either paragraph (c)(1) or (2) of this Section.

(1) For an existing CCR surface impoundment, the owner or operator must complete the demonstration no later than October 17, 2018.

(2) For a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit, the owner or operator must complete the demonstration no later than the date of initial receipt of CCR in the CCR unit.

(3) The owner or operator has completed the demonstration required by paragraph (a) of this Section when the demonstration is approved by the DEQ and placed in the facility's operating record as required by OAC 252:517-19-1(e).

(4) An owner or operator of an existing CCR surface impoundment who fails to demonstrate compliance with the requirements of paragraph (a) of this Section by the date specified in paragraph (c)(1) of this Section is subject to the requirements of OAC 252:517-15-6(b)(1).

(5) An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstrations showing compliance with the requirements of paragraph (a) of this Section is prohibited from placing CCR in the CCR unit.

(6) The owner or operator must submit the demonstrations to DEQ for approval.

(d) **Recordkeeping.** The owner or operator must comply with the recordkeeping requirements specified in OAC 252:517-19-1(e), the notification requirements specified in OAC 252:517-19-2(e), and the Internet requirements specified in OAC 252:517-19-3(e).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-5-3. Fault areas

(a) **Applicability.** New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must not be located within 60 meters (200 feet) of the outermost damage zone of a fault that has had displacement in Holocene time unless the owner or operator demonstrates by the dates specified in paragraph (c) of this Section that an

alternative setback distance of less than 60 meters (200 feet) will prevent damage to the structural integrity of the CCR unit.

(b) **PE certification.** The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the demonstration meets the requirements of paragraph (a) of this Section.

(c) **Compliance dates; DEQ approval required.** The owner or operator of the CCR unit must complete the demonstration required by paragraph (a) of this Section by the date specified in either paragraph (c)(1) or (2) of this Section.

(1) For an existing CCR surface impoundment, the owner or operator must complete the demonstration no later than October 17, 2018.

(2) For a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit, the owner or operator must complete the demonstration no later than the date of initial receipt of CCR in the CCR unit.

(3) The owner or operator has completed the demonstration required by paragraph (a) of this Section when the demonstration is approved by the DEQ and placed in the facility's operating record as required by OAC 252:517-19-1(e).

(4) An owner or operator of an existing CCR surface impoundment who fails to demonstrate compliance with the requirements of paragraph (a) of this Section by the date specified in paragraph (c)(1) of this Section is subject to the requirements of OAC 252:517-15-6(b)(1).

(5) An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) of this Section is prohibited from placing CCR in the CCR unit.

(6) The owner or operator must submit the demonstrations to DEQ for approval.

(d) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(e), the notification requirements specified in OAC 252:517-19-2(e), and the Internet requirements specified in OAC 252:517-19-3(e).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-5-4. Seismic impact zones

(a) **Applicability.** New CCR landfills, existing and new CCR surface impoundments, and all lateral expansions of CCR units must not be located in seismic impact zones unless the owner or operator demonstrates by the dates specified in paragraph (c) of this Section that all structural components including liners, leachate collection and removal systems, and surface water control systems, are designed to resist the maximum horizontal acceleration in lithified earth material for the site.

(b) **PE certification.** The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the demonstration meets the requirements of paragraph (a) of this Section.

(c) **Compliance dates; DEQ approval required.** The owner or operator of the CCR unit must complete the demonstration required by paragraph (a) of this Section by the date specified in either paragraph (c)(1) or (2) of this Section.

(1) For an existing CCR surface impoundment, the owner or operator must complete the demonstration no later than October 17, 2018.

(2) For a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit, the owner or operator must complete the demonstration no later than the date of initial receipt of CCR in the CCR unit.

(3) The owner or operator has completed the demonstration required by paragraph (a) of this Section when the demonstration is approved by the DEQ and placed in the facility's operating record as required by OAC 252:517-19-1(e).

(4) An owner or operator of an existing CCR surface impoundment who fails to demonstrate compliance with the requirements of paragraph (a) of this Section by the date specified in paragraph (c)(1) of this Section is subject to the requirements of OAC 252:517-15-6(b)(1).

(5) An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) of this Section is prohibited from placing CCR in the CCR unit.

(6) The owner or operator must submit the demonstrations to DEQ for approval.

(d) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(e), the notification requirements specified in OAC 252:517-19-2(e), and the Internet requirements specified in OAC 252:517-19-3(e).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-5-5. Unstable areas

(a) **Applicability.** An existing or new CCR landfill, existing or new CCR surface impoundment, or any lateral expansion of a CCR unit must not be located in an unstable area unless the owner or operator demonstrates by the dates specified in paragraph (d) of this Section that recognized and generally accepted good engineering practices have been incorporated into the design of the CCR unit to ensure that the integrity of the structural components of the CCR unit will not be disrupted.

(b) **Considerations.** The owner or operator must consider all of the following factors, at a minimum, when determining whether an area is unstable:

(1) On-site or local soil conditions that may result in significant differential settling;

(2) On-site or local geologic or geomorphologic features; and

(3) On-site or local human-made features or events (both surface and subsurface).

(c) **PE certification.** The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the demonstration meets the requirements of paragraph (a) of this Section.

(d) **Compliance dates; DEQ approval required.** The owner or operator of the CCR unit must complete the demonstration required by paragraph (a) of this Section by the date specified in either paragraph (d)(1) or (2) of this Section.

(1) For an existing CCR landfill or existing CCR surface impoundment, the owner or operator must complete the demonstration no later than October 17, 2018.

(2) For a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit, the owner or operator must complete the demonstration no later than the date of initial receipt of CCR in the CCR unit.

(3) The owner or operator has completed the demonstration required by paragraph (a) of this Section when the demonstration is approved by the DEQ and placed in the facility's operating record as required by OAC 252:517-19-1(e).

(4) An owner or operator of an existing CCR surface impoundment or existing CCR landfill who fails to demonstrate compliance with the requirements of paragraph (a) of this Section by the date specified in paragraph (d)(1) of this Section is subject to the requirements of OAC 252:517-15-6(b)(1) or (d)(1), respectively.

(5) An owner or operator of a new CCR landfill, new CCR surface impoundment, or any lateral expansion of a CCR unit who fails to make the demonstration showing compliance with the requirements of paragraph (a) of this Section is prohibited from placing CCR in the CCR unit.

(6) The owner or operator must submit the demonstrations to DEQ for approval.

(e) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(e), the notification requirements specified in OAC 252:517-19-2(e), and the Internet requirements specified in OAC 252:517-19-3(e).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-5-6. Scenic rivers

(a) **Prohibition.** Except as provided in (b) of this Section, no area within the permit boundary of a new CCR unit, or expansion of the permit boundary of an existing CCR unit, shall be located within the drainage basin of any river designated under the Oklahoma Scenic Rivers Commission Act.

(b) **Exception.** This restriction may be waived if the Scenic Rivers Commission that manages the affected river, or in the absence of such commission, the Oklahoma Tourism and Recreation Department, provides a statement that the proposed facility is not expected to adversely affect the river or any of the public purposes for which it was designated. Such statement shall be provided to the DEQ.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-5-7. Recreation/preservation areas

(a) **Prohibition.** Except as provided in (b) of this Section, no area within the permit boundary of a new CCR unit, or expansion of the permit boundary of an existing CCR unit, shall be located within one-half mile of any area formally dedicated and managed for public recreation or natural preservation by a federal, state, or local government agency.

(b) **Exception.** This restriction may be waived if the appropriate management agency provides a statement that the proposed facility is not expected to adversely affect the existing recreation or natural preservation area. Such statement shall be submitted to the DEQ.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-5-8. Endangered or threatened species

For a new CCR unit, or expansion of the permit boundary of an existing CCR unit, a statement from the Oklahoma Department of Wildlife Conservation (ODWC) and from the Oklahoma Biological Survey (OBS), shall be submitted regarding current information about endangered or threatened wildlife or plant species listed in state and federal laws, that exist within one mile of the permit boundary or expansion area.

(1) **Address potential impacts.** If threatened or endangered species exist within, or periodically utilize any area within, or within one mile of, the permit boundary or expansion area, the projected impacts on the identified species shall be addressed, and measures specified to avoid or mitigate the impacts.

(2) **Mitigation plan required.** When impacts are unavoidable, a mitigation plan that has been approved by ODWC for wildlife or OBS for plants, shall be submitted to the DEQ.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-5-9. 100-year floodplain

No waste management or disposal areas of a CCR unit shall be located within the 100-year floodplain, except as provided for by (a) and (b) of this Section.

(1) **CCR units permitted before April 9, 1994.** For areas of CCR units that received waste before April 9, 1994 and are located in the 100-year floodplain, the owner/operator must maintain in the operating record a demonstration that the waste disposal area will not:

(A) restrict the flow of the 100-year flood;

(B) reduce the temporary water storage capacity of the floodplain; or

(C) result in the disturbance and/or carrying away of CCR by water so as to pose a hazard to human health or the environment.

(2) **Authorized variances.** The DEQ may grant a variance from the 100-year flood plain restriction for waste management or disposal areas of new CCR units, or expansions of waste management or disposal areas of existing CCR units, provided the variance is conditioned upon the subsequent redefinition of the flood plain to not include the land area proposed by the variance.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-5-10. Public water supply

No new CCR unit or lateral expansion of a CCR unit shall be located within:

(1) one mile upgradient of an existing public water supply surface water intake, or one that is permitted for construction when a complete application has been filed with the DEQ; or

(2) a one year time of travel of a public water supply well. A wellhead delineation shall be performed and submitted to the DEQ if one has not already been performed.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-5-11. Wellhead protection area

If any new CCR unit or lateral expansion of a CCR unit will be located within two miles of a public water supply well, a wellhead protection area shall be identified, as specified by the State Wellhead Protection Plan, and such information submitted to the DEQ.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

SUBCHAPTER 7. SUBSURFACE INVESTIGATION

PART 1. GENERAL PROVISIONS

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PART 7. SURFACE PENETRATION PLUGGING

252:517-7-71. Plugging requirements

PART 1. GENERAL PROVISIONS

252:517-7-1. Applicability

(a) **CCR unit.** A subsurface investigation meeting the requirements of this Subchapter shall be completed prior to submitting a permit application for:

(1) a new CCR unit; or

(2) a lateral expansion of an existing CCR unit.

(b) **Part of permit application.** The results from the subsurface investigation shall be included as part of the permit application.

(c) **Exception.** Except as provided by OAC 252:517-7-2(c), a permit modification for a lateral expansion of a CCR unit may not require a subsurface investigation if the proposed expansion area has already had a subsurface investigation performed that meets the requirements of this Subchapter.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-7-2. General

(a) **Purpose and design.** The subsurface investigation shall:

(1) be performed to determine the location of the uppermost aquifer; and

(2) be designed to protect all saturated zones encountered while drilling.

(b) **Methods.** Dry methods of subsurface exploration, such as auger, air rotary, or cable tool, shall be used. Other methods may be approved by the DEQ on a case-by-case basis.

(c) **Verification of previously submitted data.** When a significant period of time has elapsed between the initial investigation and actual construction that there is a reasonable likelihood subsurface conditions have changed, the DEQ may require verification of data contained in a previously submitted subsurface investigation.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-7-3. Compliance with OWRB rules

All monitoring wells, borings, and/or piezometers shall be constructed and/or plugged in accordance with the applicable requirements of the OWRB at OAC 785:35.

(1) **Flush mounting prohibited.** Flush-mounting of monitoring wells and piezometers is prohibited.

(2) **Multi-zone completions prohibited.** Multi-zone completions of monitoring wells and piezometers are prohibited.

(3) **Notch.** The well casing of monitoring wells shall be notched to mark the point of measurement for groundwater elevation.

(4) **Latitude, longitude, surface elevation.** Latitude, longitude, and surface elevation, measured by a licensed surveyor, shall be permanently marked on the protective casing of each monitoring well.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-7-4. Drilling plan

(a) **Drilling plan required.** Prior to initiating the subsurface investigation, a drilling plan meeting the requirements of this Section shall be submitted to the DEQ for approval.

(1) **Drilling plan revisions.** New hydrogeologic information collected as the investigation proceeds shall be used to revise the drilling plan and CCR unit design as necessary.

(2) **DEQ approval required.** Drilling shall not begin until the drilling plan has been approved in writing by the DEQ.

(b) **Drilling plan content.** The drilling plan shall include the following information at a minimum:

(1) the name, address, and telephone number of the owner/operator, the consulting firm, and the person in charge of the project;

(2) the following maps and drawings:

(A) general location map, flood plain map, and quadrangle topographic map in accordance with OAC 252:517-3-32 through 34;

(B) existing contour map in accordance with OAC 252:517-3-35, showing the locations, estimated elevations and total depths of any proposed or existing borings on the site;

(C) site specific maps showing any wetlands, fault areas, seismic impact zones, and alluvium or terrace deposits and their recharge areas; and

(D) drawings of proposed piezometers and/or monitoring wells to demonstrate their construction will be in accordance with the requirements of OAC 252:517-7-3;

(3) the locations of borings to be completed in accordance with the following:

(A) borings shall be spaced on a grid, or an alternative spacing approved in advance by the DEQ;

(B) for an area consisting of five acres or less, a minimum of four borings within the proposed permit boundary shall be completed on a new site or within the expansion area of an existing site;

(C) for areas larger than five acres, additional borings shall be placed in accordance with Appendix C;

(D) with prior approval of the DEQ, up to one-fourth of required borings may be replaced with existing borings located within 200 feet of the proposed boundary;

(E) the DEQ may require more borings at sites with complex hydrogeology, such as groundwater divides, shallow saturated zones, or hydraulic barriers; and

(4) the depths of borings to be completed as follows:

(A) all borings shall be drilled a minimum of thirty feet below the deepest proposed placement of waste, the elevation of which shall be reported in relation to mean sea level. A borehole depth calculation shall be completed for each boring in accordance with Appendix D;

(B) at least three borings shall be drilled two hundred feet deep or a minimum of ten feet into the uppermost saturated zone, whichever is less, in accordance with Appendix C;

(C) at least one boring shall be drilled to a depth of 100 feet, regardless of the depth at which groundwater is encountered.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-7-5. Drilling

(a) **Notice of intent to drill.** After DEQ approval of the drilling plan, the DEQ shall be provided with written notice of intent to drill at least two (2) weeks prior to initiating drilling.

(b) **Drilling.** Provided proper notification is given to the DEQ, drilling may proceed in accordance with the approved plan even if a representative of the DEQ is not present as scheduled.

(c) **Qualified groundwater scientist.** A qualified groundwater scientist shall supervise all drilling operations.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

PART 3. DATA COLLECTION

252:517-7-31. Data collection

The information described in this Part shall be collected during the subsurface investigation and submitted as part of the permit application.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-7-32. Borehole logs

(a) Information shall be collected to prepare a lithologic sample log of each borehole drilled and a geophysical log of each borehole to be converted to a piezometer.

(b) All pertinent information, such as the depth at which water was encountered, shall be included on the log.

(c) Depth of water in boreholes shall be measured at the time of drilling and again 24 hours later.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-7-33. Lithologic sample logs

Lithologic sample logs shall be made for each borehole for its entire depth. Each log shall include the following information:

(1) geotechnical information about drilling, such as penetration rates, hydraulic conductivity test intervals and results, and drill bit changes;

(2) identification of all soil and rock layers encountered during drilling describing:

(A) color, texture, thickness, degree of compaction or consolidation and amount of moisture present in each layer;

(B) soil classifications based on the Unified Soil Classification System along with the geological classification; and

(C) rock classifications as defined in the American Geological Institute Dictionary of Geological Terms; and

(3) the depths at which groundwater was encountered and stabilized groundwater elevations.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-7-34. Geophysical logs

(a) **Minimum number.** For CCR units of 20 acres or less, at least three boreholes shall be logged by geophysical tools, one of which must be run on the deepest drilled borehole.

(b) **Additional logs.**

(1) For each additional 20 acres of a CCR unit, one additional borehole shall be logged by geophysical tools.

(2) In geologically complex areas, the DEQ may require additional boreholes.

(c) **Logging method.** Geophysical logs shall be obtained using:

(1) gamma ray/neutron logs from total depth to the surface in either open hole or behind casing; or

(2) alternative geophysical logs approved by the DEQ if it provides equivalent information.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-7-35. Soil and rock sampling

(a) **Sample collection.** For each borehole drilled, soil and rock samples shall be collected at five-foot intervals, and at soil or rock changes, from the surface to the total depth drilled.

(b) **Sample storage.** Samples shall be stored until final action on the permit application is taken by the DEQ.

(c) **Sampling methods.** Drilling techniques and the types of samples to be collected shall determine the method of sampling.

(1) **Split-barrel.** Split-barrel samples shall be taken according to the specifications of ASTM D1586.

(2) **Core barrel.** Consolidated rock samples shall be taken by core barrel according to the specifications of ASTM D2113.

(3) **Thin-walled tube.** When soil samples of silts and clays are required for physical tests, thin-walled tube samples shall be taken according to the specifications of ASTM D1587.

(4) **Other methods.** Other sampling methods may be approved in advance by the DEQ on a case-by-case basis.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-7-36. Soil tests

Soils proposed to be used as liner or intermediate or final cover material shall be tested as follows:

(1) **Sample collection.** At least one sample shall be collected for each type of material proposed for use as liner or intermediate or final cover material.

(2) **Laboratory requirement.** The soil samples shall be tested by a soils laboratory under the direction of a licensed professional engineer.

(3) **Required tests.** The following tests shall be conducted on each type of soil sampled:

(A) soil classification according to the specifications of ASTM D2487;

(B) particle-size analysis of soil according to the specifications of ASTM D422;

(C) sieve analysis for the following screen sizes: #4, #10, #40, #200;

(D) percent fines (#200 sieve) according to the specifications of ASTM D1140;

(E) Atterberg limits according to the specifications of ASTM D4318;

(F) moisture content according to the specifications of either the oven drying method of ASTM D2216 or the microwave drying method of ASTM D4643;

(G) moisture-density relationship according to the specifications of the standard proctor test of ASTM D698 or the modified proctor test of ASTM D1557; and

(H) hydraulic conductivity according to the specifications of ASTM D5084 or any other method approved by the DEQ.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-7-37. Soils report

A laboratory report of the characteristics of soil and rock material proposed for liner or intermediate or final cover material shall be submitted.

(1) **PE certification.** The report shall be stamped or sealed by the licensed professional engineer directing the soils laboratory; and

(2) **Report requirements.** The report shall include all test results, the type of test used, the method of testing and the condition, preparation, and orientation of each sample.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-7-38. Regional hydrogeologic study

Information on the geology and hydrogeology of the proposed site or expansion area shall be collected. Such information shall, at a minimum, include:

(1) the formation underlying the deepest formation penetrated by the boreholes and/or monitor wells;

(2) all formations exposed in the outcrop on or within 1/4 mile of the proposed permitted boundary;

(3) a geologic column and structural information of all rock formations occurring from surface to a depth of 500 feet;

(4) a regional surface geological map;

(5) illustrations of the regional stratigraphic column and geologic or hydrogeologic cross- sections;

(6) a description of regional groundwater quality; and

(7) references indicating the sources of information.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

PART 5. GROUNDWATER STUDY

252:517-7-51. General

(a) **Groundwater study required.** A groundwater study completed in accordance with this Part shall be performed as part of the subsurface investigation required by this Subchapter, and the results included with the permit application.

(b) **As-built drawings required.** As-built drawings, surveyed locations, and casing elevations of each piezometer installed shall be included with the permit application.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-7-52. Piezometers required

Boreholes and screens shall be installed in the uppermost saturated zone at locations approved by the DEQ so that data collected will be representative of the entire site or expansion area.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-7-53. Piezometer details

(a) **Minimum number.** For CCR units of 20 acres or less, at least three piezometers shall be installed.

(b) **Additional piezometers.**

(1) For each additional 20 acres of a CCR unit, one additional piezometer shall be installed.

(2) In geologically complex areas, the installation of additional piezometers may be required.

(c) **Piezometer construction.** In addition to the requirements of OAC 252:517-7-3, piezometer construction shall include the following.

(1) **Casing material.** The casing must be made of material selected according to groundwater geochemistry, anticipated lifetime of the monitoring program, well depth, parameters to be monitored and other site specific considerations.

(2) **Rigidity.** The casing must be rigid enough to support the borehole and shall have a protective cap over the bottom end.

(3) **Unconfined aquifer.** For an unconfined aquifer, the tops of screens shall be placed at, or no more than two feet above, the water table, and the screen shall extend into the saturated zone.

(4) **Confined aquifer.** For a confined aquifer, screens shall be placed in the saturated zone.

(5) **Screen length.** Screens shall be 5 feet in length, unless otherwise approved by the DEQ.

(d) **Conversion of piezometers to monitoring wells.** If any piezometers are to be converted to groundwater monitoring wells, the piezometers must be converted to meet the standards of OAC 252:517-7-3.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-7-54. Groundwater elevation measurements

(a) **Groundwater/waste separation.** Separation from groundwater shall meet the requirements of OAC 252:517-5-1.

(b) **Continuous water level monitoring.** A continuous water level monitor system shall be installed in at least one piezometer that has water in it. Water levels in all other piezometers shall be monitored once each month for 12 months at approximately the same date each month.

(c) **Measurements after heavy rainfall.** If significant changes in the water level in the continuous monitor are identified following heavy rainfall events, the DEQ may require additional measurements in other piezometers to further define the level of highest groundwater elevation.

(d) **Method defined.** The elevation of groundwater in piezometers and monitor wells shall be measured according to the specifications of ASTM D4750.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-7-55. Area rainfall

(a) **Rainfall measurements.** Daily and monthly precipitation data shall be obtained from the climatological station closest to the proposed site or expansion area, for the months in which the on- site measurements were taken and for the preceding 12 months.

(b) **Average rainfall.** CLIMOCS shall be used to obtain the 30-year mean precipitation from the climatological station closest to the proposed site or expansion area.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-7-56. Shallow saturated zone investigation

(a) **Shallow saturated zone encountered.** If a saturated zone is encountered above the depth where groundwater was anticipated, drilling shall cease and the following actions taken:

(1) note on the borehole lithologic sample log, the initial depth at which the shallow zone was encountered;

(2) install and screen a piezometer in the shallow zone; and

(3) drill a new boring, to the original proposed total depth, within ten feet of the piezometer.

(b) **Additional shallow zones encountered.** If a shallow saturated zone is encountered in the next three adjacent borehole locations in the approved drilling plan:

(1) the drilling plan and preliminary landfill design shall be revised to take into consideration the shallow water table;

(2) the subsurface investigation shall be updated and revised as hydrogeologic information becomes available; and

(3) a revised drilling plan shall be submitted to the DEQ for approval, with explanation of any changes made to the original plan.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

PART 7. SURFACE PENETRATION PLUGGING

252:517-7-71. Plugging requirements

(a) **Boreholes.** Unless it is to be converted to a piezometer or monitor well within thirty days of drilling, all boreholes shall be plugged in accordance with the requirements of OAC 252:517-7-3.

(b) **Piezometers and monitoring wells.** All piezometers and monitoring wells that will not become part of the groundwater monitoring system shall be plugged according to the requirements of OAC 252:517-7-3.

(c) **Other subsurface penetrations.** All water wells, oil and gas wells and other borings located within the proposed disposal boundary shall be plugged if they will not be utilized.

(d) **Casing extraction.** The casing of monitoring wells and piezometers shall be extracted prior to plugging.

(1) **Piezometers.** The surface seal and casing shall be removed from the borehole and a tremie pipe shall be used to fill the hole from the bottom to four feet (4') below ground surface.

(2) **Monitoring wells.**

(A) The protective bollards and concrete pad shall be removed.

(B) The surface seal and well casing shall be removed by perforating the bottom cap and filling the casing with appropriate plugging material as the casing is being pulled from the borehole, or the casing may be extracted by over-drilling.

(e) **Alternative.** In areas where all or part of the well's casing and other components of the well cannot be removed and plugged in accordance with this Part, the DEQ may allow the placement of a cement-bentonite grout inside the wells casing, from the bottom of the well to the ground surface. In this event, the owner/operator must demonstrate that the annular seal is adequately sealed and must submit documentation, prior to plugging the well, that demonstrates removal of all or part of the well's casing and other components.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

SUBCHAPTER 9. GROUNDWATER MONITORING/CORRECTIVE ACTION

Section

252:517-9-1. General provisions
252:517-9-2. Groundwater monitoring systems
252:517-9-3. [RESERVED]
252:517-9-4. Groundwater sampling and analysis requirements
252:517-9-5. Detection monitoring program
252:517-9-6. Assessment monitoring program
252:517-9-7. Assessment of corrective measures
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252:517-9-9. Implementation of the corrective action program

252:517-9-1. General provisions

(a) **Applicability.** Except as provided for in OAC 252:517-15-5 for inactive CCR surface impoundments, all CCR landfills, CCR surface impoundments, and lateral expansions of CCR units are subject to the groundwater monitoring and corrective action requirements under OAC 252:517-9-1 through OAC 252:517-9-9.

(b) **Initial timeframes.**

(1) **Existing CCR landfills and existing CCR surface impoundments.** No later than October 17, 2017, the owner or operator of the CCR unit must be in compliance with the following groundwater monitoring requirements:

(A) Install the groundwater monitoring system as required by OAC 252-517-9-2;

(B) Develop the groundwater sampling and analysis program to include selection of the statistical procedures to be used for evaluating groundwater monitoring data as required by OAC 252:517-9-4;

(C) Initiate the detection monitoring program to include obtaining a minimum of eight independent samples for each background and downgradient well as required by OAC 252:517-9-5(b); and

(D) Begin evaluating the groundwater monitoring data for statistically significant increases over background levels for the constituents listed in Appendix A of this Chapter as required by OAC 252:517-9-5.

(2) **New CCR landfills, new CCR surface impoundments, and all lateral expansions of CCR units.** Prior to initial receipt of CCR by the CCR unit, the owner or operator must be in compliance with the groundwater monitoring requirements specified in paragraph (b)(1)(A) and (B) of this Section. In addition, the owner or operator of the CCR unit must initiate the detection monitoring program to include obtaining a minimum of eight independent samples for each background well as required by OAC 252:517-9-5(b).

(c) **Groundwater monitoring and corrective action.** Once a groundwater monitoring system and groundwater monitoring program has been established at the CCR unit as required by this Chapter, the owner or operator must conduct groundwater monitoring and, if necessary, corrective action throughout the active life and post-closure care period of the CCR unit.

(d) **Control releases.** In the event of a release from a CCR unit, the owner or operator must immediately take all necessary measures to control the source(s) of releases so as to reduce or eliminate, to the maximum extent feasible, further releases of contaminants into the environment. The owner or operator of the CCR unit must comply with all applicable requirements in OAC 252:517-9-7, OAC 252:517-9-8, and OAC 252:517-9-9.

(e) **Annual groundwater monitoring and corrective action report.** For existing CCR landfills and existing CCR surface impoundments, no later than January 31, 2018, and annually thereafter, the owner or operator must prepare an annual groundwater monitoring and corrective action report. For new CCR landfills, new CCR surface impoundments, and all lateral expansions of CCR units, the owner or operator must

prepare the initial annual groundwater monitoring and corrective action report no later than January 31 of the year following the calendar year a groundwater monitoring system has been established for such CCR unit as required by this Chapter, and annually thereafter. For the preceding calendar year, the annual report must document the status of the groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year. For purposes of this Section, the owner or operator has prepared the annual report when the report is placed in the facility's operating record as required by OAC 252:517-19-1(h)(1). At a minimum, the annual groundwater monitoring and corrective action report must contain the following information, to the extent available:

(1) A map, aerial image, or diagram showing the CCR unit and all background (or upgradient) and downgradient monitoring wells, to include the well identification numbers, that are part of the groundwater monitoring program for the CCR unit;

(2) Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken;

(3) In addition to all the monitoring data obtained under OAC 252:517-9-1 through OAC 252:517-9-9, a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs;

(4) A narrative discussion of any transition between monitoring programs (e.g., the date and circumstances for transitioning from detection monitoring to assessment monitoring in addition to identifying the constituent(s) detected at a statistically significant increase over background levels); and

(5) Other information required to be included in the annual report as specified in OAC 252:517-9-1 through OAC 252:517-9-9.

(f) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(h), the notification requirements specified in OAC 252:517-19-2(h), and the internet requirements specified in OAC 252:517-19-3(h).

(g) **DEQ approval required.** The annual groundwater monitoring and corrective action report shall be submitted to the DEQ for approval.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-9-2. Groundwater monitoring systems

(a) **Performance standard.** The owner or operator of a CCR unit must install a groundwater monitoring system that consists of a sufficient number of wells, installed at appropriate locations and depths, to yield groundwater samples from the uppermost aquifer that:

(1) Accurately represent the quality of background groundwater that has not been affected by leakage from a CCR unit. A determination of background quality may include sampling of wells that are not hydraulically upgradient of the CCR management area where:

(A) Hydrogeologic conditions do not allow the owner or operator of the CCR unit to determine what wells are hydraulically upgradient; or

(B) Sampling at other wells will provide an indication of background groundwater quality that is as representative or more representative than that provided by the upgradient wells; and

(2) Accurately represent the quality of groundwater passing the waste boundary of the CCR unit. The downgradient monitoring system must be installed at the waste boundary that ensures detection of groundwater contamination in the uppermost aquifer. All potential contaminant pathways must be monitored.

(b) **Site-specific considerations.** The number, spacing, and depths of monitoring systems shall be determined based upon site-specific technical information that must include thorough characterization of:

(1) Aquifer thickness, groundwater flow rate, groundwater flow direction including seasonal and temporal fluctuations in groundwater flow; and

(2) Saturated and unsaturated geologic units and fill materials overlying the uppermost aquifer, materials comprising the uppermost aquifer, and materials comprising the confining unit defining the lower boundary of the uppermost aquifer, including, but not limited to, thicknesses, stratigraphy, lithology, hydraulic conductivities, porosities and effective porosities.

(c) **Minimum number.** The groundwater monitoring system must include the minimum number of monitoring wells necessary to meet the performance standards specified in paragraph (a) of this Section, based on the site-specific information specified in paragraph (b) of this Section. The groundwater monitoring system must contain:

(1) A minimum of one upgradient and three downgradient monitoring wells; and

(2) Additional monitoring wells as necessary to accurately represent the quality of background groundwater that has not been affected by leakage from the CCR unit and the quality of groundwater passing the waste boundary of the CCR unit.

(d) **Multi-unit groundwater monitoring system.** The owner or operator of multiple CCR units may install a multiunit groundwater monitoring system instead of separate groundwater monitoring systems for each CCR unit.

(1) The multiunit groundwater monitoring system must be equally as capable of detecting monitored constituents at the waste boundary of the CCR unit as the individual groundwater monitoring system specified in paragraphs (a) through (c) of this Section for each CCR unit based on the following factors:

(A) Number, spacing, and orientation of each CCR unit;

(B) Hydrogeologic setting;

(C) Site history; and
(D) Engineering design of the CCR unit.

(2) If the owner or operator elects to install a multiunit groundwater monitoring system, and if the multiunit system includes at least one existing unlined CCR surface impoundment as determined by OAC 252:517-11-2(a), and if at any time after October 19, 2015 the owner or operator determines in any sampling event that the concentrations of one or more constituents listed in Appendix B to this Chapter are detected at statistically significant levels above the groundwater protection standard established under OAC 252:517-9-6(h) for the multiunit system, then all unlined CCR surface impoundments comprising the multiunit groundwater monitoring system are subject to the closure requirements under OAC 252:517-15-6(a) to retrofit or close.

(e) **Monitoring wells.** Monitoring wells must be constructed in accordance with OAC 252:517-7-3.

(1) The owner or operator of the CCR unit must document and include in the operating record the design, installation, development, and decommissioning of any monitoring wells, piezometers and other measurement, sampling, and analytical devices. The qualified professional engineer must be given access to this documentation when completing the groundwater monitoring system certification required under paragraph (f) of this Section.

(2) The monitoring wells, piezometers, and other measurement, sampling, and analytical devices must be operated and maintained so that they perform to the design specifications throughout the life of the monitoring program.

(f) **PE certification.** The owner or operator must obtain a certification from a qualified professional engineer stating that the groundwater monitoring system has been designed and constructed to meet the requirements of this Section. If the groundwater monitoring system includes the minimum number of monitoring wells specified in paragraph (c)(1) of this Section, the certification must document the basis supporting this determination.

(g) **DEQ approval required.** A plan meeting the requirements of this section must be submitted to DEQ for approval prior to installation of the groundwater monitoring system.

(h) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(h), the notification requirements specified in OAC 252:517-19-2(h), and the internet requirements specified in OAC 252:517-19-3(h).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-9-3. [RESERVED]

[Source: Reserved at 33 Ok Reg 1469, eff 9-15-16]

252:517-9-4. Groundwater sampling and analysis requirements

(a) **DEQ approval required.** A groundwater monitoring program shall be established and a plan submitted to the DEQ for approval. The plan must include information required by (b) through (j) of this Section.

(b) **Sampling and analysis procedures.** The groundwater monitoring program must include consistent sampling and analysis procedures that are designed to ensure monitoring results that provide an accurate representation of groundwater quality at the background and downgradient wells required by OAC 252-517-9-2. The owner or operator of the CCR unit must develop a sampling and analysis program that includes procedures and techniques for:

(1) Sample collection;
(2) Sample preservation and shipment;
(3) Analytical procedures;
(4) Chain of custody control; and
(5) Quality assurance and quality control.

(c) **Sampling and analytical methods.** The groundwater monitoring program must include sampling and analytical methods that are appropriate for groundwater sampling and that accurately measure hazardous constituents and other monitoring parameters in groundwater samples. For purposes of OAC 252:517-9-1 through OAC 252:517-9-9, the term constituent refers to both hazardous constituents and other monitoring parameters listed in either Appendix A or B of this Chapter.

(d) **Groundwater elevation.** Groundwater elevations must be measured in each well immediately prior to purging, each time groundwater is sampled. The owner or operator of the CCR unit must determine the rate and direction of groundwater flow each time groundwater is sampled. Groundwater elevations in wells which monitor the same CCR management area must be measured within a period of time short enough to avoid temporal variations in groundwater flow which could preclude accurate determination of groundwater flow rate and direction.

(e) **Establish background.** The owner or operator of the CCR unit must establish background groundwater quality in a hydraulically upgradient or background well(s) for each of the constituents required in the particular groundwater monitoring program that applies to the CCR unit as determined under OAC 252:517-9-5(a) or OAC 252:517-9-6(a). Background groundwater quality may be established at wells that are not located hydraulically upgradient from the CCR unit if it meets the requirements of OAC 252-517-9-2(a)(1).

(f) **Number of samples.** The number of samples collected when conducting detection monitoring and assessment monitoring (for both downgradient and background wells) must be consistent with the statistical procedures chosen under paragraph (f) of this Section and the performance standards under paragraph (g) of this Section. The sampling procedures shall be those specified under OAC 252:517-9-5(b) through (d) for detection monitoring, OAC 252:517-9-6(b) through (d) for assessment monitoring, and OAC 252:517-9-7(b) for corrective action.

(g) **Statistical method.** The owner or operator of the CCR unit must select one of the statistical methods specified in paragraphs (g)(1) through (5) of this Section to be used in evaluating groundwater monitoring data for each specified constituent. The statistical test chosen shall be conducted separately for each constituent in each monitoring well.

(1) A parametric analysis of variance followed by multiple comparison procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's mean and the background mean levels for each constituent.

(2) An analysis of variance based on ranks followed by multiple comparison procedures to identify statistically significant evidence of contamination. The method must include estimation and testing of the contrasts between each compliance well's median and the background median levels for each constituent.

(3) A tolerance or prediction interval procedure, in which an interval for each constituent is established from the distribution of the background data and the level of each constituent in each compliance well is compared to the upper tolerance or prediction limit.

(4) A control chart approach that gives control limits for each constituent.

(5) Another statistical test method that meets the performance standards of paragraph (f) of this Section.

(6) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the selected statistical method is appropriate for evaluating the groundwater monitoring data for the CCR management area. The certification must include a narrative description of the statistical method selected to evaluate the groundwater monitoring data.

(h) **Statistical method performance standard.** Any statistical method chosen under paragraph (g) of this Section shall comply with the following performance standards, as appropriate, based on the statistical test method used:

(1) The statistical method used to evaluate groundwater monitoring data shall be appropriate for the distribution of constituents. Normal distributions of data values shall use parametric methods. Non-normal distributions shall use non-parametric methods. If the distribution of the constituents is shown by the owner or operator of the CCR unit to be inappropriate for a normal theory test, then the data must be transformed or a distribution-free (non-parametric) theory test must be used. If the distributions for the constituents differ, more than one statistical method may be needed.

(2) If an individual well comparison procedure is used to compare an individual compliance well constituent concentration with background constituent concentrations or a groundwater protection standard, the test shall be done at a Type I error level no less than 0.01 for each testing period. If a multiple comparison procedure is used, the Type I experiment wise error rate for each testing period shall be no less than 0.05; however, the Type I error of no less than 0.01 for individual well comparisons must be maintained. This performance standard does not apply to tolerance intervals, prediction intervals, or control charts.

(3) If a control chart approach is used to evaluate groundwater monitoring data, the specific type of control chart and its associated parameter values shall be such that this approach is at least as effective as any other approach in this Section for evaluating groundwater data. The parameter values shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.

(4) If a tolerance interval or a predictional interval is used to evaluate groundwater monitoring data, the levels of confidence and, for tolerance intervals, the percentage of the population that the interval must contain, shall be such that this approach is at least as effective as any other approach in this Section for evaluating groundwater data. These parameters shall be determined after considering the number of samples in the background data base, the data distribution, and the range of the concentration values for each constituent of concern.

(5) The statistical method must account for data below the limit of detection with one or more statistical procedures that shall be at least as effective as any other approach in this Section for evaluating groundwater data. Any practical quantitation limit that is used in the statistical method shall be the lowest concentration level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operating conditions that are available to the facility.

(6) If necessary, the statistical method must include procedures to control or correct for seasonal and spatial variability as well as temporal correlation in the data.

(i) **Statistically significant increase.** The owner or operator of the CCR unit must determine whether or not there is a statistically significant increase over background values for each constituent required in the particular groundwater monitoring program that applies to the CCR unit, as determined under OAC 252:517-9-5(a) or OAC 252:517-9-6(a).

(1) In determining whether a statistically significant increase has occurred, the owner or operator must compare the groundwater quality of each constituent at each monitoring well designated pursuant to OAC 252-517-9-2(a)(2) or (d)(1) to the background value of that constituent, according to the statistical procedures and performance standards specified under paragraphs (f) and (g) of this Section.

(2) Within 90 days after completing sampling and analysis, the owner or operator must determine whether there has been a statistically significant increase over background for any constituent at each monitoring well.

(j) **Filtering prohibition.** The owner or operator must measure "total recoverable metals" concentrations in measuring groundwater quality. Measurement of total recoverable metals captures both the particulate fraction and dissolved fraction of metals in natural waters. Groundwater samples shall not be field- filtered prior to analysis.

(k) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(h), the notification requirements specified in OAC 252:517-19-2(h), and the Internet requirements specified in OAC 252:517-19-3(h).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-9-5. Detection monitoring program

(a) **Detection monitoring required.** The owner or operator of a CCR unit must conduct detection monitoring at all groundwater monitoring wells consistent with this Section. At a minimum, a detection monitoring program must include groundwater monitoring for all constituents listed in Appendix A to this Chapter.

(b) **Monitoring frequency.** Except as provided in paragraph (d) of this Section, the monitoring frequency for the constituents listed in Appendix A to this Chapter shall be at least semiannual during the active life of the CCR unit and the post-closure period. For existing CCR landfills and existing CCR surface impoundments, a minimum of eight independent samples from each background and downgradient well must be collected and analyzed for the constituents listed in Appendix A and B to this Chapter no later than October 17, 2017. For new CCR landfills, new CCR surface impoundments, and all lateral expansions of CCR units, a minimum of eight independent samples for each background well must be collected and analyzed for the constituents listed in Appendices A and B to this Chapter during the first six months of sampling.

(c) **Number of samples.** The number of samples collected and analyzed for each background well and downgradient well during subsequent semiannual sampling events must be consistent with OAC 252:517-9-4(e), and must account for any unique characteristics of the site, but must be at least one sample from each background and downgradient well.

(d) **Alternative monitoring frequency.** The owner or operator of a CCR unit may demonstrate the need for an alternative monitoring frequency for repeated sampling and analysis for constituents listed in Appendix A to this Chapter during the active life and the post-closure care period based on the availability of groundwater. If there is not adequate groundwater flow to sample wells semiannually, the alternative frequency shall be no less than annual. The need to vary monitoring frequency must be evaluated on a site-specific basis and approved by the DEQ. The demonstration must be supported by, at a minimum, the information specified in paragraphs (d)(1) and (2) of this Section.

(1) Information documenting that the need for less frequent sampling. The alternative frequency must be based on consideration of the following factors:

(A) Lithology of the aquifer and unsaturated zone;

(B) Hydraulic conductivity of the aquifer and unsaturated zone; and

(C) Groundwater flow rates.

(2) Information documenting that the alternative frequency will be no less effective in ensuring that any leakage from the CCR unit will be discovered within a timeframe that will not materially delay establishment of an assessment monitoring program.

(3) The owner or operator must obtain a certification from a qualified professional engineer stating that the demonstration for an alternative groundwater sampling and analysis frequency meets the requirements of this Section. The owner or operator must include the demonstration providing the basis for the alternative monitoring frequency and the certification by a qualified professional engineer in the annual groundwater monitoring and corrective action report required by OAC 252:517-9-1(e).

(e) **Statistically significant increase.** If the owner or operator of the CCR unit determines, pursuant to OAC 252:517-9-4(h) that there is a statistically significant increase over background levels for one or more of the constituents listed in Appendix A to this Chapter at any monitoring well at the waste boundary specified under OAC 252-517-9-2(a)(2), the owner or operator must:

(1) Except as provided for in paragraph (e)(2) of this Section, within 90 days of detecting a statistically significant increase over background levels for any constituent, establish an assessment monitoring program meeting the requirements of OAC 252:517-9-6, and have the assessment monitoring program approved by the DEQ.

(2) The owner or operator may demonstrate that a source other than the CCR unit caused the statistically significant increase over background levels for a constituent or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. The owner or operator must complete the written demonstration within 90 days of detecting a statistically significant increase over background levels to include obtaining a certification from a qualified professional engineer verifying the accuracy of the information in the report. A report documenting this demonstration shall be submitted to the DEQ for approval. If a successful demonstration is completed within the 90-day period, the owner or operator of the CCR unit may continue with a detection monitoring program under this Section. If a successful demonstration is not completed within the 90-day period, the owner or operator of the CCR unit must initiate an assessment monitoring program as required under OAC 252:517-9-6. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by OAC 252:517-9-1(e), in addition to the certification by a qualified professional engineer.

(3) The owner or operator of a CCR unit must prepare a notification stating that an assessment monitoring program has been established. The owner or operator has completed the notification when the notification is placed in the facility's operating record as required by OAC 252:517-19-1(h)(5).

(f) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(h), the notification requirements specified in OAC 252:517-19-2(h), and the Internet requirements specified in OAC 252:517-19-3(h).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-9-6. Assessment monitoring program

(a) **Assessment monitoring required.** Assessment monitoring is required whenever a statistically significant increase over background levels has been detected for one or more of the constituents listed in Appendix A to this Chapter.

(b) **Initiation and number of samples.** Within 90 days of triggering an assessment monitoring program, and annually thereafter, the owner or operator of the CCR unit must sample and analyze the groundwater for all constituents listed in Appendix B to this Chapter. The number of samples collected and analyzed for each well during each sampling event must be consistent with OAC 252:517-9-4(e), and must account for any unique characteristics of the site, but must be at least one sample from each well.

(c) **Alternative monitoring frequency.** The owner or operator of a CCR unit may demonstrate the need for an alternative monitoring frequency for repeated sampling and analysis for constituents listed in Appendix B to this Chapter during the active life and the post-closure care period based on the availability of groundwater. If there is not adequate groundwater flow to sample wells semiannually, the alternative frequency shall be no less than annual. The need to vary monitoring frequency must be evaluated on a site-specific basis and approved by the DEQ. The demonstration must be supported by, at a minimum, the information specified in paragraphs (c)(1) and (2) of this Section.

(1) The alternative sampling frequency must be based on consideration of the following factors:

(A) Lithology of the aquifer and unsaturated zone;

(B) Hydraulic conductivity of the aquifer and unsaturated zone; and

(C) Groundwater flow rates.

(2) Information documenting that the alternative frequency will be no less effective in ensuring that any leakage from the CCR unit will be discovered within a timeframe that will not materially delay the initiation of any necessary remediation measures.

(3) The owner or operator must obtain a certification from a qualified professional engineer stating that the demonstration for an alternative groundwater sampling and analysis frequency meets the requirements of this Section. The owner or operator must include the demonstration providing the basis for the alternative monitoring frequency and the certification by a qualified professional engineer in the annual groundwater monitoring and corrective action report required by OAC 252:517-9-1(e).

(d) **Action required.** After obtaining the results from the initial and subsequent sampling events required in paragraph (b) of this Section, the owner or operator must:

(1) Within 90 days of obtaining the results, and on at least a semiannual basis thereafter, resample all wells that were installed pursuant to the requirements of OAC 252-517-9-2, conduct analyses for all parameters in Appendix A to this Chapter and for those constituents in Appendix B to this Chapter that are detected in response to paragraph (b) of this Section, and record their concentrations in the facility operating record. The number of samples collected and analyzed for each background well and downgradient well during subsequent semiannual sampling events must be consistent with OAC 252:517-9-4(e), and must account for any unique characteristics of the site, but must be at least one sample from each background and downgradient well;

(2) Establish groundwater protection standards for all constituents detected pursuant to paragraph (b) or (d) of this Section. The groundwater protection standards must be established in accordance with paragraph (h) of this Section; and

(3) Include the recorded concentrations required by paragraph (d)(1) of this Section, identify the background concentrations established under OAC 252:517-9-5(b), and identify the groundwater protection standards established under paragraph (d)(2) of this Section in the annual groundwater monitoring and corrective action report required by OAC 252:517-9-1(e).

(e) **Concentrations below background.** If the concentrations of all constituents listed in Appendices A and B to this Chapter are shown to be at or below background values, using the statistical procedures in OAC 252:517-9-4(g), for two consecutive sampling events, the owner or operator may return to detection monitoring of the CCR unit, with DEQ approval. The owner or operator must prepare a notification stating that detection monitoring is resuming for the CCR unit. The owner or operator has completed the notification when the notification is placed in the facility's operating record as required by OAC 252:517-19-1(h)(7).

(f) **Concentrations above background.** If the concentrations of any constituent in Appendices A and B to this Chapter are above background values, but all concentrations are below the groundwater protection standard established under paragraph (h) of this Section, using the statistical procedures in OAC 252:517-9-4(g), the owner or operator must continue assessment monitoring in accordance with this Section.

(g) **Concentration above groundwater protection standard.** If one or more constituents in Appendix B to this Chapter are detected at statistically significant levels above the groundwater protection standard established under paragraph (h) of this Section in any sampling event, the owner or operator must prepare a notification identifying the constituents in Appendix B to this Chapter that have exceeded the groundwater protection standard and submit to DEQ , a proposed plan and schedule for analyzing the environmental release from the facility and for developing appropriate corrective action. The owner or operator has completed the notification when the notification is placed in the facility's operating record as required by OAC 252:517-19-1(h)(8). The owner or operator of the CCR unit also must:

(1) Characterize the nature and extent of the release and any relevant site conditions that may affect the remedy ultimately selected. The characterization must be sufficient to support a complete and accurate assessment of the corrective measures necessary to effectively clean up all releases from the CCR unit pursuant to OAC 252:517-9-7. Characterization of the release includes the following minimum measures:

(A) Install additional monitoring wells necessary to define the contaminant plume(s);

(B) Collect data on the nature and estimated quantity of material released including specific information on the constituents listed in Appendix B of this

Chapter and the levels at which they are present in the material released;

(C) Install at least one additional monitoring well at the facility boundary in the direction of contaminant migration and sample this well in accordance with paragraph (d)(1) of this Section; and

(D) Sample all wells in accordance with paragraph (d)(1) of this Section to characterize the nature and extent of the release.

(2) Notify all persons who own the land or reside on the land that directly overlies any part of the plume of contamination if contaminants have migrated off-site if indicated by sampling of wells in accordance with paragraph (g)(1) of this Section. The owner or operator has completed the notifications when they are placed in the facility's operating record as required by OAC 252:517-19-1(h)(8).

(3) Within 90 days of finding that any of the constituents listed in Appendix B to this Chapter have been detected at a statistically significant level exceeding the groundwater protection standards the owner or operator must either:

(A) Initiate an assessment of corrective measures as required by OAC 252:517-9-7; or

(B) Demonstrate that a source other than the CCR unit caused the contamination, or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Any such demonstration must be supported by a report that includes the factual or evidentiary basis for any conclusions, must be certified to be accurate by a qualified professional engineer, and submitted to DEQ for approval. If a successful demonstration is made, the owner or operator must continue monitoring in accordance with the assessment monitoring program pursuant to this Section, and upon DEQ approval may return to detection monitoring if the constituents in Appendices A and B to this Chapter are at or below background as specified in paragraph (e) of this Section. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by OAC 252:517-9-1(e), in addition to the certification by a qualified professional engineer.

(4) If a successful demonstration has not been made at the end of the 90 day period provided by paragraph (g)(3)(B) of this Section, the owner or operator of the CCR unit must initiate the assessment of corrective measures requirements under OAC 252:517-9-7.

(5) If an assessment of corrective measures is required under OAC 252:517-9-7 by either paragraph (g)(3)(i) or (g)(4) of this Section, and if the CCR unit is an existing unlined CCR surface impoundment as determined by OAC 252:517-11-2(a), then the CCR unit is subject to the closure requirements under OAC 252:517-15-6(a) to retrofit or close. In addition, the owner or operator must prepare a notification stating that an assessment of corrective measures has been initiated.

(h) **Groundwater protection standard.** The owner or operator of the CCR unit must establish a groundwater protection standard for each constituent in Appendix B to this Chapter detected in the groundwater. The groundwater protection standard shall be:

(1) For constituents for which a maximum contaminant level (MCL) has been established under 40 CFR 141.62 and 141.66, the MCL for that constituent;

(2) For constituents for which an MCL has not been established, the background concentration for the constituent established from wells in accordance with OAC 252-517-9-2; or

(3) For constituents for which the background level is higher than the MCL identified under paragraph (h)(1)of this Section, the background concentration.

(i) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(h), the notification requirements specified in OAC 252:517-19-2(h), and the Internet requirements specified in OAC 252:517-19-3(h).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-9-7. Assessment of corrective measures

(a) **Assessment of corrective measures required.** Within 90 days of finding that any constituent listed in Appendix B to this Chapter has been detected at a statistically significant level exceeding the groundwater protection standard defined under OAC 252:517-9-6(h), or immediately upon detection of a release from a CCR unit, the owner or operator must initiate an assessment of corrective measures to prevent further releases, to remediate any releases and to restore affected area to original conditions. A proposed plan and schedule for analyzing the release from the facility into the environment and for developing appropriate corrective action must be submitted to DEQ. The assessment of corrective measures must be completed within 90 days, unless the owner or operator demonstrates the need for additional time to complete the assessment of corrective measures due to site-specific conditions or circumstances. The owner or operator must obtain a certification from a qualified professional engineer attesting that the demonstration is accurate. The 90-day deadline to complete the assessment of corrective measures may be extended for no longer than 60 days. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by OAC 252:517-9-1(e), in addition to the certification by a qualified professional engineer.

(b) **Continued monitoring.** The owner or operator of the CCR unit must continue to monitor groundwater in accordance with the assessment monitoring program as specified in OAC 252:517-9-6.

(c) **Effectiveness of corrective measures.** The assessment under paragraph (a) of this Section must include an analysis of the effectiveness of potential corrective measures in meeting all of the requirements and objectives of the remedy as described under OAC 252:517-9-8 addressing at least the following:

(1) The performance, reliability, ease of implementation, and potential impacts of appropriate potential

remedies, including safety impacts, cross-media impacts, and control of exposure to any residual contamination;

(2) The time required to begin and complete the remedy;

(3) The institutional requirements, such as state or local permit requirements or other environmental or public health requirements that may substantially affect implementation of the remedy(s).

(d) **DEQ approval required.** The owner or operator must submit the completed assessment of corrective measures to DEQ for approval and place the approved assessment in the facility's operating record. The assessment has been completed when it is placed in the facility's operating record as required by OAC 252:517-19-1(h)(10).

(e) **Public meeting.** The owner or operator must discuss the results of the corrective measures assessment at least 30 days prior to the selection of remedy, in a public meeting with interested and affected parties. The requirements of public notice are as follows:

(1) **Public meeting required.** Prior to the selection of a remedy, the results of the corrective measures assessment must be discussed in a public meeting.

(2) **Mail notifications required.** By certified mail, return receipt requested, notice of the public meeting shall be given at least 30 calendar days prior to the date of the meeting to the following:

(A) all persons who own the land or minerals or who reside on the land that directly overlies any part of the plume of contamination and within one year time of travel if contaminants have migrated off-site; and

(B) boards of County Commissioners, incorporated municipalities, rural water districts and conservation districts within a three-mile radius of the facility.

(C) Legal notice of the public meeting shall be published at least 10 calendar days prior to the date of the meeting in accordance with forms and instructions provided by the DEQ.

(3) **Copies to DEQ.** Prior to the public meeting, the DEQ shall be provided with:

(A) an affidavit from the publisher (accompanied by a copy of the published notice), showing the date of publication;

(B) copies of certified mail receipts for those persons identified in (b) of this Section; and

(C) a cadastral (property ownership) map and a mineral ownership map covering the area within a two (2) mile radius of the facility.

(f) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(h), the notification requirements specified in OAC 252:517-19-2(h), and the Internet requirements specified in OAC 252:517-19-3(h).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-9-8. Selection of remedy

(a) **Remedy selection.** Based on the results of the corrective measures assessment conducted under OAC 252:517-9-7, the owner or operator must, as soon as feasible, select a remedy that, at a minimum, meets the standards listed in paragraph (b) of this Section. This requirement applies to, not in place of, any applicable standards under the Occupational Safety and Health Act. The owner or operator must prepare, and submit to DEQ for approval, a semiannual report describing the progress in selecting and designing the remedy. Upon selection of a remedy, the owner or operator must prepare, and submit to DEQ for approval, a final report describing the selected remedy and how it meets the standards specified in paragraph (b) of this Section. The owner or operator must obtain a certification from a qualified professional engineer that the remedy selected meets the requirements of this Section. The report has been completed when it is placed in the operating record as required by OAC 252:517-19-1(h)(12).

(b) **Remedy requirements.** The remedy must:

(1) Be protective of human health and the environment;

(2) Attain the groundwater protection standard as specified pursuant to OAC 252:517-9-6(h);

(3) Control the source(s) of releases so as to reduce or eliminate, to the maximum extent feasible, further releases of constituents in Appendix B to this Chapter into the environment;

(4) Remove from the environment as much of the contaminated material that was released from the CCR unit as is feasible, taking into account factors such as avoiding inappropriate disturbance of sensitive ecosystems;

(5) Comply with standards for management of wastes as specified in OAC 252:517-9-9(d).

(c) **Evaluation factors.** In selecting a remedy that meets the standards of paragraph (b) of this Section, the owner or operator of the CCR unit shall consider the following evaluation factors:

(1) The long and short-term effectiveness and protectiveness of the potential remedy(s), along with the degree of certainty that the remedy will prove successful based on consideration of the following:

(A) Magnitude of reduction of existing risks;

(B) Magnitude of residual risks in terms of likelihood of further releases due to CCR remaining following implementation of a remedy;

(C) The type and degree of long-term management required, including monitoring, operation, and maintenance;

(D) Short-term risks that might be posed to the community or the environment during implementation of such a remedy, including potential threats to human health and the environment associated with excavation, transportation, and re-disposal of contaminant;

(E) Time until full protection is achieved;

(F) Potential for exposure of humans and environmental receptors to remaining wastes, considering the potential threat to human health and the environment associated with excavation, transportation, re-disposal, or containment;

(G) Long-term reliability of the engineering and institutional controls; and

(H) Potential need for replacement of the remedy.

(2) The effectiveness of the remedy in controlling the source to reduce further releases based on consideration of the following factors:

(A) The extent to which containment practices will reduce further releases; and

(B) The extent to which treatment technologies may be used.

(3) The ease or difficulty of implementing a potential remedy(s) based on consideration of the following types of factors:

(A) Degree of difficulty associated with constructing the technology;

(B) Expected operational reliability of the technologies;

(C) Need to coordinate with and obtain necessary approvals and permits from other agencies;

(D) Availability of necessary equipment and specialists; and

(E) Available capacity and location of needed treatment, storage, and disposal services.

(4) The degree to which community concerns are addressed by a potential remedy(s).

(d) **Schedule for implementation and completion.** The owner or operator must specify as part of the selected remedy a schedule(s) for implementing and completing remedial activities. Such a schedule must require the completion of remedial activities within a reasonable period of time taking into consideration the factors set forth in paragraphs (d)(1) through (6) of this Section. The schedule shall be submitted to the DEQ for approval. The owner or operator of the CCR unit must consider the following factors in determining the schedule of remedial activities:

(1) Extent and nature of contamination, as determined by the characterization required under OAC 252:517-9-6(g);

(2) Reasonable probabilities of remedial technologies in achieving compliance with the groundwater protection standards established under OAC 252:517-9-6(h) and other objectives of the remedy;

(3) Availability of treatment or disposal capacity for CCR managed during implementation of the remedy;

(4) Potential risks to human health and the environment from exposure to contamination prior to completion of the remedy;

(5) Resource value of the aquifer including:

(A) Current and future uses;

(B) Proximity and withdrawal rate of users;

(C) Groundwater quantity and quality;

(D) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to CCR constituents;

(E) The hydrogeologic characteristic of the facility and surrounding land; and

(F) The availability of alternative water supplies; and

(6) Other relevant factors.

(e) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(h), the notification requirements specified in OAC 252:517-19-2(h), and the Internet requirements specified in OAC 252:517-19-3(h).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-9-9. Implementation of the corrective action program

(a) **Requirements.** Within 90 days of selecting a remedy under OAC 252:517-9-8, the owner or operator must initiate remedial activities. Based on the schedule established under OAC 252:517-9-8(d) for implementation and completion of remedial activities the owner or operator must:

(1) Establish and implement a corrective action groundwater monitoring program that:

(A) At a minimum, meets the requirements of an assessment monitoring program under OAC 252:517-9-6;

(B) Documents the effectiveness of the corrective action remedy; and

(C) Demonstrates compliance with the groundwater protection standard pursuant to paragraph (c) of this Section.

(2) Implement the corrective action remedy selected under OAC 252:517-9-8; and

(3) Take any interim measures necessary to reduce the contaminants leaching from the CCR unit, and/or potential exposures to human or ecological receptors. Interim measures must, to the greatest extent feasible, be consistent with the objectives of and contribute to the performance of any remedy that may be required pursuant to OAC 252:517-9-8. The following factors must be considered by an owner or operator in determining whether interim measures are necessary:

(A) Time required to develop and implement a final remedy;

(B) Actual or potential exposure of nearby populations or environmental receptors to any of the constituents listed in Appendix B of this Chapter;

(C) Actual or potential contamination of drinking water supplies or sensitive ecosystems;

(D) Further degradation of the groundwater that may occur if remedial action is not initiated expeditiously;

(E) Weather conditions that may cause any of the constituents listed in Appendix B to this Chapter to migrate or be released;

(F) Potential for exposure to any of the constituents listed in Appendix B to this Chapter as a result of an accident or failure of a container or handling system; and

(G) Other situations that may pose threats to human health and the environment.

(b) **Compliance not achieved.** If an owner or operator of the CCR unit, determines, at any time, that compliance with

the requirements of OAC 252:517-9-8(b) is not being achieved through the remedy selected, the owner or operator must provide a certification from a qualified groundwater scientist and submit proposed alternative methods for DEQ approval prior to implementing other methods or techniques that could feasibly achieve compliance with the requirements.

(c) **Remedies complete.** Remedies selected pursuant to OAC 252:517-9-8 shall be considered complete when:

(1) The owner or operator of the CCR unit demonstrates compliance with the groundwater protection standards established under OAC 252:517-9-6(h) has been achieved at all points within the plume of contamination that lie beyond the groundwater monitoring well system established under OAC 252-517-9-2.

(2) Compliance with the groundwater protection standards established under OAC 252:517-9-6(h) has been achieved by demonstrating that concentrations of constituents listed in Appendix B to this Chapter have not exceeded the groundwater protection standard(s) for a period of three consecutive years using the statistical procedures and performance standards in OAC 252:517-9-4(f) and (g).

(3) All actions required to complete the remedy have been satisfied.

(d) **Compliance with RCRA.** All CCR that are managed pursuant to a remedy required under OAC 252:517-9-8, or an interim measure required under paragraph (a)(3) of this Section, shall be managed in a manner that complies with all applicable RCRA requirements.

(e) **Certification of completion.** Upon completion of the remedy, the owner or operator must prepare a notification stating that the remedy has been completed. The owner or operator must obtain a certification from a qualified professional engineer attesting that the remedy has been completed in compliance with the requirements of paragraph (c) of this Section and submit to DEQ for approval. The report has been completed when it has been approved by DEQ and is placed in the operating record as required by OAC 252:517-19-1(h)(13).

(f) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(h), the notification requirements specified in OAC 252:517-19-2(h), and the Internet requirements specified in OAC 252:517-19-3(h).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

SUBCHAPTER 11. DESIGN CRITERIA

Section

252:517-11-1. Design criteria for new CCR landfills and any lateral expansion of a CCR landfill
252:517-11-2. Liner design criteria for existing CCR surface impoundments
252:517-11-3. Liner design criteria for new CCR surface impoundments and any lateral expansion of a CCR surface impoundment
252:517-11-4. Structural integrity criteria for existing CCR surface impoundments
252:517-11-5. Structural integrity criteria for new CCR surface impoundments and any lateral expansion of a CCR surface impoundment

252:517-11-1. Design criteria for new CCR landfills and any lateral expansion of a CCR landfill

(a) **Applicability.**

(1) New CCR landfills and any lateral expansion of a CCR landfill must be designed, constructed, operated, and maintained with either a composite liner that meets the requirements of paragraph (b) of this Section or an alternative composite liner that meets the requirements in paragraph (c) of this Section, and a leachate collection and removal system that meets the requirements of paragraph (d) of this Section.

(2) Prior to construction of an overfill the underlying surface impoundment must meet the requirements of OAC 252:517-15-7(d).

(b) **Liner components.** A composite liner must consist of two components; the upper component consisting of, at a minimum, a 30-mil geomembrane liner (GM), and the lower component consisting of at least a two foot layer of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} centimeters per second (cm/sec). GM components consisting of high density polyethylene (HDPE) must be at least 60-mil thick. The GM or upper liner component must be installed in direct and uniform contact with the compacted soil or lower liner component. The composite liner must be:

(1) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the CCR or leachate to which they are exposed, climatic conditions, the stress of installation, and the stress of daily operation;

(2) Constructed of materials that provide appropriate shear resistance of the upper and lower component interface to prevent sliding of the upper component including on slopes;

(3) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(4) Installed to cover all surrounding earth likely to be in contact with the CCR or leachate.

(c) **Alternative composite liner.** If the owner or operator elects to install an alternative composite liner, all of the following requirements must be met:

(1) An alternative composite liner must consist of two components; the upper component consisting of, at a minimum, a 30-mil GM, and a lower component, that is not a geomembrane, with a liquid flow rate no greater than the liquid flow rate of two feet of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} cm/sec. GM components consisting of high density polyethylene (HDPE) must be at least 60-mil thick. If the lower component of the alternative liner is compacted soil, the GM

must be installed in direct and uniform contact with the compacted soil.

(2) The owner or operator must obtain certification from a qualified professional engineer that the liquid flow rate through the lower component of the alternative composite liner is no greater than the liquid flow rate through two feet of compacted soil with a hydraulic conductivity of 1×10^{-7} cm/ sec. The hydraulic conductivity for the two feet of compacted soil used in the comparison shall be no greater than 1×10^{-7} cm/sec. The hydraulic conductivity of any alternative to the two feet of compacted soil must be determined using recognized and generally accepted methods. The liquid flow rate comparison must be made using Equation 1 of this Section, $Q \div A = q = k((h/t)+1)$, which is derived from Darcy's Law for gravity flow through porous media.Where, Q = flow rate (cubic centimeters/second); A = surface area of the liner (squared centimeters); q = flow rate per unit area (cubic centimeters/ second/squared centimeter); k = hydraulic conductivity of the liner (centimeters/second); h = hydraulic head above the liner (centimeters); and t = thickness of the liner (centimeters).

(3) The alternative composite liner must meet the requirements specified in paragraphs (b)(1) through (4) of this Section.

(d) **Leachate collection system.** The leachate collection and removal system must be designed, constructed, operated, and maintained to collect and remove leachate from the landfill during the active life and post- closure care period. The leachate collection and removal system must be:

(1) Designed and operated to maintain less than a 30-centimeter depth of leachate over the composite liner or alternative composite liner;

(2) Constructed of materials that are chemically resistant to the CCR and any non-CCR waste managed in the CCR unit and the leachate expected to be generated, and of sufficient strength and thickness to prevent collapse under the pressures exerted by overlying waste, waste cover materials, and equipment used at the CCR unit; and

(3) Designed and operated to minimize clogging during the active life and post-closure care period.

(e) **Pre-construction requirements.** Prior to construction of the CCR landfill or any lateral expansion of a CCR landfill, the owner or operator must:

(1) Obtain a certification from a qualified professional engineer that the design of the composite liner (or, if applicable, alternative composite liner) system meets the requirements of this Section, and submit the certification along with design plans to DEQ for approval.

(2) Submit a Quality Assurance/Quality Control (QA/QC) plan to DEQ for review and approval, to demonstrate the liner system will be installed in accordance with this Subchapter and the approved design plans. The plan shall include all information required for the applicable liner design, placement, construction, and testing, and describe how independent, third-party, QA and QC will be conducted during all phases of construction of the liner.

(3) Obtain written approval from DEQ to construct.

(4) Provide written notification of construction. The DEQ shall be notified at least two weeks before liner construction begins. The notification shall:

(A) define the area to be constructed; and

(B) include the names of the contractors and third party QA and QC officials.

(5) A pre-construction meeting shall be held at the facility with the design engineer and QA and QC officials before liner construction begins. The DEQ shall be notified at least 48 hours in advance of the meeting.

(f) **LIT report.** Upon completion of construction of the CCR landfill or any lateral expansion of a CCR landfill, the owner or operator must obtain a certification from a qualified professional engineer that the composite liner (or, if applicable, alternative composite liner) and the leachate collection and removal system has been constructed in accordance with the requirements of this Section. The certification shall be submitted to the DEQ for review and approval as part of a Liner Installation and Testing (LIT) report. The LIT report shall include:

(1) summaries of all construction activities;

(2) testing data sheets and summaries;

(3) changes from design and material specifications; and

(4) all QA/QC documentation.

(g) **DEQ inspection required.** Waste shall not be placed on a new liner system until the DEQ inspects the liner system and provides written authorization to commence disposal.

(h) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(f), the notification requirements specified in OAC 252:517-19-2(f), and the Internet requirements specified in OAC 252:517-19-3(f).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-11-2. Liner design criteria for existing CCR surface impoundments

(a) **Applicability.**

(1) No later than October 17, 2016, the owner or operator of an existing CCR surface impoundment must document whether or not such unit was constructed with any one of the following:

(A) A liner consisting of a minimum of two feet of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} cm/sec;

(B) A composite liner that meets the requirements of OAC 252:517-11-1(b); or

(C) An alternative composite liner that meets the requirements of OAC 252:517-11-1(c).

(2) The hydraulic conductivity of the compacted soil must be determined using recognized and generally accepted methods.

(3) An existing CCR surface impoundment is considered to be an existing unlined CCR surface impoundment if either:

(A) The owner or operator of the CCR unit determines that the CCR unit is not constructed with a liner

that meets the requirements of paragraphs (a)(1)(A), (B), or (C) of this Section; or

(B) The owner or operator of the CCR unit fails to document whether the CCR unit was constructed with a liner that meets the requirements of paragraphs (a)(1)(A), (B), or (C) of this Section.

(4) All existing unlined CCR surface impoundments are subject to the requirements of OAC 252:517-15-6.

(b) **PE certification.** The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer attesting that the documentation as to whether a CCR unit meets the requirements of paragraph (a) of this Section is accurate. Documentation and certification shall be submitted to the DEQ.

(c) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(f), the notification requirements specified in OAC 252:517-19-2(f), and the Internet requirements specified in OAC 252:517-19-3(f).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-11-3. Liner design criteria for new CCR surface impoundments and any lateral expansion of a CCR surface impoundment

(a) **Applicability.** New CCR surface impoundments and lateral expansions of existing and new CCR surface impoundments must be designed, constructed, operated, and maintained with either a composite liner or an alternative composite liner that meets the requirements of OAC 252:517-11-1(b) or (c).

(b) **Liner coverage.** Any liner specified in this Section must be installed to cover all surrounding earth likely to be in contact with CCR. Dikes shall not be constructed on top of the composite liner.

(c) **Pre-construction requirements.** Prior to construction of the CCR surface impoundment or any lateral expansion of a CCR surface impoundment, the owner or operator must:

(1) Obtain a certification from a qualified professional engineer that the design of the composite liner (or, if applicable, alternative composite liner) system meets the requirements of this Section, and submit the certification along with design plans to DEQ for approval.

(2) Submit a QA/QC plan to DEQ for review and approval to demonstrate the liner system will be installed in accordance with this Subchapter and the approved design plans. The plan shall include all information required for the applicable liner design, placement, construction, and testing, and describe how independent, third-party, QA and QC will be conducted during all phases of construction of the liner.

(3) Obtain written approval from DEQ to construct.

(4) Provide written notification of construction. The DEQ shall be notified at least two weeks before liner construction begins. The notification shall:

(A) define the area to be constructed; and

(B) include the names of the contractors and third party QA and QC officials.

(5) A pre-construction meeting shall be held at the facility with the design engineer and QA and QC officials before liner construction begins. The DEQ shall be notified at least 48 hours in advance of the meeting.

(d) **LIT report.** Upon completion, the owner or operator must obtain certification from a qualified professional engineer that the composite liner or if applicable, the alternative composite liner has been constructed in accordance with the requirements of this Section. The certification shall be submitted to the DEQ for review and approval as part of a Liner Installation and Testing (LIT) report. The LIT report shall include:

(1) summaries of all construction activities;

(2) testing data sheets and summaries;

(3) changes from design and material specifications; and

(4) all QA/QC documentation.

(e) **DEQ inspection required.** Waste shall not be placed in a new surface impoundment until the DEQ inspects the liner system and provides written authorization to commence disposal.

(f) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(f), the notification requirements specified in OAC 252:517-19-2(f), and the Internet requirements specified in OAC 252:517-19-3(f).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-11-4. Structural integrity criteria for existing CCR surface impoundments

(a) **Applicability; criteria.** The requirements of paragraphs (a)(1) through (4) of this Section apply to all existing CCR surface impoundments, except for those existing CCR surface impoundments that are incised CCR units. If an incised CCR surface impoundment is subsequently modified (e.g., a dike is constructed) such that the CCR unit no longer meets the definition of an incised CCR unit, the CCR unit is subject to the requirements of paragraphs (a)(1) through (4) of this Section.

(1) **Permanent marker.** The owner or operator of the CCR unit must place on or immediately adjacent to the CCR unit a permanent identification marker, at least six feet high showing the permit number of the CCR unit, the name associated with the CCR unit and the name of the owner or operator of the CCR unit.

(2) **Periodic hazard potential classification assessments.**

(A) The owner or operator of the CCR unit must conduct initial and periodic hazard potential classification assessments of the CCR unit according to the timeframes specified in paragraph (f) of this Section. The owner or operator must document the hazard potential classification of each CCR unit as either a high hazard potential CCR surface impoundment, a significant hazard potential CCR surface impoundment, or a low hazard potential CCR surface impoundment. The owner or operator must also document the basis for each hazard potential classification.

(B) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial hazard potential classification and each subsequent periodic classification specified in paragraph (a)(2)(A) of this Section was conducted in accordance with the requirements of this Section.

(C) The owner or operator of the CCR unit must submit the initial hazard potential classification and each subsequent periodic classification to the DEQ for approval.

(3) **Emergency Action Plan (EAP).**

(A) **Development of the plan.** No later than April 17, 2017, the owner or operator of a CCR unit determined to be either a high hazard potential CCR surface impoundment or a significant hazard potential CCR surface impoundment under paragraph (a)(2) of this Section must prepare and maintain a written EAP. At a minimum, the EAP must:

(i) Define the events or circumstances involving the CCR unit that represent a safety emergency, along with a description of the procedures that will be followed to detect a safety emergency in a timely manner;

(ii) Define responsible persons, their respective responsibilities, and notification procedures in the event of a safety emergency involving the CCR unit;

(iii) Provide contact information of emergency responders;

(iv) Include a map which delineates the downstream area which would be affected in the event of a CCR unit failure and a physical description of the CCR unit; and

(v) Include provisions for an annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders.

(B) **Amendment of the plan.**

(i) The owner or operator of a CCR unit subject to the requirements of paragraph (a)(3)(A) of this Section may amend the written EAP at any time provided the revised plan is placed in the facility's operating record as required by OAC 252:517-19-1(f)(6). The owner or operator must amend the written EAP whenever there is a change in conditions that would substantially affect the EAP in effect.

(ii) The written EAP must be evaluated, at a minimum, every five years to ensure the information required in paragraph (a)(3)(A) of this Section is accurate. As necessary, the EAP must be updated and a revised EAP placed in the facility's operating record as required by OAC 252:517-19-1(f)(6).

(C) **Changes in hazard potential classification.**

(i) If the owner or operator of a CCR unit determines during a periodic hazard potential assessment that the CCR unit is no longer classified as either a high hazard potential CCR surface impoundment or a significant hazard potential CCR surface impoundment, then the owner or operator of the CCR unit is no longer subject to the requirement to prepare and maintain a written EAP beginning on the date the periodic hazard potential assessment documentation is placed in the facility's operating record as required by OAC 252:517-19-1(f)(5).

(ii) If the owner or operator of a CCR unit classified as a low hazard potential CCR surface impoundment subsequently determines that the CCR unit is properly re-classified as either a high hazard potential CCR surface impoundment or a significant hazard potential CCR surface impoundment, then the owner or operator of the CCR unit must prepare a written EAP for the CCR unit as required by paragraph (a)(3)(i) of this Section within six months of completing such periodic hazard potential assessment.

(D) **PE certification.** The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the written EAP, and any subsequent amendment of the EAP, meets the requirements of paragraph (a)(3) of this Section.

(E) **DEQ approval required.** The owner or operator of the CCR unit must submit the written EAP, and any subsequent amendment of the EAP, to the DEQ for approval.

(F) **Activation of the EAP.** The EAP must be implemented once events or circumstances involving the CCR unit that represent a safety emergency are detected, including conditions identified during periodic structural stability assessments, annual inspections, and inspections by a qualified person.

(4) **Slope protection.** The CCR unit and surrounding areas must be designed, constructed, operated, and maintained with vegetated slopes of dikes not to exceed a height of 6 inches above the slope of the dike, except for slopes which are protected with an alternate form(s) of slope protection.

(b) **Additional requirements.** The requirements of paragraphs (c) through (e) of this Section apply to an owner or operator of an existing CCR surface impoundment that either:

(1) Has a height of five feet or more and a storage volume of 20 acre-feet or more; or

(2) Has a height of 20 feet or more.

(c) **History of construction.**

(1) No later than October 17, 2016, the owner or operator of the CCR unit must compile a history of construction, which shall contain, to the extent feasible, the information specified in paragraphs (c)(1)(A) through (K) of this Section. The history of construction shall be submitted to the DEQ.

(A) The name and address of the person(s) owning or operating the CCR unit; the name associated with

the CCR unit; and the identification number of the CCR unit if one has been assigned by the state.

(B) The location of the CCR unit identified on the most recent U.S. Geological Survey (USGS) 7 $\frac{1}{2}$ minute or 15 minute topographic quadrangle map, or a topographic map of equivalent scale if a USGS map is not available.

(C) A statement of the purpose for which the CCR unit is being used.

(D) The name and size in acres of the watershed within which the CCR unit is located.

(E) A description of the physical and engineering properties of the foundation and abutment materials on which the CCR unit is constructed.

(F) A statement of the type, size, range, and physical and engineering properties of the materials used in constructing each zone or stage of the CCR unit; the method of site preparation and construction of each zone of the CCR unit; and the approximate dates of construction of each successive stage of construction of the CCR unit.

(G) At a scale that details engineering structures and appurtenances relevant to the design, construction, operation, and maintenance of the CCR unit, detailed dimensional drawings of the CCR unit, including a plan view and cross sections of the length and width of the CCR unit, showing all zones, foundation improvements, drainage provisions, spillways, diversion ditches, outlets, instrument locations, and slope protection, in addition to the normal operating pool surface elevation and the maximum pool surface elevation following peak discharge from the inflow design flood, the expected maximum depth of CCR within the CCR surface impoundment, and any identifiable natural or manmade features that could adversely affect operation of the CCR unit due to malfunction or mis-operation.

(H) A description of the type, purpose, and location of existing instrumentation.

(I) Area-capacity curves for the CCR unit.

(J) A description of each spillway and diversion design features and capacities and calculations used in their determination.

(K) The construction specifications and provisions for surveillance, maintenance, and repair of the CCR unit.

(L) Any record or knowledge of structural instability of the CCR unit.

(2) If there is a significant change to any information compiled under paragraph (c)(1) of this Section, the owner or operator of the CCR unit must update the relevant information, submit it to DEQ, and place it in the facility's operating record as required by OAC 252:517-19-1(f)(9).

(d) **Periodic structural stability assessments.**

(1) The owner or operator of the CCR unit must conduct initial and periodic structural stability assessments and document whether the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering practices for the maximum volume of CCR and CCR wastewater which can be impounded therein. The assessment must, at a minimum, document whether the CCR unit has been designed, constructed, operated, and maintained with:

(A) Stable foundations and abutments;

(B) Adequate slope protection to protect against surface erosion, wave action, and adverse effects of sudden drawdown;

(C) Dikes mechanically compacted to a density sufficient to withstand the range of loading conditions in the CCR unit;

(D) Vegetated slopes of dikes and surrounding areas not to exceed a height of six inches above the slope of the dike, except for slopes which have an alternate form or forms of slope protection;

(E) A single spillway or a combination of spillways configured as specified in paragraph (d)(1)(E)(i) of this Section. The combined capacity of all spillways must be designed, constructed, operated, and maintained to adequately manage flow during and following the peak discharge from the event specified in paragraph (d)(1)(E)(ii) of this Section.

(i) All spillways must be either:

(I) Of non-erodible construction and designed to carry sustained flows; or

(II) Earth- or grass-lined and designed to carry short-term, infrequent flows at non-erosive velocities where sustained flows are not expected.

(ii) The combined capacity of all spillways must adequately manage flow during and following the peak discharge from a:

(I) Probable maximum flood (PMF) for a high hazard potential CCR surface impoundment; or

(II) 1000-year flood for a significant hazard potential CCR surface impoundment; or

(III) 100-year flood for a low hazard potential CCR surface impoundment.

(F) Hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit that maintain structural integrity and are free of significant deterioration, deformation, distortion, bedding deficiencies, sedimentation, and debris which may negatively affect the operation of the hydraulic structure; and

(G) For CCR units with downstream slopes which can be inundated by the pool of an adjacent water body, such as a river, stream or lake, downstream slopes that maintain structural stability during low pool of the adjacent water body or sudden drawdown of the adjacent water body.

(2) The periodic assessment described in paragraph (d)(1) of this Section must identify any structural stability deficiencies associated with the CCR unit in addition to recommending corrective measures. If a deficiency or a

release is identified during the periodic assessment, the owner or operator unit must remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken.

(3) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial assessment and each subsequent periodic assessment was conducted in accordance with the requirements of this Section.

(4) The owner or operator of the CCR unit must submit the initial assessment and each subsequent periodic assessment to the DEQ for approval.

(e) **Periodic safety factor assessments.**

(1) The owner or operator must conduct an initial and periodic safety factor assessments for each CCR unit and document whether the calculated factors of safety for each CCR unit achieve the minimum safety factors specified in paragraphs (e)(1)(A) through (D) of this Section for the critical cross section of the embankment. The critical cross section is the cross section anticipated to be the most susceptible of all cross sections to structural failure based on appropriate engineering considerations, including loading conditions. The safety factor assessments must be supported by appropriate engineering calculations.

(A) The calculated static factor of safety under the long-term, maximum storage pool loading condition must equal or exceed 1.50.

(B) The calculated static factor of safety under the maximum surcharge pool loading condition must equal or exceed 1.40.

(C) The calculated seismic factor of safety must equal or exceed 1.00.

(D) For dikes constructed of soils that have susceptibility to liquefaction, the calculated liquefaction factor of safety must equal or exceed 1.20.

(2) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial assessment and each subsequent periodic assessment specified in paragraph (e)(1) of this Section meets the requirements of this Section.

(3) The owner or operator of the CCR unit must submit the initial assessment and each subsequent periodic assessment to the DEQ for approval.

(f) **Timeframes for periodic assessments.**

(1) **Initial assessments.** Except as provided by paragraph (f)(2) of this Section, the owner or operator of the CCR unit must complete the initial assessments required by paragraphs (a)(2), (d), and (e) of this Section no later than October 17, 2016. The owner or operator has completed an initial assessment when the owner or operator has placed the assessment required by paragraphs (a)(2), (d), and (e) of this Section in the facility's operating record as required by OAC 252:517-19-1(f)(5), (10), and (12).

(2) **Use of a previously completed assessment(s) in lieu of the initial assessment(s).** The owner or operator of the CCR unit may elect to use a previously completed assessment to serve as the initial assessment required by paragraphs (a)(2), (d), and (e) of this Section provided that the previously completed assessment(s):

(A) Was completed no earlier than 42 months prior to October 17, 2016; and

(B) Meets the applicable requirements of paragraphs (a)(2), (d), and (e) of this Section.

(3) **Frequency for conducting periodic assessments.** The owner or operator of the CCR unit must conduct and complete the assessments required by paragraphs (a)(2), (d), and (e) of this Section every five years. The date of completing the initial assessment is the basis for establishing the deadline to complete the first subsequent assessment. If the owner or operator elects to use a previously completed assessment(s) in lieu of the initial assessment as provided by paragraph (f)(2) of this Section, the date of the report for the previously completed assessment is the basis for establishing the deadline to complete the first subsequent assessment. The owner or operator may complete any required assessment prior to the required deadline provided the owner or operator places the completed assessment(s) into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing subsequent assessments is based on the date of completing the previous assessment. For purposes of this paragraph (f)(3), the owner or operator has completed an assessment when the relevant assessment(s) required by paragraphs (a)(2), (d), and (e) of this Section has been placed in the facility's operating record as required by OAC 252:517-19-1(f)(5), (10), and (12).

(4) **Closure of the CCR unit.** An owner or operator of a CCR unit who either fails to complete a timely safety factor assessment or fails to demonstrate minimum safety factors as required by paragraph (e) of this Section is subject to the requirements of OAC 252:517-15-6(b)(2).

(g) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(f), the notification requirements specified in OAC 252:517-19-2(f), and the internet requirements specified in OAC 252:517-19-3(f).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-11-5. Structural integrity criteria for new CCR surface impoundments and any lateral expansion of a CCR surface impoundment

(a) **Applicability; criteria.** The requirements of paragraphs (a)(1) through (4) of this Section apply to all new CCR surface impoundments and any lateral expansion of a CCR surface impoundment, except for those new CCR surface impoundments that are incised CCR units. If an incised CCR surface impoundment is subsequently modified (e.g., a dike is constructed) such that the CCR unit no longer meets the definition of an incised CCR unit, the CCR unit is subject to the requirements of paragraphs (a)(1) through (4) of this Section.

(1) **Permanent marker.** No later than the initial receipt of CCR, the owner or operator of the CCR unit must

place on or immediately adjacent to the CCR unit a permanent identification marker, at least six feet high showing the permit number of the CCR unit, the name associated with the CCR unit and the name of the owner or operator of the CCR unit.

(2) **Periodic hazard potential classification assessments.**

(A) The owner or operator of the CCR unit must conduct initial and periodic hazard potential classification assessments of the CCR unit according to the timeframes specified in paragraph (f) of this Section. The owner or operator must document the hazard potential classification of each CCR unit as either a high hazard potential CCR surface impoundment, a significant hazard potential CCR surface impoundment, or a low hazard potential CCR surface impoundment. The owner or operator must also document the basis for each hazard potential classification.

(B) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial hazard potential classification and each subsequent periodic classification specified in paragraph (a)(2)(i) of this Section was conducted in accordance with the requirements of this Section.

(C) The owner or operator of the CCR unit must submit the initial hazard potential classification and each subsequent periodic classification to the DEQ for approval.

(3) **Emergency Action Plan (EAP).**

(A) **Development of the plan.** Prior to the initial receipt of CCR in the CCR unit, the owner or operator of a CCR unit determined to be either a high hazard potential CCR surface impoundment or a significant hazard potential CCR surface impoundment under paragraph (a)(2) of this Section must prepare and maintain a written EAP. At a minimum, the EAP must:

(i) Define the events or circumstances involving the CCR unit that represent a safety emergency, along with a description of the procedures that will be followed to detect a safety emergency in a timely manner;

(ii) Define responsible persons, their respective responsibilities, and notification procedures in the event of a safety emergency involving the CCR unit;

(iii) Provide contact information of emergency responders;

(iv) Include a map which delineates the downstream area which would be affected in the event of a CCR unit failure and a physical description of the CCR unit; and

(v) Include provisions for an annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders.

(B) **Amendment of the plan.**

(i) The owner or operator of a CCR unit subject to the requirements of paragraph (a)(3)(A) of this Section may amend the written EAP at any time provided the revised plan is placed in the facility's operating record as required by OAC 252:517-19-1(f)(6). The owner or operator must amend the written EAP whenever there is a change in conditions that would substantially affect the EAP in effect.

(ii) The written EAP must be evaluated, at a minimum, every five years to ensure the information required in paragraph (a)(3)(A) of this Section is accurate. As necessary, the EAP must be updated and a revised EAP placed in the facility's operating record as required by OAC 252:517-19-1(f)(6).

(C) **Changes in hazard potential classification.**

(i) If the owner or operator of a CCR unit determines during a periodic hazard potential assessment that the CCR unit is no longer classified as either a high hazard potential CCR surface impoundment or a significant hazard potential CCR surface impoundment, then the owner or operator of the CCR unit is no longer subject to the requirement to prepare and maintain a written EAP beginning on the date the periodic hazard potential assessment documentation is placed in the facility's operating record as required by OAC 252:517-19-1(f)(5).

(ii) If the owner or operator of a CCR unit classified as a low hazard potential CCR surface impoundment subsequently determines that the CCR unit is properly re-classified as either a high hazard potential CCR surface impoundment or a significant hazard potential CCR surface impoundment, then the owner or operator of the CCR unit must prepare a written EAP for the CCR unit as required by paragraph (a)(3)(A) of this Section within six months of completing such periodic hazard potential assessment.

(D) **PE certification.** The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the written EAP, and any subsequent amendment of the EAP, meets the requirements of paragraph (a)(3) of this Section.

(E) **DEQ approval required.** The owner or operator of the CCR unit must submit the written EAP, and any subsequent amendment of the EAP to the DEQ for approval.

(F) **Activation of the EAP.** The EAP must be implemented once events or circumstances involving the CCR unit that represent a safety emergency are detected, including conditions identified during periodic structural stability assessments, annual inspections, and inspections by a qualified person.

(4) **Slope protection.** The CCR unit and surrounding areas must be designed, constructed, operated, and maintained with vegetated slopes of dikes not to exceed

a height of six inches above the slope of the dike, except for slopes which are protected with an alternate form(s) of slope protection.

(b) **Additional requirements.** The requirements of paragraphs (c) through (e) of this Section apply to an owner or operator of a new CCR surface impoundment and any lateral expansion of a CCR surface impoundment that either:

(1) Has a height of five feet or more and a storage volume of 20 acre-feet or more; or

(2) Has a height of 20 feet or more.

(c) **Design and construction plans.**

(1) No later than the initial receipt of CCR in the CCR unit, the owner or operator unit must compile the design and construction plans for the CCR unit, which must include, to the extent feasible, the information specified in paragraphs (c)(1)(A) through (K) of this Section.

(A) The name and address of the person(s) owning or operating the CCR unit; the name associated with the CCR unit; and the identification number of the CCR unit if one has been assigned by the state.

(B) The location of the CCR unit identified on the most recent U.S. Geological Survey (USGS) 7 $\frac{1}{2}$ minute or 15 minute topographic quadrangle map, or a topographic map of equivalent scale if a USGS map is not available.

(C) A statement of the purpose for which the CCR unit is being used.

(D) The name and size in acres of the watershed within which the CCR unit is located.

(E) A description of the physical and engineering properties of the foundation and abutment materials on which the CCR unit is constructed.

(F) A statement of the type, size, range, and physical and engineering properties of the materials used in constructing each zone or stage of the CCR unit; the method of site preparation and construction of each zone of the CCR unit; and the dates of construction of each successive stage of construction of the CCR unit.

(G) At a scale that details engineering structures and appurtenances relevant to the design, construction, operation, and maintenance of the CCR unit, detailed dimensional drawings of the CCR unit, including a plan view and cross sections of the length and width of the CCR unit, showing all zones, foundation improvements, drainage provisions, spillways, diversion ditches, outlets, instrument locations, and slope protection, in addition to the normal operating pool surface elevation and the maximum pool surface elevation following peak discharge from the inflow design flood, the expected maximum depth of CCR within the CCR surface impoundment, and any identifiable natural or manmade features that could adversely affect operation of the CCR unit due to malfunction or mis-operation.

(H) A description of the type, purpose, and location of existing instrumentation.

(I) Area-capacity curves for the CCR unit.

(J) A description of each spillway and diversion design features and capacities and calculations used in their determination.

(K) The construction specifications and provisions for surveillance, maintenance, and repair of the CCR unit.

(L) Any record or knowledge of structural instability of the CCR unit.

(2) If there is a significant change to any information compiled under paragraph (c)(1) of this Section, the owner or operator of the CCR unit must update the relevant information and place it in the facility's operating record as required by OAC 252:517-19-1(f)(13).

(d) **Periodic structural stability assessments.**

(1) The owner or operator of the CCR unit must conduct initial and periodic structural stability assessments and document whether the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering practices for the maximum volume of CCR and CCR wastewater which can be impounded therein. The assessment must, at a minimum, document whether the CCR unit has been designed, constructed, operated, and maintained with:

(A) Stable foundations and abutments;

(B) Adequate slope protection to protect against surface erosion, wave action, and adverse effects of sudden drawdown;

(C) Dikes mechanically compacted to a density sufficient to withstand the range of loading conditions in the CCR unit;

(D) Vegetated slopes of dikes and surrounding areas not to exceed a height of six inches above the slope of the dike, except for slopes which have an alternate form or forms of slope protection;

(E) A single spillway or a combination of spillways configured as specified in paragraph (d)(1)(E)(i) of this Section. The combined capacity of all spillways must be designed, constructed, operated, and maintained to adequately manage flow during and following the peak discharge from the event specified in paragraph (d)(1)(E)(ii) of this Section.

(i) All spillways must be either:

(I) Of non-erodible construction and designed to carry sustained flows; or

(II) Earth- or grass-lined and designed to carry short-term, infrequent flows at non-erosive velocities where sustained flows are not expected.

(ii) The combined capacity of all spillways must adequately manage flow during and following the peak discharge from a:

(I) Probable maximum flood (PMF) for a high hazard potential CCR surface impoundment; or

(II) 1000-year flood for a significant hazard potential CCR surface impoundment; or

(III) 100-year flood for a low hazard potential CCR surface impoundment.

(F) Hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit that maintain structural integrity and are free of significant deterioration, deformation, distortion, bedding deficiencies, sedimentation, and debris which may negatively affect the operation of the hydraulic structure; and

(G) For CCR units with downstream slopes which can be inundated by the pool of an adjacent water body, such as a river, stream or lake, downstream slopes that maintain structural stability during low pool of the adjacent water body or sudden drawdown of the adjacent water body.

(2) The periodic assessment described in paragraph (d)(1) of this Section must identify any structural stability deficiencies associated with the CCR unit in addition to recommending corrective measures. If a deficiency or a release is identified during the periodic assessment, the owner or operator unit must remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken.

(3) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial assessment and each subsequent periodic assessment was conducted in accordance with the requirements of this Section.

(4) The owner or operator of the CCR unit must submit the initial assessment and each subsequent periodic assessment to the DEQ for approval.

(e) **Periodic safety factor assessments.**

(1) The owner or operator must conduct an initial and periodic safety factor assessments for each CCR unit and document whether the calculated factors of safety for each CCR unit achieve the minimum safety factors specified in paragraphs (e)(1)(A) through (E) of this Section for the critical cross section of the embankment. The critical cross section is the cross section anticipated to be the most susceptible of all cross sections to structural failure based on appropriate engineering considerations, including loading conditions. The safety factor assessments must be supported by appropriate engineering calculations.

(A) The calculated static factor of safety under the end-of-construction loading condition must equal or exceed 1.30. The assessment of this loading condition is only required for the initial safety factor assessment and is not required for subsequent assessments.

(B) The calculated static factor of safety under the long-term, maximum storage pool loading condition must equal or exceed 1.50.

(C) The calculated static factor of safety under the maximum surcharge pool loading condition must equal or exceed 1.40.

(D) The calculated seismic factor of safety must equal or exceed 1.00.

(E) For dikes constructed of soils that have susceptibility to liquefaction, the calculated liquefaction factor of safety must equal or exceed 1.20.

(2) The owner or operator of the CCR unit must obtain a certification from a qualified professional engineer stating that the initial assessment and each subsequent periodic assessment specified in paragraph (e)(1) of this Section meets the requirements of this Section.

(3) The owner or operator of the CCR unit must submit the initial assessment and each subsequent periodic assessment to the DEQ for approval.

(f) **Timeframes for periodic assessments.**

(1) **Initial assessments.** Except as provided by paragraph (f)(2) of this Section, the owner or operator of the CCR unit must complete the initial assessments required by paragraphs (a)(2), (d), and (e) of this Section prior to the initial receipt of CCR in the unit. The owner or operator has completed an initial assessment when the owner or operator has placed the assessment required by paragraphs (a)(2), (d), and (e) of this Section in the facility's operating record as required by OAC 252:517-19-1(f)(5), (10), and (12).

(2) **Frequency for conducting periodic assessments.** The owner or operator of the CCR unit must conduct and complete the assessments required by paragraphs (a)(2), (d), and (e) of this Section every five years. The date of completing the initial assessment is the basis for establishing the deadline to complete the first subsequent assessment. The owner or operator may complete any required assessment prior to the required deadline provided the owner or operator places the completed assessment(s) into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing subsequent assessments is based on the date of completing the previous assessment. For purposes of this paragraph (f)(2), the owner or operator has completed an assessment when the relevant assessment(s) required by paragraphs (a)(2), (d), and (e) of this Section has been placed in the facility's operating record as required by OAC 252:517-19-1(f)(5), (10), and (12).

(3) **Failure to document minimum safety factors during the initial assessment.** Until the date an owner or operator of a CCR unit documents that the calculated factors of safety achieve the minimum safety factors specified in paragraphs (e)(1)(A) through (E) of this Section, the owner or operator is prohibited from placing CCR in such unit.

(4) **Closure of the CCR unit.** An owner or operator of a CCR unit who either fails to complete a timely periodic safety factor assessment or fails to demonstrate minimum safety factors as required by paragraph (e) of this Section is subject to the requirements of OAC 252:517-15-6(c).

(g) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(f), the notification requirements specified in OAC 252:517-19-2(f), and the internet requirements specified in OAC 252:517-19-3(f).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

SUBCHAPTER 13. OPERATIONAL REQUIREMENTS

Section
252:517-13-1. Air criteria
252:517-13-2. Run-on and run-off controls for CCR landfills
252:517-13-3. Hydrologic and hydraulic capacity requirements for CCR surface impoundments
252:517-13-4. Inspection requirements for CCR surface impoundments
252:517-13-5. Inspection requirements for CCR landfills
252:517-13-6. Discharges
252:517-13-7. Leachate collection and management for CCR Landfills

252:517-13-1. Air criteria

(a) **Minimizing airborne CCR.** The owner or operator of a CCR landfill, CCR surface impoundment, or any lateral expansion of a CCR unit must adopt measures that will effectively minimize CCR from becoming airborne at the facility, including CCR fugitive dust originating from CCR units, roads, and other CCR management and material handling activities.

(b) **CCR fugitive dust control plan.** The owner or operator of the CCR unit must prepare and operate in accordance with a CCR fugitive dust control plan as specified in paragraphs (b)(1) through (7) of this Section. This requirement applies in addition to, not in place of, any applicable standards under the Occupational Safety and Health Act.

(1) The CCR fugitive dust control plan must identify and describe the CCR fugitive dust control measures the owner or operator will use to minimize CCR from becoming airborne at the facility. The owner or operator must select, and include in the CCR fugitive dust control plan, the CCR fugitive dust control measures that are most appropriate for site conditions, along with an explanation of how the measures selected are applicable and appropriate for site conditions. Examples of control measures that may be appropriate include: Locating CCR inside an enclosure or partial enclosure; operating a water spray or fogging system; reducing fall distances at material drop points; using wind barriers, compaction, or vegetative covers; establishing and enforcing reduced vehicle speed limits; paving and sweeping roads; covering trucks transporting CCR; reducing or halting operations during high wind events; or applying a daily cover.

(2) If the owner or operator operates a CCR landfill or any lateral expansion of a CCR landfill, the CCR fugitive dust control plan must include procedures to emplace CCR as conditioned CCR. Conditioned CCR means wetting CCR with water to a moisture content that will prevent wind dispersal, but will not result in free liquids. In lieu of water, CCR conditioning may be accomplished with an appropriate chemical dust suppression agent.

(3) The CCR fugitive dust control plan must include procedures to log citizen complaints received by the owner or operator involving CCR fugitive dust events at the facility.

(4) The CCR fugitive dust control plan must include a description of the procedures the owner or operator will follow to periodically assess the effectiveness of the control plan.

(5) The owner or operator of a CCR unit must have prepared an initial CCR fugitive dust control plan for the facility no later than October 19, 2015, or by initial receipt of CCR in any CCR unit at the facility if the owner or operator becomes subject to this Chapter after October 19, 2015. The owner or operator has completed the initial CCR fugitive dust control plan when the plan has been placed in the facility's operating record as required by OAC 252:517-19-1(g)(1).

(6) The owner or operator of a CCR unit subject to the requirements of this Section may amend the written CCR fugitive dust control plan at any time provided the revised plan is placed in the facility's operating record as required by OAC 252:517-19-1(g)(1). The owner or operator must amend the written plan whenever there is a change in conditions that would substantially affect the written plan in effect, such as the construction and operation of a new CCR unit.

(7) The owner or operator must obtain a certification from a qualified professional engineer that the initial CCR fugitive dust control plan, or any subsequent amendment of it, meets the requirements of this Section.

(8) The owner or operator must submit the initial CCR fugitive dust control plan, and any subsequent amendment of it, to the DEQ for approval.

(c) **Annual CCR fugitive dust control report.** The owner or operator of a CCR unit must prepare and submit to DEQ an annual CCR fugitive dust control report that includes a description of the actions taken by the owner or operator to control CCR fugitive dust, a record of all citizen complaints, and a summary of any corrective measures taken. The initial annual report must be completed no later than 14 months after placing the initial CCR fugitive dust control plan in the facility's operating record. The deadline for completing a subsequent report is one year after the date of completing the previous report. For purposes of this paragraph (c), the owner or operator has completed the annual CCR fugitive dust control report when the plan has been placed in the facility's operating record as required by OAC 252:517-19-1(g)(2).

(d) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(g), the notification requirements specified in OAC 252:517-19-2(g), and the internet requirements specified in OAC 252:517-19-3(g).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-13-2. Run-on and run-off controls for CCR landfills

(a) **Run-on/run-off control systems.** The owner or operator of an existing or new CCR landfill or any lateral expansion of a CCR landfill must design, construct, operate, and maintain:

(1) A run-on control system to prevent flow onto the active portion of the CCR unit during the peak discharge from a 24-hour, 25-year storm; and

(2) A run-off control system from the active portion of the CCR unit to collect and control at least the water volume resulting from a 24-hour, 25-year storm.

(b) **Run-off from active portion of CCR unit.** Run-off from the active portion of the CCR unit must be handled in accordance with the surface water requirements under OAC 252:517-13-6.

(c) **Run-on and run-off control system plan.**

(1) **Content of the plan.** The owner or operator must prepare initial and periodic run-on and run-off control system plans for the CCR unit according to the timeframes specified in paragraphs (c)(3) and (4) of this Section. These plans must document how the run-on and run-off control systems have been designed and constructed to meet the applicable requirements of this Section. Each plan must be supported by appropriate engineering calculations. The owner or operator has completed the initial run-on and run-off control system plan when the plan has been placed in the facility's operating record as required by OAC 252:517-19-1(g)(3).

(2) **Amendment of the plan.** The owner or operator may amend the written run-on and run-off control system plan at any time provided the revised plan is placed in the facility's operating record as required by OAC 252:517-19-1(g)(3). The owner or operator must amend the written run-on and run- off control system plan whenever there is a change in conditions that would substantially affect the written plan in effect.

(3) **Timeframes for preparing the initial plan.**

(A) **Existing CCR landfills.** The owner or operator of the CCR unit must prepare the initial run-on and run-off control system plan no later than October 17, 2016.

(B) **New CCR landfills and any lateral expansion of a CCR landfill.** The owner or operator must prepare the initial run-on and run-off control system plan no later than the date of initial receipt of CCR in the CCR unit.

(4) **Frequency for revising the plan.** The owner or operator of the CCR unit must prepare periodic run-on and run-off control system plans required by paragraph (c)(1) of this Section every five years. The date of completing the initial plan is the basis for establishing the deadline to complete the first subsequent plan. The owner or operator may complete any required plan prior to the required deadline provided the owner or operator places the completed plan into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing a subsequent plan is based on the date of completing the previous plan. For purposes of this paragraph (c)(4), the owner or operator has completed a periodic run-on and run-off control system plan when the plan has been placed in the facility's operating record as required by OAC 252:517-19-1(g)(3).

(5) **PE certification.** The owner or operator must obtain a certification from a qualified professional engineer stating that the initial and periodic run-on and run-off control system plans meet the requirements of this Section.

(6) **DEQ approval required.** The owner or operator must submit the initial and periodic run-on and run-off control system plans, and any subsequent amendment of the plans, to the DEQ for approval.

(d) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(g), the notification requirements specified in OAC 252:517-19-2(g), and the internet requirements specified in OAC 252:517-19-3(g).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-13-3. Hydrologic and hydraulic capacity requirements for CCR surface impoundments

(a) **Inflow design flood control system.** The owner or operator of an existing or new CCR surface impoundment or any lateral expansion of a CCR surface impoundment must design, construct, operate, and maintain an inflow design flood control system as specified in paragraphs (a)(1) and (2) of this Section.

(1) The inflow design flood control system must adequately manage flow into the CCR unit during and following the peak discharge of the inflow design flood specified in paragraph (a)(3) of this Section.

(2) The inflow design flood control system must adequately manage flow from the CCR unit to collect and control the peak discharge resulting from the inflow design flood specified in paragraph (a)(3) of this Section.

(3) The inflow design flood is:

(A) For a high hazard potential CCR surface impoundment, as determined under OAC 252:517-11-4(a)(2) or OAC 252:517-11-5(a)(2), the probable maximum flood;

(B) For a significant hazard potential CCR surface impoundment, as determined under OAC 252:517-11-4(a)(2) or OAC 252:517-11-5(a)(2), the 1,000-year flood;

(C) For a low hazard potential CCR surface impoundment, as determined under OAC 252:517-11-4(a)(2) or OAC 252:517-11-5(a)(2), the 100-year flood; or

(D) For an incised CCR surface impoundment, the 25-year flood.

(b) **Discharges.** Discharge from the CCR unit must be handled in accordance with the surface water requirements under OAC 252:517-13-6.

(c) **Inflow design flood control system plan.**

(1) **Content of the plan.** The owner or operator must prepare initial and periodic inflow design flood control system plans for the CCR unit according to the timeframes specified in paragraphs (c)(3) and (4) of this Section. These plans must document how the inflow design flood control system has been designed and constructed to meet the requirements of this Section. Each plan must be supported by appropriate engineering calculations. The owner or operator of the CCR unit has completed the inflow design flood control system plan when the plan has

been placed in the facility's operating record as required by OAC 252:517-19-1(g)(4).

(2) **Amendment of the plan.** The owner or operator of the CCR unit may amend the written inflow design flood control system plan at any time provided the revised plan is placed in the facility's operating record as required by OAC 252:517-19-1(g)(4). The owner or operator must amend the written inflow design flood control system plan whenever there is a change in conditions that would substantially affect the written plan in effect.

(3) **Timeframes for preparing the initial plan.**

(A) **Existing CCR surface impoundments.** The owner or operator of the CCR unit must prepare the initial inflow design flood control system plan no later than October 17, 2016.

(B) **New CCR surface impoundments and any lateral expansion of a CCR surface impoundment.** The owner or operator must prepare the initial inflow design flood control system plan no later than the date of initial receipt of CCR in the CCR unit.

(4) **Frequency for revising the plan.** The owner or operator must prepare periodic inflow design flood control system plans required by paragraph (c)(1) of this Section every five years. The date of completing the initial plan is the basis for establishing the deadline to complete the first periodic plan. The owner or operator may complete any required plan prior to the required deadline provided the owner or operator places the completed plan into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing a subsequent plan is based on the date of completing the previous plan. For purposes of this paragraph (c)(4), the owner or operator has completed an inflow design flood control system plan when the plan has been placed in the facility's operating record as required by OAC 252:517-19-1(g)(4).

(5) **PE certification.** The owner or operator must obtain a certification from a qualified professional engineer stating that the initial and periodic inflow design flood control system plans meet the requirements of this Section.

(6) **DEQ approval required.** The owner or operator must submit the initial and periodic inflow design flood control system plans, and any amendment to the plans, to the DEQ for approval.

(d) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(g), the notification requirements specified in OAC 252:517-19-2(g), and the internet requirements specified in OAC 252:517-19-3(g).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-13-4. Inspection requirements for CCR surface impoundments

(a) **Inspections by a qualified person.**

(1) **Inspection intervals.** All CCR surface impoundments and any lateral expansion of a CCR surface impoundment must be examined by a qualified person as follows:

(A) At intervals not exceeding seven days, inspect for any appearances of actual or potential structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or safety of the CCR unit;

(B) At intervals not exceeding seven days, inspect the discharge of all outlets of hydraulic structures which pass underneath the base of the surface impoundment or through the dike of the CCR unit for abnormal discoloration, flow or discharge of debris or sediment; and

(C) At intervals not exceeding 30 days, monitor all CCR unit instrumentation.

(D) The results of the inspection by a qualified person must be recorded in the facility's operating record as required by OAC 252:517-19-1(g)(5).

(2) **Timeframes for inspections by a qualified person.**

(A) **Existing CCR surface impoundments.** The owner or operator of the CCR unit must have initiated the inspections required under paragraph (a) of this Section no later than October 19, 2015.

(B) **New CCR surface impoundments and any lateral expansion of a CCR surface impoundment.** The owner or operator of the CCR unit must initiate the inspections required under paragraph (a) of this Section upon initial receipt of CCR by the CCR unit.

(b) **Annual inspections by a qualified professional engineer.**

(1) **Inspection requirements.** If the existing or new CCR surface impoundment or any lateral expansion of the CCR surface impoundment is subject to the periodic structural stability assessment requirements under OAC 252:517-11-4(d) or OAC 252:517-11-5(d), the CCR unit must additionally be inspected on a periodic basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. The inspection must, at a minimum, include:

(A) A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (e.g., CCR unit design and construction information required by OAC 252:517-11-4(c)(1) and OAC 252:517-11-5(c)(1), previous periodic structural stability assessments required under OAC 252:517-11-4(d) and OAC 252:517-11-5(d), the results of inspections by a qualified person, and results of previous annual inspections);

(B) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit and appurtenant structures; and

(C) A visual inspection of any hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit for structural integrity and continued safe and reliable operation.

(2) **Inspection report.** The qualified professional engineer must prepare a report following each inspection that addresses the following:

(A) Any changes in geometry of the impounding structure since the previous annual inspection;

(B) The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection;

(C) The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection;

(D) The storage capacity of the impounding structure at the time of the inspection;

(E) The approximate volume of the impounded water and CCR at the time of the inspection;

(F) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit and appurtenant structures; and

(G) Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.

(3) **Timeframes for conducting the initial inspection.**

(A) **Existing CCR surface impoundments.** The owner or operator of the CCR unit must have completed the initial inspection required by paragraphs (b)(1) and (2) of this Section no later than January 19, 2016.

(B) **New CCR surface impoundments and any lateral expansion of a CCR surface impoundment.** The owner or operator of the CCR unit must complete the initial annual inspection required by paragraphs (b)(1) and (2) of this Section is completed no later than 14 months following the date of initial receipt of CCR in the CCR unit.

(4) **Frequency of inspections.**

(A) Except as provided for in paragraph (b)(4)(B) of this Section, the owner or operator of the CCR unit must conduct the inspection required by paragraphs (b)(1) and (2) of this Section on an annual basis. The date of completing the initial inspection report is the basis for establishing the deadline to complete the first subsequent inspection. Any required inspection may be conducted prior to the required deadline provided the owner or operator places the completed inspection report into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing subsequent inspection reports is based on the date of completing the previous inspection report. For purposes of this Section, the owner or operator has completed an inspection when the inspection report has been placed in the facility's operating record as required by OAC 252:517-19-1(g)(6).

(B) In any calendar year in which both the periodic inspection by a qualified professional engineer and the quinquennial (occurring every five years) structural stability assessment by a qualified professional engineer required by OAC 252:517-11-4(d) and OAC 252:517-11-5(d) are required to be completed, the annual inspection is not required, provided the structural stability assessment is completed during the calendar year. If the annual inspection is not conducted in a year as provided by this paragraph (b)(4)(B), the deadline for completing the next annual inspection is one year from the date of completing the quinquennial structural stability assessment.

(5) **Deficiency identified; corrective measures taken.** If a deficiency or release is identified during an inspection, the owner or operator must remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken.

(6) **DEQ notification.** The DEQ shall be notified is a deficiency is identified in (5) above and provided documentation of corrective measures.

(c) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(g), the notification requirements specified in OAC 252:517-19-2(g), and the internet requirements specified in OAC 252:517-19-3(g).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-13-5. Inspection requirements for CCR landfills

(a) **Inspections by a qualified person.**

(1) **Applicability.** All CCR landfills and any lateral expansion of a CCR landfill must be examined by a qualified person as follows:

(A) At intervals not exceeding seven days, inspect for any appearances of actual or potential structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or safety of the CCR unit; and

(B) The results of the inspection by a qualified person must be recorded in the facility's operating record as required by OAC 252:517-19-1(g)(8).

(2) **Timeframes.** Timeframes for inspections by a qualified person.

(A) **Existing CCR landfills.** The owner or operator of the CCR unit must have initiated the inspections required under paragraph (a) of this Section no later than October 19, 2015.

(B) **New CCR landfills and any lateral expansion of a CCR landfill.** The owner or operator of the CCR unit must initiate the inspections required under paragraph (a) of this Section upon initial receipt of CCR by the CCR unit.

(b) **Annual inspections by a qualified professional engineer.**

(1) **Inspection requirements.** Existing and new CCR landfills and any lateral expansion of a CCR landfill must be inspected on a periodic basis by a qualified professional engineer to ensure that the design, construction, operation, and maintenance of the CCR unit is consistent with recognized and generally accepted good engineering standards. The inspection must, at a minimum, include:

(A) A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (e.g., the results of inspections by a qualified person, and results of previous annual inspections); and

(B) A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit.

(2) **Inspection report.** The qualified professional engineer must prepare a report following each inspection that addresses the following:

(A) Any changes in geometry of the structure since the previous annual inspection;

(B) The approximate volume of CCR contained in the unit at the time of the inspection;

(C) Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit; and

(D) Any other change(s) which may have affected the stability or operation of the CCR unit since the previous annual inspection.

(3) **Timeframes for conducting the initial inspection.**

(A) **Existing CCR landfills.** The owner or operator of the CCR unit must complete the initial inspection required by paragraphs (b)(1) and (2) of this Section no later than January 19, 2016.

(B) **New CCR landfills and any lateral expansion of a CCR landfill.** The owner or operator of the CCR unit must complete the initial annual inspection required by paragraphs (b)(1) and (2) of this Section no later than 14 months following the date of initial receipt of CCR in the CCR unit.

(4) **Frequency of inspections.** The owner or operator of the CCR unit must conduct the inspection required by paragraphs (b)(1) and (2) of this Section on an annual basis. The date of completing the initial inspection report is the basis for establishing the deadline to complete the first subsequent inspection. Any required inspection may be conducted prior to the required deadline provided the owner or operator places the completed inspection report into the facility's operating record within a reasonable amount of time. In all cases, the deadline for completing subsequent inspection reports is based on the date of completing the previous inspection report. For purposes of this Section, the owner or operator has completed an inspection when the inspection report has been placed in the facility's operating record as required by OAC 252:517-19-1(g)(9).

(5) **Deficiency identified; corrective measures taken.** If a deficiency or release is identified during an inspection, the owner or operator must remedy the deficiency or release as soon as feasible and prepare documentation detailing the corrective measures taken.

(6) **DEQ notification.** The DEQ shall be notified if a deficiency is identified in (5) above and provided documentation of corrective measures.

(c) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(g), the notification requirements specified in OAC 252:517-19-2(g), and the internet requirements specified in OAC 252:517-19-3(g).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-13-6. Discharges

(a) **All CCR units.** All CCR units shall be operated to:

(1) prevent the discharge of contaminated stormwater unless the proper permit is obtained from the DEQ's Water Quality Division;

(2) prevent the discharge of pollutants that violates any requirements of the federal Clean Water Act, including, but not limited to, the Oklahoma Pollutant Discharge Elimination System (OPDES) requirements;

(3) prevent the discharge of a non-point source of pollution that violates any requirement of an area-wide or State-wide water quality management plan that has been approved in accordance with the federal Clean Water Act; and

(4) comply with all requirements of their OPDES permit, if applicable. A copy of the OPDES permit shall be maintained in the operating record.

(b) **Stormwater permit.** If required by OAC 252:606 (Oklahoma Pollutant Discharge Elimination System Standards - OPDES), active CCR units shall have:

(1) a Stormwater Pollution Prevention Plan (SWPPP) and a General Permit for Stormwater Discharges. A copy of the SWPPP and General Permit shall be maintained in the operating record; and

(2) an OPDES stormwater permit for construction sites for any on- or off-site soil borrow areas of one acre or more.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-13-7. Leachate collection and management for CCR Landfills

(a) **Corrective action.**

(1) **Plan.** In the event the leachate collection system fails to perform as designed, and approved by the DEQ, a corrective action plan shall be submitted to the DEQ within 30 days from the discovery of the failure.

(2) **Implementation.** The corrective action plan shall be implemented within 30 days of DEQ approval.

(b) **Cleanout and maintenance of the leachate collection system.**

(1) **Frequency.** The leachate collection header pipes shall be cleaned out after placement of the protective layer, again after placement of the first lift of waste, and once per year thereafter.

(2) **Routine inspections.** The leachate collection system shall be inspected at least quarterly to ensure proper operation.

(c) **Leachate management.** Leachate shall be managed in accordance with a plan approved by DEQ in one or more of the methods identified in this Section and in a manner that will not cause contamination.

(1) **Storage.**

(A) **Above-ground tanks.** Above-ground storage tanks used to store leachate shall be equipped with:

(i) adequate berming to contain the entire contents of the largest tank in the system; and either a composite liner made of two feet (2') of recompacted clay with the hydraulic conductivity of 1.0 x 10-7 cm/sec overlain by a 60 mil HDPE liner; or

(ii) a DEQ approved alternative liner that will prevent infiltration of fluid.

(B) **Underground tanks.** Underground tanks used to store leachate shall be constructed in accordance with the Oklahoma Corporation Commission's General Requirements for Underground Storage Tank Systems, OAC 165-25, Subchapter 1, Part 8.

(C) **Surface impoundments.** A surface impoundment used to store leachate shall have a composite liner constructed in accordance with the liner requirements of this Section.

(i) **Run-on control.** Surface water run-on control measures shall be provided.

(ii) **Freeboard.** A minimum three feet of freeboard shall be maintained.

(2) **POTW.**

(A) **POTW approval required.** Leachate may be discharged from the disposal facility into a POTW provided prior written approval from the POTW has been obtained.

(B) **Additional requirements.** Such discharges shall comply with any additional requirements of the POTW.

(C) **Recordkeeping.** A copy of the POTW approval shall be placed in the operating record.

(3) **Oklahoma Pollutant Discharge Elimination System (OPDES).**

(A) **Permit required.** Leachate may be discharged from the disposal facility provided an OPDES permit from the Water Quality Division of the DEQ has been obtained for such discharge.

(B) **Copy of permit.** A copy of the OPDES permit shall be maintained in the operating record.

(C) **Comply with permit.** Such discharges shall comply with the provisions of the OPDES permit.

(4) **Other.** Plans for alternative methods of leachate management may be approved by the DEQ.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

SUBCHAPTER 15. CLOSURE AND POST-CLOSURE CARE

Section

252:517-15-1. Performance standard
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252:517-15-6. Closure or retrofit of CCR units
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252:517-15-9. Post-closure care requirements
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252:517-15-1. Performance standard

The facility shall be closed in accordance with the approved closure plan and in a manner that minimizes the need for further maintenance and controls and minimizes post-closure escape of CCR into the environment.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-15-2. DEQ Notification

The DEQ shall be notified in writing prior to beginning final closure of a CCR unit.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-15-3. Certification of final closure

(a) **Certification requirements.** A Certification of Final Closure shall be submitted to the DEQ after completion of final closure. The Certification shall:

(1) be signed by the owner/operator;

(2) state that the facility was closed according to the approved closure plan, the permit, and applicable rules;

(3) contain a closure report with related drawings, plans or specifications describing how closure was performed; and

(4) indicate whether inspection of groundwater or surface water monitoring has shown the presence of elevated levels of any constituent or if any evidence of contamination related to site operations has been found and, if so, what corrective measures were taken.

(b) **Final closure map.** In addition to the requirements of (a) of this Section, a final closure map shall be included in the Certification of Final Closure. The final closure map shall show as-built conditions at the time of closure, including but not limited to:

(1) final contours of the entire site;

(2) the permit boundary and boundaries of CCR units;
(3) the location of groundwater monitoring wells;
(4) the location of leachate management systems or surface impoundments;
(5) the location of any permanent surface drainage structures;
(6) aesthetic enhancements; and
(7) other relevant information.

(c) **PE certification.** The Certification of Final Closure shall be prepared and sealed by an independent qualified professional engineer licensed in the State of Oklahoma.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-15-4. Final closure

(a) **DEQ approval required.** The DEQ must approve the final closure of a CCR unit before the post-closure period can begin.

(b) **Extension of closure period.** The DEQ may extend the closure period and require the posting of additional financial assurance if:

(1) any testing shows the confirmed presence of elevated levels of any constituent;
(2) any evidence of contamination related to site operations has been found; or
(3) final closure of the site is found to be inadequate.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-15-5. Inactive CCR surface impoundments

(a) **Applicability.** Except as provided by paragraph (b) of this Section, inactive CCR surface impoundments are subject to all of the requirements of this Chapter applicable to existing CCR surface impoundments.

(b) **Inactive CCR surface impoundment exemption.** An owner or operator of an inactive CCR surface impoundment that completes closure of such CCR unit, and meets all of the requirements of either paragraphs (b)(1) through (4) of this Section or paragraph (b)(5) of this Section no later than April 17, 2018, is exempt from all other requirements of this Chapter.

(1) **Closure by leaving CCR in place.** If the owner or operator of the inactive CCR surface impoundment elects to close the CCR surface impoundment by leaving CCR in place, the owner or operator must ensure that, at a minimum, the CCR unit is closed in a manner that will:

(A) Control, minimize or eliminate, to the maximum extent feasible, post-closure infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters or to the atmosphere;
(B) Preclude the probability of future impoundment of water, sediment, or slurry;
(C) Include measures that provide for major slope stability to prevent the sloughing or movement of the final cover system; and
(D) Minimize the need for further maintenance of the CCR unit.

(2) **Free liquids; stabilization.** The owner or operator of the inactive CCR surface impoundment must meet the requirements of paragraphs (b)(2)(A) and (B) of this Section prior to installing the final cover system required under paragraph (b)(3) of this Section.

(A) Free liquids must be eliminated by removing liquid wastes or solidifying the remaining wastes and waste residues.
(B) Remaining wastes must be stabilized sufficient to support the final cover system.

(3) **Final cover system design.** The owner or operator must install a final cover system that is designed to minimize infiltration and erosion, and at a minimum, meets the requirements of paragraph (b)(3)(A) of this Section, or the requirements of an alternative final cover system specified in paragraph (b)(3)(B) of this Section.

(A) The final cover system must be designed and constructed to meet the criteria specified in paragraphs (b)(3)(A)(i) through (iv) of this Section.

(i) The permeability of the final cover system must be less than or equal to the permeability of any bottom liner system or natural subsoils present, or a permeability no greater than 1×10^{-5} centimeters/second, whichever is less.
(ii) The infiltration of liquids through the CCR unit must be minimized by the use of an infiltration layer that contains a minimum of 18 inches of earthen material.
(iii) The erosion of the final cover system must be minimized by the use of an erosion layer that contains a minimum of six inches of earthen material that is capable of sustaining native plant growth.
(iv) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.

(B) The owner or operator may select an alternative final cover system design, provided the alternative final cover system is designed and constructed to meet the criteria in paragraphs (b)(3)(B)(i) through (iii) of this Section.

(i) The design of the final cover system must include an infiltration layer that achieves an equivalent reduction in infiltration as the infiltration layer specified in paragraphs (b)(3)(A)(i) and (ii) of this Section.
(ii) The design of the final cover system must include an erosion layer that provides equivalent protection from wind or water erosion as the erosion layer specified in paragraph (b)(3)(A)(iii) of this Section.
(iii) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.

(4) **PE certification of final cover.** The owner or operator of the CCR surface impoundment must obtain a written certification from a qualified professional engineer stating that the design of the final cover system meets

either the requirements of paragraphs (b)(3)(A) or (B) of this Section.

(5) **Closure through removal of CCR.** The owner or operator may alternatively elect to close an inactive CCR surface impoundment by removing and decontaminating all areas affected by releases from the CCR surface impoundment. CCR removal and decontamination of the CCR surface impoundment are complete when all CCR in the inactive CCR surface impoundment is removed, including the bottom liner of the CCR unit.

(6) **PE certification of timeline.** The owner or operator of the CCR surface impoundment must obtain a written certification from a qualified professional engineer that closure of the CCR surface impoundment under either paragraphs (b)(1) through (4) or (b)(5) of this Section is technically feasible within the timeframe in paragraph (b) of this Section.

(7) **Failure to complete closure.** If the owner or operator of the CCR surface impoundment fails to complete closure of the inactive CCR surface impoundment within the timeframe in paragraph (b) of this Section, the CCR unit must comply with all of the requirements applicable to existing CCR surface impoundments under this Chapter.

(c) **Required notices and progress reports.** An owner or operator of an inactive CCR surface impoundment that closes in accordance with paragraph (b) of this Section must complete the notices and progress reports specified in paragraphs (c)(1) through (3) of this Section.

(1) The owner or operator must prepare and place in the facility's operating record a notification of intent to initiate closure of the CCR surface impoundment. The notification must state that the CCR surface impoundment is an inactive CCR surface impoundment closing under the requirements of paragraph (b) of this Section. The notification must also include a narrative description of how the CCR surface impoundment will be closed, a schedule for completing closure activities, and the required certifications under paragraphs (b)(4) and (6) of this Section, if applicable.

(2) The owner or operator must prepare periodic progress reports summarizing the progress of closure implementation, including a description of the actions completed to date, any problems encountered and a description of the actions taken to resolve the problems, and projected closure activities for the upcoming year. The annual progress reports must be completed according to the following schedule and submitted to the DEQ:

(A) The first annual progress report must be prepared no later than 13 months after completing the notification of intent to initiate closure required by paragraph (c)(1) of this Section.

(B) The second annual progress report must be prepared no later than 12 months after completing the first progress report required by paragraph (c)(2)(A) of this Section.

(C) The owner or operator has completed the progress reports specified in paragraph (c)(2) of this Section when the reports are placed in the facility's operating record as required by OAC 252:517-19-1(i)(2).

(3) The owner or operator must prepare and place in the facility's operating record a notification of completion of closure of the CCR surface impoundment. The notification must be submitted within 60 days of completing closure of the CCR surface impoundment and must include a written certification from a qualified professional engineer stating that the CCR surface impoundment was closed in accordance with the requirements of either paragraph (b)(1) through (4) or (b)(5) of this Section.

(d) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(i), the notification requirements specified in OAC 252:517-19-2(i), and the internet requirements specified in OAC 252:517-19-3(i).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-15-6. Closure or retrofit of CCR units

(a) **Existing unlined CCR surface impoundment.** The owner or operator of an existing unlined CCR surface impoundment, as determined under OAC 252:517-11-2(a), is subject to the requirements of paragraph (a)(1) of this Section.

(1) Except as provided by paragraph (a)(3) of this Section, if at any time after October 19, 2015 an owner or operator of an existing unlined CCR surface impoundment determines in any sampling event that the concentrations of one or more constituents listed in Appendix B to this Chapter are detected at statistically significant levels above the groundwater protection standard established under OAC 252:517-9-6(h) for such CCR unit, within six months of making such determination, the owner or operator of the existing unlined CCR surface impoundment must cease placing CCR and non-CCR wastestreams into such CCR surface impoundment and either retrofit or close the CCR unit in accordance with the requirements of OAC 252:517-15-7.

(2) An owner or operator of an existing unlined CCR surface impoundment that closes in accordance with paragraph (a)(1) of this Section must include a statement in the notification required under OAC 252:517-15-7(g) or (k)(5) that the CCR surface impoundment is closing or retrofitting under the requirements of paragraph (a)(1) of this Section.

(3) The timeframe specified in paragraph (a)(1) of this Section does not apply if the owner or operator complies with the alternative closure procedures specified in OAC 252:517-15-8.

(4) At any time after the initiation of closure under paragraph (a)(1) of this Section, the owner or operator may cease closure activities and initiate a retrofit of the CCR unit in accordance with the requirements of OAC 252:517-15-7(k).

(b) **Existing CCR surface impoundment.** The owner or operator of an existing CCR surface impoundment is subject to the requirements of paragraph (b)(1) of this Section.

(1) Except as provided by paragraph (b)(4) of this Section, within six months of determining that an existing CCR surface impoundment has not demonstrated compliance with any location standard specified in OAC 252:517-5-1(a), OAC 252:517-5-2(a), OAC 252:517-5-3(a), OAC 252:517-5-4(a), and OAC 252:517-5-5(a), the owner or operator of the CCR surface impoundment must cease placing CCR and non-CCR wastestreams into such CCR unit and close the CCR unit in accordance with the requirements of OAC 252:517-15-7.

(2) Within six months of either failing to complete the initial or any subsequent periodic safety factor assessment required by OAC 252:517-11-4(e) by the deadlines specified in OAC 252:517-11-4(f)(1) through (3) or failing to document that the calculated factors of safety for the existing CCR surface impoundment achieve the minimum safety factors specified in OAC 252:517-11-4(e)(1)(i) through (iv), the owner or operator of the CCR surface impoundment must cease placing CCR and non-CCR wastestreams into such CCR unit and close the CCR unit in accordance with the requirements of OAC 252:517-15-7.

(3) An owner or operator of an existing CCR surface impoundment that closes in accordance with paragraphs (b)(1) or (2) of this Section must include a statement in the notification required under OAC 252:517-15-7(g) that the CCR surface impoundment is closing under the requirements of paragraphs (b)(1) or (2) of this Section.

(4) The timeframe specified in paragraph (b)(1) of this Section does not apply if the owner or operator complies with the alternative closure procedures specified in OAC 252:517-15-8.

(c) **New CCR surface impoundment.** The owner or operator of a new CCR surface impoundment is subject to the requirements of paragraph (c)(1) of this Section.

(1) Within six months of either failing to complete the initial or any subsequent periodic safety factor assessment required by OAC 252:517-11-5(e) by the deadlines specified in OAC 252:517-11-5(f)(1) through (3) or failing to document that the calculated factors of safety for the new CCR surface impoundment achieve the minimum safety factors specified in OAC 252:517-11-5(e)(1)(i) through (v), the owner or operator of the CCR surface impoundment must cease placing CCR and non-CCR wastestreams into such CCR unit and close the CCR unit in accordance with the requirements of OAC 252:517-15-7.

(2) An owner or operator of a new CCR surface impoundment that closes in accordance with paragraph (c)(1) of this Section must include a statement in the notification required under OAC 252:517-15-7(g) that the CCR surface impoundment is closing under the requirements of paragraph (c)(1) of this Section.

(d) **Existing CCR landfill.** The owner or operator of an existing CCR landfill is subject to the requirements of paragraph (d)(1) of this Section.

(1) Except as provided by paragraph (d)(3) of this Section, within six months of determining that an existing CCR landfill has not demonstrated compliance with the location restriction for unstable areas specified in OAC 252:517-5-5(a), the owner or operator of the CCR unit must cease placing CCR and non-CCR waste streams into such CCR landfill and close the CCR unit in accordance with the requirements of OAC 252:517-15-7.

(2) An owner or operator of an existing CCR landfill that closes in accordance with paragraph (d)(1) of this Section must include a statement in the notification required under OAC 252:517-15-7(g) that the CCR landfill is closing under the requirements of paragraph (d)(1) of this Section.

(3) The timeframe specified in paragraph (d)(1) of this Section does not apply if the owner or operator complies with the alternative closure procedures specified in OAC 252:517-15-8.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-15-7. Criteria for conducting the closure or retrofit of CCR units

(a) **Closure of CCR unit; retrofit of CCR surface impoundment.** Closure of a CCR landfill, CCR surface impoundment, or any lateral expansion of a CCR unit must be completed either by leaving the CCR in place and installing a final cover system or through removal of the CCR and decontamination of the CCR unit, as described in paragraphs (b) through (j) of this Section. Retrofit of a CCR surface impoundment must be completed in accordance with the requirements in paragraph (k) of this Section.

(b) **Written closure plan.**

(1) **Content of the plan.** The owner or operator of a CCR unit must prepare a written closure plan that describes the steps necessary to close the CCR unit at any point during the active life of the CCR unit consistent with recognized and generally accepted good engineering practices. The written closure plan must include, at a minimum, the information specified in paragraphs (b)(1)(A) through (F)of this Section.

(A) A narrative description of how the CCR unit will be closed in accordance with this Section.

(B) If closure of the CCR unit will be accomplished through removal of CCR from the CCR unit, a description of the procedures to remove the CCR and decontaminate the CCR unit in accordance with paragraph (c) of this Section.

(C) If closure of the CCR unit will be accomplished by leaving CCR in place, a description of the final cover system, designed in accordance with paragraph (d) of this Section, and the methods and procedures to be used to install the final cover. The closure plan must also discuss how the final cover system will achieve the performance standards specified in paragraph (d) of this Section.

(D) An estimate of the maximum inventory of CCR ever on-site over the active life of the CCR unit.

(E) An estimate of the largest area of the CCR unit ever requiring a final cover as required by paragraph (d) of this Section at any time during the CCR unit's active life.

(F) A schedule for completing all activities necessary to satisfy the closure criteria in this Section, including an estimate of the year in which all closure activities for the CCR unit will be completed. The schedule should provide sufficient information to describe the sequential steps that will be taken to close the CCR unit, including identification of major milestones such as coordinating with and obtaining necessary approvals and permits from other agencies, the dewatering and stabilization phases of CCR surface impoundment closure, or installation of the final cover system, and the estimated timeframes to complete each step or phase of CCR unit closure. When preparing the written closure plan, if the owner or operator of a CCR unit estimates that the time required to complete closure will exceed the timeframes specified in paragraph (f)(1) of this Section, the written closure plan must include the site-specific information, factors and considerations that would support any time extension sought under paragraph (f)(2) of this Section.

(2) **Timeframes for preparing the initial written closure plan.**

(A) Existing CCR landfills and existing CCR surface impoundments. No later than October 17, 2016, the owner or operator of the CCR unit must prepare an initial written closure plan consistent with the requirements specified in paragraph (b)(1) of this Section.

(B) New CCR landfills and new CCR surface impoundments, and any lateral expansion of a CCR unit. No later than the date of the initial receipt of CCR in the CCR unit, the owner or operator must prepare an initial written closure plan consistent with the requirements specified in paragraph (b)(1) of this Section.

(C) The owner or operator has completed the written closure plan when the plan, including the certification required by paragraph (b)(4) of this Section, has been placed in the facility's operating record as required by OAC 252:517-19-1(i)(4).

(3) **Amendment of a written closure plan.**

(A) The owner or operator may amend the initial or any subsequent written closure plan developed pursuant to paragraph (b)(1) of this Section at any time.

(B) The owner or operator must amend the written closure plan whenever:

(i) There is a change in the operation of the CCR unit that would substantially affect the written closure plan in effect; or

(ii) Before or after closure activities have commenced, unanticipated events necessitate a revision of the written closure plan.

(C) The owner or operator must amend the closure plan at least 60 days prior to a planned change in the operation of the facility or CCR unit, or no later than 60 days after an unanticipated event requires the need to revise an existing written closure plan. If a written closure plan is revised after closure activities have commenced for a CCR unit, the owner or operator must amend the current closure plan no later than 30 days following the triggering event.

(4) **PE certification.** The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the initial and any amendment of the written closure plan meets the requirements of this Section.

(5) **DEQ approval required.** The owner or operator of the CCR unit must submit the initial closure plan and any amendment of the closure plan to the DEQ for approval.

(c) **Closure by removal of CCR.** An owner or operator may elect to close a CCR unit by removing and decontaminating all areas affected by releases from the CCR unit. CCR removal and decontamination of the CCR unit are complete when constituent concentrations throughout the CCR unit and any areas affected by releases from the CCR unit have been removed and groundwater monitoring concentrations do not exceed the groundwater protection standard established pursuant to OAC 252:517-9-6(h) for constituents listed in Appendix B to this Chapter.

(d) **Closure performance standard when leaving CCR in place.**

(1) **Closure standards.** The owner or operator of a CCR unit must ensure that, at a minimum, the CCR unit is closed in a manner that will:

(A) Control, minimize or eliminate, to the maximum extent feasible, post-closure infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters or to the atmosphere;

(B) Preclude the probability of future impoundment of water, sediment, or slurry;

(C) Include measures that provide for major slope stability to prevent the sloughing or movement of the final cover system during the closure and post-closure care period;

(D) Minimize the need for further maintenance of the CCR unit; and

(E) Be completed in the shortest amount of time consistent with recognized and generally accepted good engineering practices.

(2) **Drainage and stabilization of CCR surface impoundments.** The owner or operator of a CCR surface impoundment or any lateral expansion of a CCR surface impoundment must meet the requirements of paragraphs (d)(2)(A) and (B) of this Section prior to installing the final cover system required under paragraph (d)(3) of this Section.

(A) Free liquids must be eliminated by removing liquid wastes or solidifying the remaining wastes and waste residues.

(B) Remaining wastes must be stabilized sufficient to support the final cover system.

(3) **Final cover system.** If a CCR unit is closed by leaving CCR in place, the owner or operator must install a final cover system that is designed to minimize infiltration and erosion, and at a minimum, meets the requirements of

paragraph (d)(3)(A) of this Section, or the requirements of the alternative final cover system specified in paragraph (d)(3)(B) of this Section.

(A) The final cover system must be designed and constructed to meet the criteria in paragraphs (d)(3)(A)(i) through (iv) of this Section. The design of the final cover system must be included in the written closure plan required by paragraph (b) of this Section.

(i) The permeability of the final cover system must be less than or equal to the permeability of any bottom liner system or natural subsoils present, or a permeability no greater than 1×10^{-5} cm/sec, whichever is less.

(ii) The infiltration of liquids through the closed CCR unit must be minimized by the use of an infiltration layer that contains a minimum of 18 inches of earthen material.

(iii) The erosion of the final cover system must be minimized by the use of an erosion layer that contains a minimum of six inches of earthen material that is capable of sustaining native plant growth.

(iv) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.

(B) The owner or operator may select an alternative final cover system design, provided the alternative final cover system is designed and constructed to meet the criteria in paragraphs (f)(3)(B)(i) through (iv) of this Section. The design of the final cover system must be included in the written closure plan required by paragraph (b) of this Section.

(i) The design of the final cover system must include an infiltration layer that achieves an equivalent reduction in infiltration as the infiltration layer specified in paragraphs (d)(3)(A)(i) and (ii) of this Section.

(ii) The design of the final cover system must include an erosion layer that provides equivalent protection from wind or water erosion as the erosion layer specified in paragraph (d)(3)(A)(iii) of this Section.

(iii) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.

(C) The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the design of the final cover system meets the requirements of this Section.

(e) **Initiation of closure activities.** Except as provided for in paragraph (e)(4) of this Section and OAC 252:517-15-8, the owner or operator of a CCR unit must commence closure of the CCR unit no later than the applicable timeframes specified in either paragraph (e)(1) or (2) of this Section.

(1) **Commencing closure.** The owner or operator must commence closure of the CCR unit no later than 30 days after the date on which the CCR unit either:

(A) Receives the known final receipt of waste, either CCR or any non-CCR waste stream; or

(B) Removes the known final volume of CCR from the CCR unit for the purpose of beneficial use of CCR.

(2) **Conditions.**

(A) Except as provided by paragraph (e)(2)(B) of this Section, the owner or operator must commence closure of a CCR unit that has not received CCR or any non-CCR waste stream or is no longer removing CCR for the purpose of beneficial use within two years of the last receipt of waste or within two years of the last removal of CCR material for the purpose of beneficial use.

(B) Notwithstanding paragraph (e)(2)(A) of this Section, the owner or operator of the CCR unit may secure an additional two years to initiate closure of the idle unit provided the owner or operator provides written documentation that the CCR unit will continue to accept wastes or will start removing CCR for the purpose of beneficial use. The documentation must be supported by, at a minimum, the information specified in paragraphs (e)(2)(B)(i) and (ii) of this Section. The owner or operator may obtain two-year extensions provided the owner or operator continues to be able to demonstrate that there is reasonable likelihood that the CCR unit will accept wastes in the foreseeable future or will remove CCR from the unit for the purpose of beneficial use. The owner or operator must place each completed demonstration, if more than one time extension is sought, in the facility's operating record as required by OAC 252:517-19-1(i)(5) prior to the end of any two-year period.

(i) Information documenting that the CCR unit has remaining storage or disposal capacity or that the CCR unit can have CCR removed for the purpose of beneficial use; and

(ii) Information demonstrating that that there is a reasonable likelihood that the CCR unit will resume receiving CCR or non-CCR waste streams in the foreseeable future or that CCR can be removed for the purpose of beneficial use. The narrative must include a best estimate as to when the CCR unit will resume receiving CCR or non-CCR waste streams. The situations listed in paragraphs (e)(2)(B)(ii)(I) through (IV) of this Section are examples of situations that would support a determination that the CCR unit will resume receiving CCR or non-CCR waste streams in the foreseeable future.

(I) Normal plant operations include periods during which the CCR unit does not receive CCR or non-CCR waste streams, such as the alternating use of two or more CCR units whereby at any point in time one CCR unit is receiving CCR while CCR is being removed from a second CCR unit after its dewatering.

(II) The CCR unit is dedicated to a coal-fired boiler unit that is temporarily idled

(e.g., CCR is not being generated) and there is a reasonable likelihood that the coal-fired boiler will resume operations in the future.

(III) The CCR unit is dedicated to an operating coal-fired boiler (i.e., CCR is being generated); however, no CCR are being placed in the CCR unit because the CCR are being entirely diverted to beneficial uses, but there is a reasonable likelihood that the CCR unit will again be used in the foreseeable future.

(IV) The CCR unit currently receives only non-CCR waste streams and those non-CCR waste streams are not generated for an extended period of time, but there is a reasonable likelihood that the CCR unit will again receive non-CCR waste streams in the future.

(C) In order to obtain additional time extension(s) to initiate closure of a CCR unit beyond the two years provided by paragraph (e)(2)(A) of this Section, the owner or operator of the CCR unit must include with the demonstration required by paragraph (e)(2)(B) of this Section the following statement signed by the owner or operator or an authorized representative: I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(3) **Commencement activities.** For purposes of this Chapter, closure of the CCR unit has commenced if the owner or operator has ceased placing waste and completes any of the following actions or activities:

(A) Taken any steps necessary to implement the written closure plan required by paragraph (b) of this Section; or

(B) Taken any steps necessary to comply with any standards that are a prerequisite, or are otherwise applicable, to initiating or completing the closure of a CCR unit.

(4) **Timeline exceptions.** The timeframes specified in paragraphs (e)(1) and (2) of this Section do not apply to any of the following owners or operators:

(A) An owner or operator of an inactive CCR surface impoundment closing the CCR unit as required by OAC 252:517-15-5(b);

(B) An owner or operator of an existing unlined CCR surface impoundment closing the CCR unit as required by OAC 252:517-15-6(a);

(C) An owner or operator of an existing CCR surface impoundment closing the CCR unit as required by OAC 252:517-15-6(b);

(D) An owner or operator of a new CCR surface impoundment closing the CCR unit as required by OAC 252:517-15-6(c); or

(E) An owner or operator of an existing CCR landfill closing the CCR unit as required by OAC 252:517-15-6(d).

(f) **Completion of closure activities.**

(1) **Closure timeframes.** Except as provided for in paragraph (f)(2) of this Section, the owner or operator must complete closure of the CCR unit:

(A) For existing and new CCR landfills and any lateral expansion of a CCR landfill, within six months of commencing closure activities.

(B) For existing and new CCR surface impoundments and any lateral expansion of a CCR surface impoundment, within five years of commencing closure activities.

(2) **Extensions of closure timeframes.**

(A) **Applicability.** The timeframes for completing closure of a CCR unit specified under paragraphs (f)(1) of this Section may be extended if the owner or operator can demonstrate that it was not feasible to complete closure of the CCR unit within the required timeframes due to factors beyond the facility's control. If the owner or operator is seeking a time extension beyond the time specified in the written closure plan as required by paragraph (b)(1) of this Section, the demonstration must include a narrative discussion providing the basis for additional time beyond that specified in the closure plan. The owner or operator must place each completed demonstration, if more than one time extension is sought, in the facility's operating record as required by OAC 252:517-19-1(i)(6) prior to the end of any two-year period. Factors that may support such a demonstration include:

(i) Complications stemming from the climate and weather, such as unusual amounts of precipitation or a significantly shortened construction season;

(ii) Time required to dewater a surface impoundment due to the volume of CCR contained in the CCR unit or the characteristics of the CCR in the unit;

(iii) The geology and terrain surrounding the CCR unit will affect the amount of material needed to close the CCR unit; or

(iv) Time required or delays caused by the need to coordinate with and obtain necessary approvals and permits from a state or other agency.

(B) **Maximum time extensions.**

(i) CCR surface impoundments of 40 acres or smaller may extend the time to complete closure by no longer than two years.

(ii) CCR surface impoundments larger than 40 acres may extend the timeframe to complete closure of the CCR unit multiple times, in two-year increments. For each two-year extension sought, the owner or operator must substantiate the factual circumstances demonstrating the need for the extension. No more than a total of five two-year

extensions may be obtained for any CCR surface impoundment.

(iii) CCR landfills may extend the timeframe to complete closure of the CCR unit multiple times, in one-year increments. For each one-year extension sought, the owner or operator must substantiate the factual circumstances demonstrating the need for the extension. No more than a total of two one-year extensions may be obtained for any CCR landfill.

(C) **Certification statement.** In order to obtain additional time extension(s) to complete closure of a CCR unit beyond the times provided by paragraph (f)(1) of this Section, the owner or operator of the CCR unit must include with the demonstration required by paragraph (f)(2)(A) of this Section the following statement signed by the owner or operator or an authorized representative: I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(3) **PE certification.** Upon completion, the owner or operator of the CCR unit must obtain a certification from a qualified professional engineer verifying that closure has been completed in accordance with the closure plan specified in paragraph (b) of this Section and the requirements of this Section.

(g) **Notification of intent to close.** No later than the date the owner or operator initiates closure of a CCR unit, the owner or operator must prepare a notification of intent to close a CCR unit. The notification must include the certification by a qualified professional engineer for the design of the final cover system as required by OAC 252:517-15-7(d)(3)(iii), if applicable. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by OAC 252:517-19-1(i)(7).

(h) **Notification of closure.** Within 30 days of completion of closure of the CCR unit, the owner or operator must prepare a notification of closure of a CCR unit. The notification must include the certification by a qualified professional engineer as required by OAC 252:517-15-7(f)(3). The owner or operator has completed the notification when it has been placed in the facility's operating record as required by OAC 252:517-19-1(i)(8).

(i) **Deed notations.**

(1) Except as provided by paragraph (i)(4) of this Section, following closure of a CCR unit, the owner or operator must record a notation on the deed to the property, or some other instrument that is normally examined during title search.

(2) The notation on the deed must in perpetuity notify any potential purchaser of the property that:

(A) The land has been used as a CCR unit; and

(B) Its use is restricted under the post-closure care requirements as provided by OAC 252:517-15-9(d)(1)(iii).

(3) Within 30 days of recording a notation on the deed to the property, the owner or operator must prepare a notification stating that the notation has been recorded. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by OAC 252:517-19-1(i)(9).

(4) An owner or operator that closes a CCR unit in accordance with paragraph (c) of this Section is not subject to the requirements of paragraphs (i)(1) through (3) of this Section.

(j) **Recordkeeping.** The owner or operator of the CCR unit must comply with the closure recordkeeping requirements specified in OAC 252:517-19-1(i), the closure notification requirements specified in OAC 252:517-19-2(i), and the closure Internet requirements specified in OAC 252:517-19-3(i).

(k) **Criteria to retrofit existing CCR surface impoundment.**

(1) **Retrofit existing CCR surface impoundment.** To retrofit an existing CCR surface impoundment, the owner or operator must:

(A) First remove all CCR, including any contaminated soils and sediments from the CCR unit; and

(B) Comply with the requirements in OAC 252:517-11-3.

(C) A CCR surface impoundment undergoing a retrofit remains subject to all other requirements of this Chapter, including the requirement to conduct any necessary corrective action.

(2) **Written retrofit plan.**

(A) **Content of the plan.** The owner or operator must prepare a written retrofit plan that describes the steps necessary to retrofit the CCR unit consistent with recognized and generally accepted good engineering practices. The written retrofit plan must include, at a minimum, all of the following information:

(i) A narrative description of the specific measures that will be taken to retrofit the CCR unit in accordance with this Section.

(ii) A description of the procedures to remove all CCR and contaminated soils and sediments from the CCR unit.

(iii) An estimate of the maximum amount of CCR that will be removed as part of the retrofit operation.

(iv) An estimate of the largest area of the CCR unit that will be affected by the retrofit operation.

(v) A schedule for completing all activities necessary to satisfy the retrofit criteria in this Section, including an estimate of the year in which retrofit activities of the CCR unit will be completed.

(B) **Timeframes for preparing the initial written retrofit plan.**

(i) No later than 60 days prior to date of initiating retrofit activities, the owner or operator must prepare an initial written retrofit plan consistent with the requirements specified in paragraph (k)(2) of this Section. For purposes of this Chapter, initiation of retrofit activities has commenced if the owner or operator has ceased placing waste in the unit and completes any of the following actions or activities:

(I) Taken any steps necessary to implement the written retrofit plan;

(II) Submitted a completed application for any required state or agency permit or permit modification; or

(III) Taken any steps necessary to comply with any state or other agency standards that are a prerequisite, or are otherwise applicable, to initiating or completing the retrofit of a CCR unit.

(ii) The owner or operator has completed the written retrofit plan when the plan, including the certification required by paragraph (k)(2)(D) of this Section, has been placed in the facility's operating record as required by OAC 252:517-19-1(j)(1).

(C) **Amendment of a written retrofit plan.**

(i) The owner or operator may amend the initial or any subsequent written retrofit plan at any time.

(ii) The owner or operator must amend the written retrofit plan whenever:

(I) There is a change in the operation of the CCR unit that would substantially affect the written retrofit plan in effect; or

(II) Before or after retrofit activities have commenced, unanticipated events necessitate a revision of the written retrofit plan.

(iii) The owner or operator must amend the retrofit plan at least 60 days prior to a planned change in the operation of the facility or CCR unit, or no later than 60 days after an unanticipated event requires the revision of an existing written retrofit plan. If a written retrofit plan is revised after retrofit activities have commenced for a CCR unit, the owner or operator must amend the current retrofit plan no later than 30 days following the triggering event.

(D) **PE certification.** The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the activities outlined in the written retrofit plan, including any amendment of the plan, meet the requirements of this Section.

(E) **DEQ approval required.** The owner or operator of the CCR unit must submit the written retrofit plan, and any amendment of the plan, to the DEQ for approval.

(3) **Deadline for completion.** Deadline for completion of activities related to the retrofit of a CCR unit. Any CCR surface impoundment that is being retrofitted must complete all retrofit activities within the same time frames and procedures specified for the closure of a CCR surface impoundment in OAC 252:517-15-7(f) or, where applicable, OAC 252:517-15-8.

(4) **PE certification; DEQ approval required.** Upon completion, the owner or operator must obtain a certification from a qualified professional engineer verifying that the retrofit activities have been completed in accordance with the retrofit plan specified in paragraph (k)(2) of this Section and the requirements of this Section. The certified report shall be submitted to DEQ for approval.

(5) **Notification of intent.** No later than the date the owner or operator initiates the retrofit of a CCR unit, the owner or operator must prepare a notification of intent to retrofit a CCR unit. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by OAC 252:517-19-1(j)(5).

(6) **Notification of completion.** Within 30 days of completing the retrofit activities specified in paragraph (k)(1) of this Section, the owner or operator must prepare a notification of completion of retrofit activities. The notification must include the certification by a qualified professional engineer as required by paragraph (k)(4) of this Section. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by OAC 252:517-19-1(j)(6).

(7) **Retrofit cessation.** At any time after the initiation of a CCR unit retrofit, the owner or operator may cease the retrofit and initiate closure of the CCR unit in accordance with the requirements of OAC 252:517-15-7.

(8) **Recordkeeping.** The owner or operator of the CCR unit must comply with the retrofit recordkeeping requirements specified in OAC 252:517-19-1(j), the retrofit notification requirements specified in OAC 252:517-19-2(j), and the retrofit Internet requirements specified in OAC 252:517-19-3(j).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-15-8. Alternative closure requirements

(a) The owner or operator of a CCR landfill, CCR surface impoundment, or any lateral expansion of a CCR unit that is subject to closure pursuant to OAC 252:517-15-6(a), (b)(1), or (d) may continue to receive CCR in the unit provided the owner or operator meets the requirements of either paragraph (a) or (b) of this Section.

(1) **No alternative CCR disposal capacity.**

(A) Notwithstanding the provisions of OAC 252:517-15-6(a), (b)(1), or (d), a CCR unit may continue to receive CCR if the owner or operator of the CCR unit certifies that the CCR must continue to be managed in that CCR unit due to the absence of alternative disposal capacity both on-site and off-site of the facility. To qualify under this paragraph (a)(1), the owner or operator of the CCR unit must document

that all of the following conditions have been met and approved by the DEQ:

(B) No alternative disposal capacity is available on-site or off-site. An increase in costs or the inconvenience of existing capacity is not sufficient to support qualification under this Section;

(C) The owner or operator has made, and continues to make, efforts to obtain additional capacity. Qualification under this Subsection lasts only as long as no alternative capacity is available. Once alternative capacity is identified, the owner or operator must arrange to use such capacity as soon as feasible;

(D) The owner or operator must remain in compliance with all other requirements of this Chapter, including the requirement to conduct any necessary corrective action; and

(E) The owner or operator must prepare an annual progress report documenting the continued lack of alternative capacity and the progress towards the development of alternative CCR disposal capacity.

(2) Once alternative capacity is available, the CCR unit must cease receiving CCR and initiate closure following the timeframes in OAC 252:517-15-7(e) and (f).

(3) If no alternative capacity is identified within five years after the initial certification, the CCR unit must cease receiving CCR and close in accordance with the timeframes in OAC 252:517-15-7(e) and (f).

(b) **Permanent cessation of a coal fired boiler(s) by a date certain.**

(1) Notwithstanding the provisions of OAC 252:517-15-6(a), (b)(1), and (d), a CCR unit may continue to receive CCR if the owner or operator certifies that the facility will cease operation of the coal-fired boilers within the timeframes specified in paragraphs (b)(2) through (4) of this Section, but in the interim period (prior to closure of the coal-fired boiler), the facility must continue to use the CCR unit due to the absence of alternative disposal capacity both on-site and off-site of the facility. To qualify under this paragraph (b)(1), the owner or operator of the CCR unit must document that all of the following conditions have been met and approved by the DEQ:

(A) No alternative disposal capacity is available on-site or off-site. An increase in costs or the inconvenience of existing capacity is not sufficient to support qualification under this Section.

(B) The owner or operator must remain in compliance with all other requirements of this Chapter, including the requirement to conduct any necessary corrective action; and

(C) The owner or operator must prepare an annual progress report documenting the continued lack of alternative capacity and the progress towards the closure of the coal-fired boiler.

(2) For a CCR surface impoundment that is 40 acres or smaller, the coal-fired boiler must cease operation and the CCR surface impoundment must have completed closure no later than October 17, 2023.

(3) For a CCR surface impoundment that is larger than 40 acres, the coal-fired boiler must cease operation, and the CCR surface impoundment must complete closure no later than October 17, 2028.

(4) For a CCR landfill, the coal-fired boiler must cease operation, and the CCR landfill must complete closure no later than April 19, 2021.

(c) **Required notices and progress reports.** An owner or operator of a CCR unit that closes in accordance with paragraphs (a) or (b) of this Section must complete the notices and progress reports specified in paragraphs (c)(1) through (3) of this Section.

(1) Within six months of becoming subject to closure pursuant to OAC 252:517-15-6(a), (b)(1), or (d), the owner or operator must prepare, submit to DEQ and place in the facility's operating record a notification of intent to comply with the alternative closure requirements of this Section. The notification must describe why the CCR unit qualifies for the alternative closure provisions under either paragraph (a) or (b) of this Section, in addition to providing the documentation and certifications required by paragraph (a) or (b) of this Section.

(2) The owner or operator must prepare the periodic progress reports required by paragraphs (a)(1)(D) or (b)(1)(C), in addition to describing any problems encountered and a description of the actions taken to resolve the problems. The annual progress reports must be completed according to the following schedule:

(A) The first annual progress report must be prepared no later than 13 months after completing the notification of intent to comply with the alternative closure requirements required by paragraph (c)(1) of this Section.

(B) The second annual progress report must be prepared no later than 12 months after completing the first annual progress report. Additional annual progress reports must be prepared within 12 months of completing the previous annual progress report.

(C) The owner or operator must submit the progress reports required in (A) and (B) above to the DEQ for approval.

(D) The owner or operator has completed the progress reports specified in paragraph (c)(2) of this Section when the reports are placed in the facility's operating record as required by OAC 252:517-19-1(i)(10).

(3) An owner or operator of a CCR unit must also prepare the notification of intent to close a CCR unit as required by OAC 252:517-15-7(g).

(d) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(i), the notification requirements specified in OAC 252:517-19-2(i), and the Internet requirements specified in OAC 252:517-19-3(i)

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-15-9. Post-closure care requirements

(a) **Applicability.**

(1) Except as provided by either paragraph (a)(2) or (3) of this Section, OAC 252:517-15-9 applies to the owners or operators of CCR landfills, CCR surface impoundments, and all lateral expansions of CCR units that are subject to the closure criteria under OAC 252:517-15-7.

(2) An owner or operator of a CCR unit that elects to close a CCR unit by removing CCR as provided by OAC 252:517-15-7(c) is not subject to the post-closure care criteria under this Section.

(3) An owner or operator of an inactive CCR surface impoundment that elects to close a CCR unit pursuant to the requirements under OAC 252:517-15-5(b) is not subject to the post-closure care criteria under this Section.

(b) **Post-closure care maintenance requirements.** Following closure of the CCR unit, the owner or operator must conduct post-closure care for the CCR unit, which must consist of at least the following:

(1) Maintaining the integrity and effectiveness of the final cover system, including making repairs to the final cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the final cover;

(2) If the CCR unit is subject to the design criteria under OAC 252:517-11-1, maintaining the integrity and effectiveness of the leachate collection and removal system and operating the leachate collection and removal system in accordance with the requirements of OAC 252:517-11-1; and

(3) Maintaining the groundwater monitoring system and monitoring the groundwater in accordance with the requirements of OAC 252:517-9-1 through OAC 252:517-9-9.

(c) **Post-closure care period.**

(1) Except as provided by paragraph (c)(2) and (3) of this Section, the owner or operator of the CCR unit must conduct post-closure care for 30 years.

(2) If at the end of the post-closure care period the owner or operator of the CCR unit is operating under assessment monitoring in accordance with OAC 252:517-9-6, the owner or operator must continue to conduct post-closure care until the owner or operator returns to detection monitoring in accordance with OAC 252:517-9-6.

(3) The DEQ may extend the post-closure monitoring and care period if:

(A) sampling shows the presence of elevated levels of any constituent;

(B) evidence of contamination resulting from site operations is found to exist;

(C) prior maintenance or monitoring of the site is found to be inadequate;

(D) the site is producing leachate that must be treated prior to discharge; or

(E) if other conditions are present that indicate a need for additional post-closure monitoring and care.

(4) When the post-closure period is extended, the DEQ may require the maintenance of existing financial assurance, the posting of additional assurance, and/or may require corrective action.

(d) **Written post-closure plan.**

(1) **Content of the plan.** The owner or operator of a CCR unit must prepare a written post-closure plan that includes, at a minimum, the information specified in paragraphs (d)(1)(A) through (C) of this Section.

(A) A description of the monitoring and maintenance activities required in paragraph (b) of this Section for the CCR unit, and the frequency at which these activities will be performed;

(B) The name, address, telephone number, and email address of the person or office to contact about the facility during the post-closure care period; and

(C) A description of the planned uses of the property during the post-closure period. Post-closure use of the property shall not disturb the integrity of the final cover, liner(s), or any other component of the containment system, or the function of the monitoring systems unless necessary to comply with the requirements in this Chapter. Any other disturbance is allowed if the owner or operator of the CCR unit demonstrates that disturbance of the final cover, liner, or other component of the containment system, including any removal of CCR, will not increase the potential threat to human health or the environment. The demonstration must be certified by a qualified professional engineer, and notification shall be provided to the State Director that the demonstration has been placed in the operating record and on the owners or operator's publicly accessible Internet site.

(2) **Deadline to prepare the initial written post-closure plan.**

(A) **Existing CCR landfills and existing CCR surface impoundments.** No later than October 17, 2016, the owner or operator of the CCR unit must prepare an initial written post-closure plan consistent with the requirements specified in paragraph (d)(1) of this Section.

(B) **New CCR landfills, new CCR surface impoundments, and any lateral expansion of a CCR unit.** No later than the date of the initial receipt of CCR in the CCR unit, the owner or operator must prepare an initial written post-closure plan consistent with the requirements specified in paragraph (d)(1) of this Section.

(C) **Completion.** The owner or operator has completed the written post-closure plan when the plan, including the certification required by paragraph (d)(4) of this Section, has been placed in the facility's operating record as required by OAC 252:517-19-1(i)(4).

(3) **Amendment of a written post-closure plan.**

(A) The owner or operator may amend the initial or any subsequent written post-closure plan developed pursuant to paragraph (d)(1) of this Section at any time.

(B) The owner or operator must amend the written closure plan whenever:

(i) There is a change in the operation of the CCR unit that would substantially affect the written post-closure plan in effect; or

(ii) After post-closure activities have commenced, unanticipated events necessitate a revision of the written post-closure plan.

(C) The owner or operator must amend the written post-closure plan at least 60 days prior to a planned change in the operation of the facility or CCR unit, or no later than 60 days after an unanticipated event requires the need to revise an existing written post-closure plan. If a written post-closure plan is revised after post-closure activities have commenced for a CCR unit, the owner or operator must amend the written post-closure plan no later than 30 days following the triggering event.

(4) **PE certification.** The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the initial and any amendment of the written post-closure plan meets the requirements of this Section.

(5) **DEQ approval required.** The owner or operator of the CCR unit must submit the initial post-closure plan and any amendment of the post-closure plan to the DEQ for approval.

(e) **Notification of completion of post-closure care period.** No later than 60 days following the completion of the post-closure care period, the owner or operator of the CCR unit must prepare a notification verifying that post-closure care has been completed and submit it to the DEQ. The notification must include the certification by a qualified professional engineer verifying that post-closure care has been completed in accordance with the closure plan specified in paragraph (d) of this Section and the requirements of this Section. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by OAC 252:517-19-1(i)(13).

(f) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(i), the notification requirements specified in OAC 252:517-19-2(i), and the Internet requirements specified in OAC 252:517-19-3(i).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-15-10. Post-closure use of property

(a) **Maintain integrity.** Use of the property during the post-closure period must not disturb the integrity of the final cover, the liner, or any other components of the containment system, or the function of the monitoring systems.

(b) **DEQ approval required.** The owner/operator shall not allow any other use of the property during the post-closure period unless it is approved by DEQ.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-15-11. Certification of post-closure performance

(a) **Certification required.** At the conclusion of the post-closure period, a Certification of Post- closure Performance shall be submitted to the DEQ. The Certification shall:

(1) state the facility was maintained and monitored in accordance with the approved post-closure plan, the permit, and applicable rules;

(2) indicate whether monitoring throughout the post-closure period has shown the presence of elevated levels of any constituent or if any evidence of contamination related to site operations has been found and, if so, what corrective measures were taken; and

(3) be maintained in the operating record.

(b) **PE certification.** The Certification of Post-closure Performance shall be prepared and sealed by an independent qualified professional engineer.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-15-12. Land use restrictions

(a) **Ascertain wastes.** Any person contemplating using a closed CCR Unit shall ascertain the depth of waste units and the operating history of the site and shall avoid any activity that may pose increased threat to human health or the environment.

(b) **Considerations.** The following items are to be considered:

(1) Irrigation, plowing or other activities that disturb materials below the topsoil could result in percolation of moisture into the buried waste.

(2) Concentrated loadings can cause uneven settlement.

(3) Pilings or foundation should not disturb or penetrate the final cover and/or bottom liner.

(c) **Utilities and pipelines.** Utilities and pipelines must be routed around the waste disposal area.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

SUBCHAPTER 17. COST ESTIMATES AND FINANCIAL ASSURANCE

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PART 1. GENERAL PROVISIONS

252:517-17-1. Applicability

All CCR units are subject to the requirements of this Subchapter.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-2. Effective date

(a) **Closure and post-closure care.** DEQ approved financial assurance for closure and post-closure care must be established prior to the initial receipt of waste.

(b) **Corrective action.** DEQ approved financial assurance for corrective action must be established no later than 120 days after the corrective action remedy has been selected in accordance with OAC 252:517-9-8, or an alternative corrective action plan has been approved.

(c) **Permit modifications.** DEQ approved financial assurance must be established and appropriately funded before the DEQ will issue a permit modification that results in an increase in closure or post- closure cost estimates.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-3. Duty to maintain financial assurance

Financial assurance for closure, post-closure, and/or corrective action, as applicable, must be maintained continuously until released from the requirement to maintain such assurance by:

(1) demonstrating compliance with the closure and/or post-closure requirements of Subchapter 15 of this Chapter; or

(2) demonstrating compliance with the corrective action requirements of OAC 252:517-9-9, or an approved corrective action plan.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-4. Updating

Provided they remain in effect, the worksheets in Appendices E and F shall be updated coinciding with the update of Appendices H and I in OAC 252:515.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-5. Permit transfers

(a) **Transfer of permit.** When the permit is transferred from one owner/operator ("transferor") to another owner/operator ("transferee"), the transferee shall either provide new financial assurance or assume the existing assurance, if adequate in amount.

(b) **Release of transferor's financial assurance.** The DEQ will not release the transferor's financial assurance until the transferee has obtained approved financial assurance.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-6. Effect of non-renewal of, or failure to maintain or provide, financial assurance

The DEQ shall begin proceedings to summarily suspend or revoke the permit for failure to:

(1) establish financial assurance in accordance with this Subchapter;

(2) renew or maintain an approved financial assurance mechanism as required; or

(3) provide acceptable substitute financial assurance when necessary.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-7. Substitute financial assurance

(a) **Substitutions allowed.** Substitute financial assurance may be provided as specified in this Subchapter.

(b) **Release of previous instrument.** The DEQ will not release any current assurances until an approved substitute is in place.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-8. Economic life of CCR unit

(a) **New CCR unit.** The economic life of a new CCR unit shall be based on the area to be initially permitted for waste disposal, not on the total permitted area.

(b) **Economic life.** For the purposes of determining the pay-in period for a trust fund or escrow account used as a financial assurance mechanism, or another approved mechanism that allows pay-in over a specified period of time, the economic life for a new CCR unit shall be the lesser of fifteen (15) years

from the initial receipt of waste or the life as calculated in accordance with (b) of this Subsection.

(c) **Calculation.** The life shall be calculated according to the following formula: L = (V x D) ÷ W, where

(1) "L" equals the life of the CCR unit, in years;

(2) "V" equals the total volume of air space in cubic yards available for waste disposal and daily cover. V shall be calculated from the top of the protective layer to final contours minus the amount of air space taken up by final cover;

(3) "D" is the anticipated density of waste compacted in place in pounds per cubic yard. Until an alternative value based on a history of operational practice can be documented, D must not be more than 1000 pounds per cubic yard (1000 lbs/cy); and

(4) "W" is the amount of waste expected to be disposed during one year of operation in pounds per year, until the owner/operator can document actual waste disposed based on a history of operational practice.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

PART 3. COST ESTIMATES

252:517-17-31. Cost estimates for closure

(a) **Closure cost estimate.** Closure cost estimates shall be submitted to the DEQ for approval. The estimate shall be a detailed written estimate, in current dollars, of the cost of hiring a third party to close the CCR unit in accordance with the permit, the approved closure plan, and the rules of this Chapter at any time during its active life.

(b) **Amount.** The cost estimate shall be set by the DEQ and be equal to the cost of closing the facility when the extent and manner of its operation would make closure the most expensive, as indicated by its closure plan. The closure cost for a CCR unit must equal the cost of closing the largest area of the facility ever requiring a final cover at any time during the active life.

(c) **Determination of closure cost estimate.**

(1) Closure cost estimates shall be determined in accordance with OAC 252:517-17-51.

(2) A copy of the cost estimate shall be submitted to the DEQ for approval.

(3) A copy of the approved estimate shall be placed in the operating record.

(d) **Increases required.** Closure cost estimates and the amount of financial assurance provided must be increased if, at any time during the active life, changes to the closure plan or facility conditions increase the maximum cost of closure.

(e) **Reductions allowed.** Proposals for reduction of closure cost estimates and the amount of financial assurance required may be approved by the DEQ.

(1) **Conditions.** To qualify for a reduction:

(A) part of the closure plan must have been completed and approved by the DEQ; or

(B) the cost estimate must be demonstrated to exceed the maximum cost of closure during the remaining life of the facility.

(2) **Adequate assurance remains.** The amount of security remaining after the reduction must adequately cover the estimated closure cost yet to be performed.

(3) **DEQ approval required.** Financial assurance shall not be reduced until DEQ approval has been granted.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-32. Cost estimates for post-closure care

(a) **Post-closure cost estimate required.** Post-closure cost estimates shall be submitted to the DEQ for approval. The estimate shall be a detailed written estimate, in current dollars, of the cost of hiring a third party to conduct post-closure care for the CCR unit in accordance with the permit, the approved post-closure plan, and the rules of this Chapter.

(b) **Amount.** The cost estimate shall be set by the DEQ and equal the most expensive cost for post- closure care, as indicated by the post-closure plan.

(c) **Determination of post-closure cost estimate.**

(1) Post-closure cost estimates shall be determined in accordance with OAC 252:517-17-51.

(2) A copy of the cost estimate shall be submitted to the DEQ for approval.

(3) A copy of the approved estimate shall be placed in the operating record.

(d) **Increases required.** Post-closure cost estimates and the amount of financial assurance provided must be increased if, at any time during the active life, changes to the post-closure plan or facility conditions increase the maximum cost of post-closure care.

(e) **Reduction allowed.** Proposals for reduction of post-closure cost estimates and the amount of financial assurance required may be approved by the DEQ.

(1) **Estimate exceeds cost.** To qualify for a reduction, the cost estimate must be demonstrated to exceed the maximum cost of post-closure during the remaining life of the facility.

(2) **Adequate assurance remains.** The amount of security remaining after the reduction must adequately cover the estimated post-closure cost yet to be performed.

(3) **DEQ approval required.** Financial assurance shall not be reduced until DEQ approval has been granted.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-33. Cost estimates for corrective action

(a) **Corrective action cost estimate required.** When corrective action is required at a CCR unit, cost estimates for corrective action shall be submitted to the DEQ for approval. The cost estimates shall be a detailed written estimate, in current dollars, of the cost of hiring a third party to perform the corrective action in accordance with the approved corrective action plan.

(b) **Amount.** The corrective action cost estimate shall be set by the DEQ and account for the total costs of corrective action

activities as described in the approved corrective action plan for the entire corrective action period.

(c) **Determination of corrective action cost estimate.**

(1) Corrective action cost estimates shall be determined in accordance with OAC 252:517-17-52.

(2) A copy of the cost estimate shall be submitted to the DEQ for approval.

(3) A copy of the approved estimate shall be placed in the operating record.

(d) **Increases required.** The corrective action cost estimate and the amount of financial assurance provided must be increased at any time changes to the corrective action program or facility conditions increase the estimated cost of corrective action.

(e) **Reduction allowed.** Proposals for reduction of corrective action cost estimates and the amount of financial assurance required may be approved by the DEQ.

(1) **Estimate exceeds cost.** To qualify for a reduction, the cost estimate must be demonstrated to exceed the maximum cost of corrective action at any time during the remaining life of the facility.

(2) **Adequate assurance remains.** The amount of security remaining after the reduction must adequately cover the estimated corrective action costs yet to be realized.

(3) **DEQ approval required.** Financial assurance shall not be reduced until DEQ approval has been granted.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-34. Annual adjustments to cost estimates

(a) **Adjustment required.** Except as provided in (b) and (c) of this Section, cost estimates for closure, post-closure, and/or corrective action shall be adjusted no later than April 9th of each year. The adjustment must be submitted to the DEQ for approval.

(1) **Recalculation of maximum costs.** The maximum costs of closure, post-closure, and/or corrective action may be recalculated in current dollars using the procedure in Part 5 of this Subchapter (relating to determination of cost estimates).

(2) **Use of inflation factor.** If there are no significant changes to the closure or post-closure plan, corrective action plan, or facility conditions, cost estimates may be adjusted by use of an inflation factor derived from the most recent annual "Implicit Price Deflator for Gross National Product" or the "Implicit Price Deflator for Gross Domestic Product" published by the U.S. Department of Commerce in its Survey of Current Business in the year for which the adjustment is being made.

(A) The first adjustment shall be made by multiplying the approved cost estimate by the inflation factor. The result is the adjusted cost estimate.

(B) Subsequent adjustments shall be made by multiplying the latest adjusted cost estimate by the latest inflation factor.

(3) **Place in operating record.** The approved adjusted cost estimates shall be placed in the operating record.

(b) **Corporate test or guarantee as financial assurance mechanism.** When the corporate test (OAC 252:517-17-81) or guarantee (OAC 252:517-17-82) is used as the financial assurance mechanism, the cost estimates for closure, post-closure, and/or corrective action shall be adjusted no later than 90 days after the close of the corporate fiscal year.

(1) **Required information.** The financial strength information specified in OAC 252:517-17-81(c) shall be submitted to the DEQ for approval.

(2) **Extension allowed.** The DEQ may provide up to an additional 45 days to submit the information upon demonstration that 90 days is insufficient time to acquire audited financial statements.

(3) **Place in operating record.** The approved adjusted cost estimates shall be placed in the operating record.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

PART 5. DETERMINATION OF COST ESTIMATES

252:517-17-51. Cost estimates for closure and post-closure

(a) **Determine cost estimate from unit costs.** Cost estimate for closure and post-closure shall be determined by completing the worksheets in Appendix E and F, respectively.

(b) **Deviation from unit costs using bids.** Deviations from the unit costs for one or more individual tasks identified in Appendix E or F may be approved by using the average of three current bids. The following shall be submitted to the DEQ for approval:

(1) identification of the task(s) for which bids will be provided;

(2) a statement of work fully describing the actions necessary for completion of the task(s) identified; and

(3) written bids from three independent contractors not affiliated with the owner/operator. The bids shall be dated within 30 days of submittal and be an estimate of the contractor's cost for performing the work identified in the statement of work on behalf of the State of Oklahoma.

(c) **Deviation from unit costs using actual costs.** Deviations from the unit costs for one or more of the individual tasks identified in Appendix E or F may be approved by using actual costs paid within the previous six (6) months by the owner/operator for work performed. The following shall be submitted to the DEQ for approval:

(1) identification of the task(s) for which actual costs will be provided;

(2) a statement of work from the contractor, fully describing the work done to meet the requirements of the task(s); and

(3) written documentation from the contractor identifying his cost to the owner/operator for performance of the task.

(d) **Tasks not specified in Appendix E or F.** If a CCR unit has unique tasks required under its approved closure or post-closure plan that are not identified in Appendix E or F,

those tasks shall be identified and the costs estimated in accordance with (b)(1) through (b)(3) or (c)(1) through (c)(3) of this Section.

(e) **DEQ approval required.** The completed worksheets, bid documentation, and/or actual cost documentation shall be submitted to the DEQ for approval.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-52. Cost estimates for corrective action

(a) **Equivalent tasks specified in Appendix E or F.** For those corrective action tasks in the approved corrective action plan for which there are equivalent tasks in Appendix E or F, applicable portions of Appendix E or F or the procedure in OAC 252:517-17-51 shall be used to determine cost estimates.

(b) **Equivalent tasks not specified in Appendix E or F.** For those corrective action tasks in the approved corrective action plan for which there are no equivalent tasks in Appendix E or F, the cost estimate shall be determined by using the procedure in OAC 252:517-17-51(b)(1) through (b)(3) or (c)(1) through (c)(3).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

PART 7. FINANCIAL ASSURANCE MECHANISMS

252:517-17-71. General requirements for financial assurance mechanisms

(a) **Requirements.** To qualify as financial assurance for the performance costs of closure, post-closure, and/or corrective action, a financial assurance mechanism must:

(1) ensure that the amount of funds assured is sufficient to cover the costs of closure, post-closure care, and/or corrective action for known releases when needed;

(2) ensure that funds will be available in a timely fashion when needed;

(3) be legally valid, binding, and enforceable under State and Federal law;

(4) be non-negotiable;

(5) be in an amount approved by the DEQ;

(6) indicate the purpose of the financial assurance is to provide funds for the adequate completion of closure, post-closure, and/or corrective action upon the failure of the owner/operator ("principal") to fully complete performance according to the terms of the permit and applicable law;

(7) provide the name, address, telephone number(s), contact person(s), and organizational information for the principal and for the financial assurance issuer ("issuer");

(8) provide information on financial responsibility and liability limits of the issuer;

(9) provide a clause requiring payment to the State of Oklahoma, Department of Environmental Quality Revolving Fund, as the sole beneficiary upon the DEQ's certification that the principal has not fully or satisfactorily performed required closure, post-closure, and/or corrective action activities;

(10) provide a clause addressing termination and stating that neither the principal nor issuer can revoke or cancel the financial assurance mechanism without notice to the DEQ 120 days before revocation or cancellation is effective;

(11) provide a clause requiring notice to the DEQ by issuer and to the principal prior to renewal date, if any;

(12) provide a clause requiring 30 day notice to the DEQ by issuer of principal's failure to pay renewal fee(s), if any;

(13) specify whether coverage is for the life of the facility through certified closure, the period of post-closure care required by law, and/or corrective action;

(14) include original signatures and typed names of authorized agents of the principal and the issuer; and

(15) contain evidence that the signatory for the issuer is empowered to commit the issuer to payment.

(b) **Submit to DEQ.** An original and one copy of the approved mechanism shall be submitted to the DEQ for deposit or filing in the State Treasurer's office.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-72. Use of multiple mechanisms

(a) **Multiple mechanisms allowed.** Financial assurance requirements may be satisfied by establishing more than one approved financial assurance mechanism described in this Part.

(b) **Amount must be sufficient.** If multiple mechanisms are used, the amount of financial assurance for all mechanisms must total at least the current cost estimate for closure, post-closure care and/or corrective action.

(c) **Limitations on performance mechanisms.** Mechanisms guaranteeing performance rather than payment may not be combined with other mechanisms.

(d) **Limitations on corporate test or guarantee.** The financial test or a guarantee provided by a corporate parent, sibling, or grandparent may not be combined if the financial statements of the two firms are consolidated.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-73. Allowable financial assurance mechanisms

(a) The owner/operator must choose from the financial assurance mechanisms specified in this Part.

(b) The mechanisms must ensure that the funds necessary to meet the costs of closure, post-closure care, and corrective action for known releases will be available whenever they are needed.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-74. Cash

(a) **Cash authorized.** Financial assurance requirements may be satisfied by making a deposit, via cash, certified check,

or money order, to the State Treasury, payable to the Department of Environmental Quality Revolving Fund, for the fully approved cost estimates for closure, post-closure, and/or corrective action.

(b) **Additional requirements.** Compliance with OAC 252:517-17-71(a)(5), (6), (7), and (13) is required.

(c) **Submit to DEQ.** Documentation demonstrating compliance with (a) and (b) of this Section shall be submitted to the DEQ and placed in the operating record.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-75. Certificate of deposit

(a) **Certificate of deposit authorized.** Financial assurance requirements may be satisfied through a certificate of deposit payable to the Department of Environmental Quality Revolving Fund, for the fully approved cost estimates for closure, post-closure, and/or corrective action. Such certificate shall be filed with the Office of the State Treasurer.

(b) **Chartered bank.** The certificate of deposit shall be issued by a state or federally chartered bank, regulated and examined by a state or federal agency.

(c) **Additional requirements.** Compliance with OAC 252:517-17-71(a)(5), (6), (7), and (13) is required.

(d) **Submit to DEQ.** Documentation demonstrating compliance with (a) through (c) of this Section shall be submitted to the DEQ and placed in the operating record.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-76. Trust fund

(a) **Trust fund authorized.** Financial assurance requirements may be satisfied by establishing a trust fund meeting the requirements of this Section.

(b) **Acceptable trustee.** The trustee must be an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency.

(c) **Additional requirements.** The trust must be in a format approved by the DEQ and contain an irrevocable assignment of the funds to the DEQ.

(d) **Submit trust agreement to DEQ.** A copy of the trust agreement must be submitted to the DEQ for approval and a copy of the approved trust agreement placed in the facility's operating record.

(e) **Pay-in period.** Payments into the trust fund must be made no later than April 9th of each year as follows:

(1) **Closure and/or post-closure.** For closure and/or post-closure care, the pay-in period shall be the economic life of the CCR unit, as determined in accordance with OAC 252:517-17-8(a)(1) or (b)(1), as applicable.

(2) **Corrective action.** For corrective action, the pay-in period shall be 15 years after the corrective action remedy has been selected, or one-half of the estimated length of the corrective action program, whichever is shorter.

(f) **Payments into trust for closure or post-closure.** Payments into the trust for closure and/or post-closure shall be made as follows:

(1) **First payment.** The first payment into the fund must be at least equal to the current cost estimate for closure or post-closure care, except as provided in OAC 252:517-17-72 (relating to the use of multiple mechanisms), divided by the number of years in the pay-in period.

(2) **Subsequent payments.** Subsequent payments shall be determined by the following formula: Next Payment = (CE - CV) ÷ Y, where

(A) "CE" is the current cost estimate for closure and/or post-closure care (updated for inflation or other changes); and

(B) "CV" is the current value of the trust fund; and

(C) "Y" is the number of years remaining in the pay-in period.

(g) **Payments into trust for corrective action.** Payments into the trust for corrective action shall be made as follows:

(1) **First payment.** The first payment into the trust fund must be at least equal to one-half of the current cost estimate for corrective action, except as provided in OAC 252:517-17-72 or the approved corrective action plan, divided by the number of years in the corrective action pay-in period.

(2) **Subsequent payments.** Subsequent payments shall be determined by the following formula: Next Payment = (RB - CV) ÷ Y, where

(A) "RB" is the most recent estimate of the required trust fund balance for corrective action (i.e., the total costs that will be incurred during the second half of the corrective action period); and

(B) "CV" is the current value of the trust fund; and

(C) "Y" is the number of years remaining in the corrective action pay-in period.

(h) **Trust fund after use of other mechanisms.** If a trust fund is established after having used one or more alternate mechanisms specified in this Part, the initial payment into the trust fund must be at least the amount that the fund would contain if the trust fund were established initially and annual payments made in accordance with (f) and/or (g) of this Section.

(i) **Requests for reimbursement from trust fund.** Persons authorized to conduct closure, post- closure care, or corrective action activities may request reimbursement from the trustee for these expenditures.

(1) **Sufficient funds available.** Requests for reimbursement will be granted by the trustee only if sufficient funds are remaining in the trust fund to cover the remaining costs of closure, post-closure care, or corrective action

(2) **Submit justification to DEQ.** Documentation of the justification for reimbursement must be submitted to the DEQ.

(3) **Place in operating record.** A copy of the approved documentation shall be placed in the operating record.

(4) **Document reimbursement received.** Documentation shall be provided to the DEQ to demonstrate reimbursement has been received.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-77. Escrow account

(a) **Escrow account authorized.** Financial assurance requirements maybe satisfied by establishing an escrow account in the name of the Department of Environmental Quality.

(b) **Chartered bank.** The escrow bank must be a state or national bank located within the State of Oklahoma authorized to receive and hold State funds.

(c) **Additional requirements.**

(1) **Escrow agreement.** The escrow agreement must contain an irrevocable assignment of the funds therein to the Department of Environmental Quality to be used in accordance with this Section.

(2) **Funds insured.** The funds placed in the escrow account must be fully insured and/or collateralized by the Bank's pledge of government securities.

(d) **DEQ approval required.** The form of the escrow agreement must be approved by the DEQ, and a copy of the approved escrow agreement submitted to the DEQ and placed in the operating record.

(e) **Pay-in period.** Payments into the escrow account must be made no later than April 9th of each year as follows:

(1) **Closure and/or post-closure.** For closure and/or post-closure care, the pay-in period shall be the economic life of the CCR unit, as determined in accordance with OAC 252:517-17-8(a)(1) or (b)(1), as applicable.

(2) **Corrective action.** For corrective action, the pay-in period shall be 15 years after the corrective action remedy has been selected, or one-half of the estimated length of the corrective action program, whichever is shorter.

(f) **Payments into escrow for closure or post-closure.** Payments into the escrow account for closure and/or post-closure shall be made as follows:

(1) **First payment.** The first payment must be at least equal to the current cost estimate for closure or post-closure care, except as provided in OAC 252:517-17-72 (relating to the use of multiple mechanisms), divided by the number of years in the pay-in period.

(2) **Subsequent payments.** Subsequent payments shall be determined by the following formula: Next Payment = (CE - CV) ÷ Y, where

(A) "CE" is the current cost estimate for closure and/or post-closure care (updated for inflation or other changes); and

(B) "CV" is the current value of the escrow account; and

(C) "Y" is the number of years remaining in the pay-in period.

(g) **Payments into escrow for corrective action.** Payments into the escrow account for corrective action shall be as follows:

(1) **First payment.** The first payment must be at least equal to one-half of the current cost estimate for corrective action, except as provided in OAC 252:517-17-72 or the approved corrective action plan, divided by the number of years in the corrective action pay-in period.

(2) **Subsequent payments.** Subsequent payments shall be determined by the following formula: Next Payment = (RB - CV) ÷ Y, where

(A) "RB" is the most recent estimate of the required trust fund balance for corrective action (i.e., the total costs that will be incurred during the second half of the corrective action period); and

(B) "CV" is the current value of the escrow account; and

(C) "Y" is the number of years remaining in the corrective action pay-in period.

(h) **Escrow after use of other mechanisms.** If an escrow account is established after having used one or more alternate mechanisms specified in this Part, the initial payment into the escrow account must be at least the amount that the account would contain if it were established initially and annual payments made in accordance with (f) and/or (g) of this Section.

(i) **Reimbursements authorized.** Persons authorized to conduct closure, post-closure care, or corrective action activities, may request the DEQ authorize reimbursement from the escrow account for these expenditures.

(1) **Sufficient funds available.** Requests for reimbursement will be granted by the DEQ only if sufficient funds are remaining in the escrow account to cover the remaining costs of closure, post-closure care, or corrective action.

(2) **Submit justification to DEQ.** Justification for the reimbursement must be submitted to the DEQ for approval.

(3) **Place in operating record.** A copy of the approval and supporting documentation must be placed in the operating record.

(4) **Document reimbursement received.** Documentation shall be provided to the DEQ to demonstrate reimbursement has been received.

(5) **Principal protected.** The escrow bank shall not allow any withdrawal from the escrow account, except for interest once the account is fully funded, without written authorization from the Executive Director of the DEQ.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-78. Surety bond

(a) **Surety bond for closure and/or post-closure authorized.** Financial assurance requirements for closure or post-closure care may be satisfied by obtaining a payment or performance surety bond conforming to the requirements of this Section.

(b) **Performance bond for corrective action authorized.** Financial assurance requirements for corrective action may be satisfied by obtaining a performance bond conforming to the requirements of this Section.

(c) **Submit bond to DEQ.** A copy of the bond must be submitted to the DEQ for approval and a copy of the approved bond placed in the operating record.

(d) **Acceptable bonds.** The surety company issuing the bond must, at a minimum, be among those listed as acceptable

sureties on Federal bonds in Circular 570 of the U.S. Department of the Treasury.

(e) **Penal sum.** The penal sum of the bond must be in an amount at least equal to the current closure, post-closure care or corrective action cost estimate, whichever is applicable, except as provided in OAC 252:517-17-72 (relating to the use of multiple mechanisms).

(f) **Surety liable.** Under the terms of the bond, the surety will become liable on the bond obligation when the owner/operator fails to perform as guaranteed by the bond.

(g) **Establish standby trust fund.** A standby trust to receive bond payments must be established that meets the requirements of OAC 252:517-17-76, except the requirements for initial payment and subsequent annual payments specified in OAC 252:517-17-76(e) through (g).

(h) **Deposits into standby trust.** Payments made under the terms of the bond must be deposited by the surety directly into the standby trust fund.

(i) **Payments from the trust.** Payments from the trust fund must first be approved by the DEQ and the trustee.

(j) **Cancellation by surety.** Under the terms of the bond, the surety may cancel the bond by sending notice of cancellation by certified mail to the owner/operator and to the DEQ 120 days in advance of cancellation.

(k) **New financial assurance required.** DEQ approved alternate financial assurance meeting the requirements of this Part must be established:

(1) prior to the effective date of cancellation of the bond by the surety, or

(2) within 60 days of receipt of notice the surety no longer meets the requirements of (d) of this Section.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-79. Letter of credit

(a) **Letter of credit authorized.** Financial assurance for closure, post-closure care, and/or corrective action may be satisfied by obtaining an irrevocable standby letter of credit that conforms to the requirements of this Section.

(b) **Submit letter of credit to DEQ.** A copy of the letter of credit must be submitted to the DEQ for approval, and a copy of the approved letter of credit placed in the operating record.

(c) **Acceptable issuing institutions.** The issuing institution must be an entity that has the authority to issue letters of credit and whose letter of credit operations are regulated and examined by a federal or state agency.

(d) **Documents to include.** A letter from the owner/operator referring to the letter of credit by number and containing the following must be included with the letter of credit:

(1) the name of the issuing institution;

(2) the date the letter of credit was issued;

(3) the CCR unit name and address; and

(4) the amount of funds assured.

(e) **Letter of credit requirements.** The letter of credit must:

(1) be irrevocable;

(2) be issued for a period of at least one year in an amount at least equal to the current cost estimate for closure, post-closure care and/or corrective action, except as provided in OAC 252:517-17-72; and

(3) provide that the expiration date will be automatically extended for a period of at least one year unless the issuing institution cancels the letter of credit.

(f) **Cancellation by issuing institution.** The issuing institution may cancel the letter of credit by sending notice of cancellation by certified mail to the owner/operator and the DEQ 120 days in advance of cancellation.

(g) **New financial assurance required.** If the letter of credit is canceled by the issuing institution, alternate financial assurance meeting the requirements of this Part must be obtained prior to the effective date of cancellation.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-80. Insurance

(a) **Insurance authorized.** Financial assurance for closure and/or post-closure care maybe satisfied by obtaining insurance that conforms to the requirements of this Section.

(b) **Definition.** When used in this Section, the term "face amount" means the total amount the insurer is obligated to pay under the policy. Actual payments by the insurer will not change the face amount, although the insurer's future liability will be lowered by the amount of the payments.

(c) **Acceptable insurers.** At a minimum, the insurer must be licensed to transact the business of insurance in the State of Oklahoma, or be eligible to provide insurance as an excess or surplus lines insurer, in one or more States.

(d) **Submit to the DEQ.** A copy of the insurance policy must be submitted to the DEQ for approval, and a copy of the approved policy placed in the operating record.

(e) **Policy requirements.** The insurance policy must include the following provisions.

(1) **Face amount.** The policy must be issued for a face amount at least equal to the current cost estimate for closure or post-closure care, whichever is applicable, except as provided in OAC 252:517-17-72 (relating to the use of multiple mechanisms).

(2) **Funds available.** The policy must guarantee that funds will be available to close the facility whenever final closure occurs or to provide post-closure care for the facility whenever the post- closure care period begins, whichever is applicable.

(3) **Insurer responsible.** The policy must guarantee that once closure or post-closure care begins, the insurer will be responsible for the paying out of funds to the owner/operator or other person authorized to conduct closure or post-closure care, up to an amount equal to the face amount of the policy.

(4) **Assignment of policy.** The policy must contain a provision allowing assignment of the policy to a successor owner/operator. Such assignment may be conditional upon consent of the insurer, provided that such consent is not unreasonably refused.

(5) **Insurer may not cancel, terminate, or fail to renew.** The policy must include a provision that the insurer may not cancel, terminate or fail to renew the policy except for failure to pay the premium.

(6) **Automatic renewal.** The policy must provide the insured with the option of automatic renewal of the policy at the face amount of the expiring policy.

(f) **Reimbursements authorized.** Persons authorized to conduct closure or post-closure care may receive reimbursements from the insurer for closure or post-closure expenditures, whichever is applicable.

(1) **Sufficient value.** The remaining value of the policy must be sufficient to cover the remaining costs of closure or post-closure care.

(2) **Justification.** Justification for the reimbursement must be submitted to the DEQ for approval.

(3) **Place in operating record.** A copy of the approval and supporting documentation must be placed in the operating record.

(4) **Document reimbursement received.** Documentation shall be provided to the DEQ to demonstrate reimbursement has been received.

(g) **Cancellation for non-payment.** If there is a failure to pay the premium, the insurer may cancel the policy by sending notice of cancellation by certified mail to the owner/operator and to the DEQ at least 120 days in advance of cancellation.

(h) **New financial assurance required.** DEQ approved alternate financial assurance meeting the requirements of this Part must be established:

(1) prior to cancellation of the policy by the insurer; or

(2) within 60 days of receipt of notice the insurer no longer meets the requirements of (c) of this Section.

(i) **Annual increases for policies for post-closure care.**

(1) For insurance policies providing coverage for post-closure care, commencing on the date that liability to make payments pursuant to the policy accrues, the insurer must thereafter annually increase the face amount of the policy.

(2) Such increase must be equivalent to the face amount of the policy, less any payments made, multiplied by an amount equivalent to 85 percent of the most recent investment rate or of the equivalent coupon-issue yield announced by the U.S. Treasury for 26-week Treasury securities.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-81. Corporate financial test

(a) **Corporate test authorized.** A corporate owner/operator that satisfies the requirements of this Section may demonstrate financial assurance up to the amount specified in this Section.

(b) **Financial component.** The following demonstrations must be submitted to the DEQ for approval and a copy of the approved demonstrations placed in the operating record.

(1) The corporation must satisfy one of the following three conditions:

(A) a current rating for its senior unsubordinated debt of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A or Baa as issued by Moody's; or

(B) a ratio of less than 1.5 comparing total liabilities to net worth; or

(C) a ratio of greater than 0.10 comparing the sum of net income plus depreciation, depletion and amortization, minus $10 million, to total liabilities.

(2) The corporation's tangible net worth must be greater than:

(A) The sum of the current closure, post-closure care, corrective action cost estimates and any other environmental obligations, including guarantees, covered by a financial test plus $10 million except as provided in (B) of this paragraph.

(B) $10 million in net worth plus the amount of any guarantees that have not been recognized as liabilities on the financial statements provided all of the current closure, post- closure care, and corrective action costs and any other environmental obligations covered by a financial test are recognized as liabilities on the corporation's audited financial statements, and subject to the approval of the DEQ.

(3) The corporation must have assets located in the United States amounting to at least the sum of current closure, post-closure care, corrective action cost estimates and any other environmental obligations covered by a financial test as described in (d) of this Section.

(c) **Recordkeeping and reporting.** The following must be submitted to the DEQ for approval and a copy of the approved documents placed in the operating record.

(1) a letter signed by the owner/operator's chief financial officer that:

(A) lists all the current cost estimates covered by a financial test, including, but not limited to:

(i) cost estimates required for municipal solid waste management facilities under this Chapter;

(ii) cost estimates required for UIC facilities under 40 CFR Part 144, if applicable;

(iii) cost estimates required for petroleum underground storage tank facilities under 40 CFR Part 280, if applicable;

(iv) cost estimates required for PCB storage facilities under 40 CFR Part 761, if applicable; and

(v) cost estimates required for hazardous waste treatment, storage, and disposal facilities under 40 CFR Parts 264 and 265, if applicable; and

(B) provides evidence demonstrating that the corporation meets the conditions of either (b)(1)(A), (b)(1)(B), or (b)(1)(C) of this Section, and (b)(2) and (b)(3) of this Section.

(2) a copy of an independent certified public accountant's unqualified opinion of the owner/operator's financial statements for the latest completed fiscal year. A corporate owner/operator may not use the corporate test as a financial assurance mechanism if it receives an adverse opinion, disclaimer of opinion, or other qualified opinion

from the independent certified public accountant. In such case, alternate financial assurance meeting the requirements of this Part shall be provided.

(3) If the chief financial officer's letter providing evidence of financial assurance includes financial data showing that owner/operator satisfies (b)(1)(B) or (b)(1)(C) of this Section that are different from data in the audited financial statements referred to in (c)(2) of this Section or any other audited financial statement or data filed with the SEC, then a special report from the owner/operator's independent certified public accountant to the owner/operator is required. The special report shall be based upon an agreed upon procedures engagement in accordance with professional auditing standards and shall describe the procedures performed in comparing the data in the chief financial officer's letter derived from the independently audited, year-end financial statements for the latest fiscal year with the amounts in such financial statements, the findings of that comparison, and the reasons for any differences.

(4) If the chief financial officer's letter provides a demonstration that the firm has assured for environmental obligations as provided in (b)(2)(B) of this Section, then the letter shall include a report from the independent certified public accountant that verifies that all of the environmental obligations covered by a financial test have been recognized as liabilities on the audited financial statements, how these obligations have been measured and reported, and that the tangible net worth of the firm is at least $10 million plus the amount of any guarantees provided.

(d) **Calculation of costs to be assured.** When calculating the current cost estimates for closure, post-closure care, corrective action, or the sum of the combination of such costs to be covered, and any other environmental obligations assured by a financial test referred to in this Section, the owner/operator must include:

(1) cost estimates required for municipal solid waste management facilities under this Chapter; and

(2) cost estimates required for the following if it assures them through a financial test:

(A) obligations associated with UIC facilities under 40 CFR Part 144

(B) obligations associated with petroleum underground storage tank facilities under 40 CFR Part 280;

(C) obligations associated with PCB storage facilities under 40 CFR Part 761; and

(D) obligations associated with hazardous waste treatment, storage, and disposal facilities under 40 CFR Parts 264 and 265.

(e) **New financial assurance required.** If the owner/operator no longer meets the requirements of (b) of this Section, the owner/operator must obtain DEQ approved alternative financial assurance that meets the requirements of this Part within 120 days following the close of the owner/operator's fiscal year.

(f) **DEQ may request financial information.** The DEQ may, based on a reasonable belief that the owner/operator may no longer meet the requirements of (b) of this Section, require the owner/operator to provide reports of its financial condition in addition to or including current financial test documentation as specified in (c) of this Section. If the DEQ finds that the owner/operator no longer meets the requirements of (b) of this Section, the owner/operator must comply with (e) of this Section.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-82. Corporate guarantee

(a) **Corporate guarantee authorized.** An owner/operator may satisfy his financial assurance requirements by obtaining a written guarantee from a corporate sponsor ("guarantor").

(b) **Relationship of guarantor to owner/operator.** The guarantor must be the direct or higher-tier parent corporation of the owner/operator, a firm whose parent corporation is also the parent corporation of the owner/operator, or a firm with a substantial business relationship with the owner/operator.

(c) **Requirements of guarantor.** The guarantor must meet the requirements for corporate owner/operators in OAC 252:517-17-81 and must comply with the terms of the guarantee.

(d) **Documentation required.** The owner/operator must submit to the DEQ for approval, a certified copy of the guarantee, along with copies of the information described in OAC 252:517-17-81(c). A copy of the approved documentation shall be placed in the operating record.

(1) If the guarantor's parent corporation is also the parent corporation of the owner/operator, the letter from the guarantor's chief financial officer must describe the value received in consideration of the guarantee.

(2) If the guarantor is a firm with a substantial business relationship with the owner/operator, this letter must describe this substantial business relationship and the value received in consideration of the guarantee.

(e) **Terms of guarantee.** The terms of the guarantee must include certain provisions.

(1) **Failure to perform.** If the owner/operator fails to perform closure, post-closure care, and/or corrective action of a facility covered by the guarantee, the guarantor will:

(A) perform, or pay a third party to perform, closure, post-closure care, and/or corrective action as required (performance guarantee); or

(B) establish a fully funded trust fund as specified in OAC 252:517-17-76 in the name of the owner/operator (payment guarantee).

(2) **Guarantee remains in force unless cancelled.** The guarantee will remain in force for as long as the owner/operator must comply with the applicable financial assurance requirements of this Subchapter unless the guarantor sends prior notice of cancellation by certified mail to the owner/operator and to the DEQ. Cancellation may not occur, however, during the 120 days beginning on the date of receipt of the notice of cancellation by both the owner/operator and the DEQ, as evidenced by the return receipts.

(3) **Obtain alternate financial assurance after cancellation.** If notice of cancellation is given, the owner/operator must, within 90 days following receipt of the cancellation notice by the owner/operator and the DEQ, obtain DEQ approved alternate financial assurance meeting the requirements of this Part.

(4) **Failure to provide alternate financial assurance.** If the owner/operator fails to provide alternate financial assurance within the 90-dayperiod, the guarantor must provide DEQ approved alternate assurance within 120 days of receipt of the cancellation notice.

(f) **Corporate guarantor no longer qualifies.**

(1) **Obtain alternative financial assurance.** If a corporate guarantor no longer meets the requirements of OAC 252:517-17-81(b), the owner/operator must, within 90 days of receipt of such notice, obtain DEQ approved alternative financial assurance meeting the requirements of this Part.

(2) **Failure to provide alternate financial assurance.** If the owner/operator fails to provide alternate financial assurance within the 90-dayperiod, the guarantor must provide DEQ approved alternate assurance within the next 30 days.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-17-83. State approved mechanism

An owner/operator may satisfy the requirements of this Part by obtaining any other financial assurance mechanism that meets the financial assurance mechanism criteria specified in OAC 252:517-17-71 and that is approved by the DEQ.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

SUBCHAPTER 19. RECORD KEEPING, NOTIFICATION, AND POSTING OF INFORMATION TO THE INTERNET

Section

252:517-19-1. Recordkeeping requirements
252:517-19-2. Notification requirements
252:517-19-3. Publicly accessible internet site requirements

252:517-19-1. Recordkeeping requirements

(a) **Applicability.** Each owner or operator of a CCR unit subject to the requirements of this Chapter must maintain files of all information required by this Section in a written operating record at their facility.

(b) **Records retention.** Unless specified otherwise, each file must be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, record, or study.

(c) **Recordkeeping methods.** An owner or operator of more than one CCR unit subject to the provisions of this Chapter may comply with the requirements of this Section in one recordkeeping system provided the system identifies each file by the name of each CCR unit. The files may be maintained on microfilm, on a computer, on computer disks, on a storage system accessible by a computer, on magnetic tape disks, or on microfiche.

(d) **DEQ submittal.** The owner or operator of a CCR unit must submit to the DEQ any demonstration or documentation required by this Chapter, if requested, when such information is not otherwise available on the owner or operator's publicly accessible Internet site.

(e) **Location restrictions.** The owner or operator of a CCR unit subject to this Chapter must place the demonstrations documenting whether or not the CCR unit is in compliance with the requirements under OAC 252:517-5-1(a), OAC 252:517-5-2(a), OAC 252:517-5-3(a), OAC 252:517-5-4(a), and OAC 252:517-5-5(a), as it becomes available, in the facility's operating record.

(f) **Design criteria.** The owner or operator of a CCR unit subject to this Chapter must place the following information, as it becomes available, in the facility's operating record:

(1) The design and construction certifications as required by OAC 252:517-11-1(e) and (f).

(2) The documentation of liner type as required by OAC 252:517-11-2(a).

(3) The design and construction certifications as required by OAC 252:517-11-3(c) and (d).

(4) Documentation prepared by the owner or operator stating that the permanent identification marker was installed as required by OAC 252:517-11-4(a)(1) and OAC 252:517-11-5(a)(1).

(5) The initial and periodic hazard potential classification assessments as required by OAC 252:517-11-4(a)(2) and OAC 252:517-11-5(a)(2).

(6) The emergency action plan (EAP), and any amendment of the EAP, as required by OAC 252:517-11-4(a)(3) and OAC 252:517-11-5(a)(3), except that only the most recent EAP must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this Section.

(7) Documentation prepared by the owner or operator recording the annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders as required by OAC 252:517-11-4(a)(3)(i)(E) and OAC 252:517-11-5(a)(3)(i)(E).

(8) Documentation prepared by the owner or operator recording all activations of the emergency action plan as required by OAC 252:517-11-4(a)(3)(v) and OAC 252:517-11-5(a)(3)(v).

(9) The history of construction, and any revisions of it, as required by OAC 252:517-11-4(c), except that these files must be maintained until the CCR unit completes closure of the unit in accordance with OAC 252:517-15-7.

(10) The initial and periodic structural stability assessments as required by OAC 252:517-11-4(d) and OAC 252:517-11-5(d).

(11) Documentation detailing the corrective measures taken to remedy the deficiency or release as required by OAC 252:517-11-4(d)(2) and OAC 252:517-11-5(d)(2).

(12) The initial and periodic safety factor assessments as required by OAC 252:517-11-4(e) and OAC 252:517-11-5(e).

(13) The design and construction plans, and any revisions of it, as required by OAC 252:517-11-5(c), except that these files must be maintained until the CCR unit completes closure of the unit in accordance with OAC 252:517-15-7.

(g) **Operating criteria.** The owner or operator of a CCR unit subject to this Chapter must place the following information, as it becomes available, in the facility's operating record:

(1) The CCR fugitive dust control plan, and any subsequent amendment of the plan, required by OAC 252:517-13-1(b), except that only the most recent control plan must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this Section.

(2) The annual CCR fugitive dust control report required by OAC 252:517-13-1(c).

(3) The initial and periodic run-on and run-off control system plans as required by OAC 252:517-13-2(c).

(4) The initial and periodic inflow design flood control system plan as required by OAC 252:517-13-3(c).

(5) Documentation recording the results of each inspection and instrumentation monitoring by a qualified person as required by OAC 252:517-13-4(a).

(6) The periodic inspection report as required by OAC 252:517-13-4(b)(2).

(7) Documentation detailing the corrective measures taken to remedy the deficiency or release as required by OAC 252:517-13-4(b)(5) and OAC 252:517-13-5(b)(5).

(8) Documentation recording the results of the weekly inspection by a qualified person as required by OAC 252:517-13-5(a).

(9) The periodic inspection report as required by OAC 252:517-13-5(b)(2).

(h) **Groundwater monitoring and corrective action.** The owner or operator of a CCR unit subject to this Chapter must place the following information, as it becomes available, in the facility's operating record:

(1) The annual groundwater monitoring and corrective action report as required by OAC 252:517-9-1(e).

(2) Documentation of the design, installation, development, and decommissioning of any monitoring wells, piezometers and other measurement, sampling, and analytical devices as required by OAC 252-517-9-2(e)(1).

(3) The groundwater monitoring system certification as required by OAC 252-517-9-2(f).

(4) The selection of a statistical method certification as required by OAC 252:517-9-4(f)(6).

(5) Within 30 days of establishing an assessment monitoring program, the notification as required by OAC 252:517-9-5(e)(3).

(6) The results of Appendices A and B to this Chapter constituent concentrations as required by OAC 252:517-9-6(d)(1).

(7) Within 30 days of returning to a detection monitoring program, the notification as required by OAC 252:517-9-6(e).

(8) Within 30 days of detecting one or more constituents in Appendix B to this Chapter at statistically significant levels above the groundwater protection standard, the notifications as required by OAC 252:517-9-6(g).

(9) Within 30 days of initiating the assessment of corrective measures requirements, the notification as required by OAC 252:517-9-6(g)(5).

(10) The completed assessment of corrective measures as required by OAC 252:517-9-7(d).

(11) Documentation prepared by the owner or operator recording the public meeting for the corrective measures assessment as required by OAC 252:517-9-7(e).

(12) The semiannual report describing the progress in selecting and designing the remedy and the selection of remedy report as required by OAC 252:517-9-8(a), except that the selection of remedy report must be maintained until the remedy has been completed.

(13) Within 30 days of completing the remedy, the notification as required by OAC 252:517-9-9(e).

(i) **Closure and post-closure care.** The owner or operator of a CCR unit subject to this Chapter must place the following information, as it becomes available, in the facility's operating record:

(1) The notification of intent to initiate closure of the CCR unit as required by OAC 252:517-15-5(c)(1).

(2) The annual progress reports of closure implementation as required by OAC 252:517-15-5(c)(2)(i) and (ii).

(3) The notification of closure completion as required by OAC 252:517-15-5(c)(3).

(4) The written closure plan, and any amendment of the plan, as required by OAC 252:517-15-7(b), except that only the most recent closure plan must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this Section.

(5) The written demonstration(s), including the certification required by OAC 252:517-15-7(e)(2)(iii), for a time extension for initiating closure as required by OAC 252:517-15-7(e)(2)(ii).

(6) The written demonstration(s), including the certification required by OAC 252:517-15-7(f)(2)(iii), for a time extension for completing closure as required by OAC 252:517-15-7(f)(2)(i).

(7) The notification of intent to close a CCR unit as required by OAC 252:517-15-7(g).

(8) The notification of completion of closure of a CCR unit as required by OAC 252:517-15-7(h).

(9) The notification recording a notation on the deed as required by OAC 252:517-15-7(i).

(10) The notification of intent to comply with the alternative closure requirements as required by OAC 252:517-15-8(c)(1).

(11) The annual progress reports under the alternative closure requirements as required by OAC 252:517-15-8(c)(2).

(12) The written post-closure plan, and any amendment of the plan, as required by OAC 252:517-15-9(d), except that only the most recent closure plan must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this Section.

(13) The notification of completion of post-closure care period as required by OAC 252:517-15-9(e).

(j) **Financial assurance.** The owner or operator of a CCR unit subject to this Chapter must follow the recordkeeping requirements of Subchapter 17 of this Chapter, as applicable to the facility.

(k) **Retrofit criteria.** The owner or operator of a CCR unit subject to this Chapter must place the following information, as it becomes available, in the facility's operating record:

(1) The written retrofit plan, and any amendment of the plan, as required by OAC 252:517-15-7(k)(2), except that only the most recent retrofit plan must be maintained in the facility's operating record irrespective of the time requirement specified in paragraph (b) of this Section.

(2) The notification of intent that the retrofit activities will proceed in accordance with the alternative procedures in OAC 252:517-15-8.

(3) The annual progress reports required under the alternative requirements as required by OAC 252:517-15-8.

(4) The written demonstration(s), including the certification in OAC 252:517-15-7(f)(2)(iii), for a time extension for completing retrofit activities as required by OAC 252:517-15-7(k)(3).

(5) The notification of intent to initiate retrofit of a CCR unit as required by OAC 252:517-15-7(k)(5).

(6) The notification of completion of retrofit activities as required by OAC 252:517-15-7(k)(6).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-19-2. Notification requirements

(a) **DEQ notification.** The notifications required under paragraphs (e) through (i) of this Section must be sent to the DEQ before the close of business on the day the notification is required to be completed. For purposes of this Section, before the close of business means the notification must be postmarked or sent by electronic mail (email). If a notification deadline falls on a weekend or federal holiday, the notification deadline is automatically extended to the next business day. For those plans requiring approval by DEQ, submittal of the plan constitutes notification.

(b) **Combining notifications.** Notifications may be combined as long as the deadline requirement for each notification is met.

(c) **Notification required.** Unless otherwise required in this Section, the notifications specified in this Section must be sent to the DEQ within 30 days of placing in the operating record the information required by OAC 252:517-19-1.

(d) **Location restrictions.** The owner or operator of a CCR unit subject to the requirements of this Chapter must notify the DEQ that each demonstration specified under OAC 252:517-19-1(e) has been placed in the operating record and on the owner or operator's publicly accessible internet site.

(e) **Design criteria.** The owner or operator of a CCR unit subject to this Chapter must notify the DEQ when information has been placed in the operating record and on the owner or operator's publicly accessible internet site. The owner or operator must:

(1) Within 60 days of commencing construction of a new CCR unit, provide notification of the availability of the design certification specified under OAC 252:517-19-1(f)(1) or (3). If the owner or operator of the CCR unit elects to install an alternative composite liner, the owner or operator must also submit to the DEQ a copy of the alternative composite liner design.

(2) No later than the date of initial receipt of CCR by a new CCR unit, provide notification of the availability of the construction certification specified under OAC 252:517-19-1(f)(1) or (3).

(3) Provide notification of the availability of the documentation of liner type specified under OAC 252:517-19-1(f)(2).

(4) Provide notification of the availability of the initial and periodic hazard potential classification assessments specified under OAC 252:517-19-1(f)(5).

(5) Provide notification of the availability of emergency action plan (EAP), and any revisions of the EAP, specified under OAC 252:517-19-1(f)(6).

(6) Provide notification of the availability of documentation prepared by the owner or operator recording the annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders specified under OAC 252:517-19-1(f)(7).

(7) Provide notification of documentation prepared by the owner or operator recording all activations of the emergency action plan specified under OAC 252:517-19-1(f)(8).

(8) Provide notification of the availability of the history of construction, and any revision of it, specified under OAC 252:517-19-1(f)(9).

(9) Provide notification of the availability of the initial and periodic structural stability assessments specified under OAC 252:517-19-1(f)(10).

(10) Provide notification of the availability of the documentation detailing the corrective measures taken to remedy the deficiency or release specified under OAC 252:517-19-1(f)(11).

(11) Provide notification of the availability of the initial and periodic safety factor assessments specified under OAC 252:517-19-1(f)(12).

(12) Provide notification of the availability of the design and construction plans, and any revision of them, specified under OAC 252:517-19-1(f)(13).

(f) **Operating criteria.** The owner or operator of a CCR unit subject to this Chapter must notify the DEQ when information has been placed in the operating record and on the owner or operator's publicly accessible internet site. The owner or operator must:

(1) Provide notification of the availability of the CCR fugitive dust control plan, or any subsequent amendment of the plan, specified under OAC 252:517-19-1(g)(1).

(2) Provide notification of the availability of the annual CCR fugitive dust control report specified under OAC 252:517-19-1(g)(2).

(3) Provide notification of the availability of the initial and periodic run-on and run-off control system plans specified under OAC 252:517-19-1(g)(3).

(4) Provide notification of the availability of the initial and periodic inflow design flood control system plans specified under OAC 252:517-19-1(g)(4).

(5) Provide notification of the availability of the periodic inspection reports specified under OAC 252:517-19-1(g)(6).

(6) Provide notification of the availability of the documentation detailing the corrective measures taken to remedy the deficiency or release specified under OAC 252:517-19-1(g)(7).

(7) Provide notification of the availability of the periodic inspection reports specified under OAC 252:517-19-1(g)(9).

(g) **Groundwater monitoring and corrective action.** The owner or operator of a CCR unit subject to this Chapter must notify the DEQ when information has been placed in the operating record and on the owner or operator's publicly accessible internet site. The owner or operator must:

(1) Provide notification of the availability of the annual groundwater monitoring and corrective action report specified under OAC 252:517-19-1(h)(1).

(2) Provide notification of the availability of the groundwater monitoring system certification specified under OAC 252:517-19-1(h)(3).

(3) Provide notification of the availability of the selection of a statistical method certification specified under OAC 252:517-19-1(h)(4).

(4) Provide notification that an assessment monitoring programs has been established specified under OAC 252:517-19-1(h)(5).

(5) Provide notification that the CCR unit is returning to a detection monitoring program specified under OAC 252:517-19-1(h)(7).

(6) Provide notification that one or more constituents in Appendix B to this Chapter have been detected at statistically significant levels above the groundwater protection standard and the notifications to land owners specified under OAC 252:517-19-1(h)(8).

(7) Provide notification that an assessment of corrective measures has been initiated specified under OAC 252:517-19-1(h)(9).

(8) Provide notification of the availability of assessment of corrective measures specified under OAC 252:517-19-1(h)(10).

(9) Provide notification of the availability of the semi-annual report describing the progress in selecting and designing the remedy and the selection of remedy report specified under OAC 252:517-19-1(h)(12).

(10) Provide notification of the completion of the remedy specified under OAC 252:517-19-1(h)(13).

(h) **Closure and post-closure care.** The owner or operator of a CCR unit subject to this Chapter must notify the DEQ when information has been placed in the operating record and on the owner or operator's publicly accessible Internet site. The owner or operator must:

(1) Provide notification of the intent to initiate closure of the CCR unit specified under OAC 252:517-19-1(i)(1).

(2) Provide notification of the availability of the annual progress reports of closure implementation specified under OAC 252:517-19-1(i)(2).

(3) Provide notification of closure completion specified under OAC 252:517-19-1(i)(3).

(4) Provide notification of the availability of the written closure plan, and any amendment of the plan, specified under OAC 252:517-19-1(i)(4).

(5) Provide notification of the availability of the demonstration(s) for a time extension for initiating closure specified under OAC 252:517-19-1(i)(5).

(6) Provide notification of the availability of the demonstration(s) for a time extension for completing closure specified under OAC 252:517-19-1(i)(6).

(7) Provide notification of intent to close a CCR unit specified under OAC 252:517-19-1(i)(7).

(8) Provide notification of completion of closure of a CCR unit specified under OAC 252:517-19-1(i)(8).

(9) Provide notification of the deed notation as required by OAC 252:517-19-1(i)(9).

(10) Provide notification of intent to comply with the alternative closure requirements specified under OAC 252:517-19-1(i)(10).

(11) The annual progress reports under the alternative closure requirements as required by OAC 252:517-19-1(i)(11).

(12) Provide notification of the availability of the written post-closure plan, and any amendment of the plan, specified under OAC 252:517-19-1(i)(12).

(13) Provide notification of completion of post-closure care specified under OAC 252:517-19-1(i)(13).

(i) **Retrofit criteria.** The owner or operator of a CCR unit subject to this Chapter must notify the DEQ when information has been placed in the operating record and on the owner or operator's publicly accessible Internet site. The owner or operator must:

(1) Provide notification of the availability of the written retrofit plan, and any amendment of the plan, specified under OAC 252:517-19-1(j)(1).

(2) Provide notification of intent to comply with the alternative retrofit requirements specified under OAC 252:517-19-1(j)(2).

(3) The annual progress reports under the alternative retrofit requirements as required by OAC 252:517-19-1(j)(3).

(4) Provide notification of the availability of the demonstration(s) for a time extension for completing retrofit activities specified under OAC 252:517-19-1(j)(4).

(5) Provide notification of intent to initiate retrofit of a CCR unit specified under OAC 252:517-19-1(j)(5).

(6) Provide notification of completion of retrofit activities specified under OAC 252:517-19-1(j)(6).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

252:517-19-3. Publicly accessible internet site requirements

(a) **Applicability.** Each owner or operator of a CCR unit subject to the requirements of this Chapter must maintain a publicly accessible Internet site (CCR Web site) containing the information specified in this Section. The owner or operator's Web site must be titled "CCR Rule Compliance Data and Information."

(b) **Multiple CCR units.** An owner or operator of more than one CCR unit subject to the provisions of this Chapter may comply with the requirements of this Section by using the same Internet site for multiple CCR units provided the CCR Web site clearly delineates information by the name or identification number of each unit.

(c) **Website records retention.** Unless otherwise required in this Section, the information required to be posted to the CCR Web site must be made available to the public for at least five years following the date on which the information was first posted to the CCR Web site.

(d) **Timeline for posting to website.** Unless otherwise required in this Section, the information must be posted to the CCR Web site within 30 days of placing the pertinent information required by OAC 252:517-19-1 in the operating record.

(e) **Location restrictions.** The owner or operator of a CCR unit subject to this Chapter must place each demonstration specified under OAC 252:517-19-1(e) on the owner or operator's CCR Web site.

(f) **Design criteria.** The owner or operator of a CCR unit subject to this Chapter must place the following information on the owner or operator's CCR Web site:

(1) Within 60 days of commencing construction of a new unit, the design certification specified under OAC 252:517-19-1(f)(1) or (3).

(2) No later than the date of initial receipt of CCR by a new CCR unit, the construction certification specified under OAC 252:517-19-1(f)(1) or (3).

(3) The documentation of liner type specified under OAC 252:517-19-1(f)(2).

(4) The initial and periodic hazard potential classification assessments specified under OAC 252:517-19-1(f)(5).

(5) The emergency action plan (EAP) specified under OAC 252:517-19-1(f)(6), except that only the most recent EAP must be maintained on the CCR Web site irrespective of the time requirement specified in paragraph (c) of this Section.

(6) Documentation prepared by the owner or operator recording the annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders specified under OAC 252:517-19-1(f)(7).

(7) Documentation prepared by the owner or operator recording any activation of the emergency action plan specified under OAC 252:517-19-1(f)(8).

(8) The history of construction, and any revisions of it, specified under OAC 252:517-19-1(f)(9).

(9) The initial and periodic structural stability assessments specified under OAC 252:517-19-1(f)(10).

(10) The documentation detailing the corrective measures taken to remedy the deficiency or release specified under OAC 252:517-19-1(f)(11).

(11) The initial and periodic safety factor assessments specified under OAC 252:517-19-1(f)(12).

(12) The design and construction plans, and any revisions of them, specified under OAC 252:517-19-1(f)(13).

(g) **Operating criteria.** The owner or operator of a CCR unit subject to this Chapter must place the following information on the owner or operator's CCR Web site:

(1) The CCR fugitive dust control plan, or any subsequent amendment of the plan, specified under OAC 252:517-19-1(g)(1) except that only the most recent plan must be maintained on the CCR Web site irrespective of the time requirement specified in paragraph (c) of this Section.

(2) The annual CCR fugitive dust control report specified under OAC 252:517-19-1(g)(2).

(3) The initial and periodic run-on and run-off control system plans specified under OAC 252:517-19-1(g)(3).

(4) The initial and periodic inflow design flood control system plans specified under OAC 252:517-19-1(g)(4).

(5) The periodic inspection reports specified under OAC 252:517-19-1(g)(6).

(6) The documentation detailing the corrective measures taken to remedy the deficiency or release specified under OAC 252:517-19-1(g)(7).

(7) The periodic inspection reports specified under OAC 252:517-19-1(g)(9).

(h) **Groundwater monitoring and corrective action.** The owner or operator of a CCR unit subject to this Chapter must place the following information on the owner or operator's CCR Web site:

(1) The annual groundwater monitoring and corrective action report specified under OAC 252:517-19-1(h)(1).

(2) The groundwater monitoring system certification specified under OAC 252:517-19-1(h)(3).

(3) The selection of a statistical method certification specified under OAC 252:517-19-1(h)(4).

(4) The notification that an assessment monitoring programs has been established specified under OAC 252:517-19-1(h)(5).

(5) The notification that the CCR unit is returning to a detection monitoring program specified under OAC 252:517-19-1(h)(7).

(6) The notification that one or more constituents in Appendix B to this Chapter have been detected at statistically significant levels above the groundwater protection standard and the notifications to land owners specified under OAC 252:517-19-1(h)(8).

(7) The notification that an assessment of corrective measures has been initiated specified under OAC 252:517-19-1(h)(9).

(8) The assessment of corrective measures specified under OAC 252:517-19-1(h)(10).

(9) The semiannual reports describing the progress in selecting and designing remedy and the selection of remedy report specified under OAC 252:517-19-1(h)(12), except that the selection of the remedy report must be maintained until the remedy has been completed.

(10) The notification that the remedy has been completed specified under OAC 252:517-19-1(h)(13).

(i) **Closure and post-closure care.** The owner or operator of a CCR unit subject to this Chapter must place the following information on the owner or operator's CCR Web site:

(1) The notification of intent to initiate closure of the CCR unit specified under OAC 252:517-19-1(i)(1).

(2) The annual progress reports of closure implementation specified underOAC 252:517-19-1(i)(2).

(3) The notification of closure completion specified under OAC 252:517-19-1(i)(3).

(4) The written closure plan, and any amendment of the plan, specified under OAC 252:517-19-1(i)(4).

(5) The demonstration(s) for a time extension for initiating closure specified under OAC 252:517-19-1(i)(5).

(6) The demonstration(s) for a time extension for completing closure specified under OAC 252:517-19-1(i)(6).

(7) The notification of intent to close a CCR unit specified under OAC 252:517-19-1(i)(7).

(8) The notification of completion of closure of a CCR unit specified under OAC 252:517-19-1(i)(8).

(9) The notification recording a notation on the deed as required by OAC 252:517-19-1(i)(9).

(10) The notification of intent to comply with the alternative closure requirements as required by OAC 252:517-19-1(i)(10).

(11) The annual progress reports under the alternative closure requirements as required by OAC 252:517-19-1(i)(11).

(12) The written post-closure plan, and any amendment of the plan, specified under OAC 252:517-19-1(i)(12).

(13) The notification of completion of post-closure care specified under OAC 252:517-19-1(i)(13).

(j) **Retrofit criteria.** The owner or operator of a CCR unit subject to this Chapter must place the following information on the owner or operator's CCR Web site:

(1) The written retrofit plan, and any amendment of the plan, specified under OAC 252:517-19-1(j)(1).

(2) The notification of intent to comply with the alternative retrofit requirements as required by OAC 252:517-19-1(j)(2).

(3) The annual progress reports under the alternative retrofit requirements as required by OAC 252:517-19 1(j)(3).

(4) The demonstration(s) for a time extension for completing retrofit activities specified under OAC 252:517-19-1(j)(4).

(5) The notification of intent to retrofit a CCR unit specified under OAC 252:517-19-1(j)(5).

(6) The notification of completion of retrofit activities specified under OAC 252:517-19-1(j)(6).

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

APPENDIX A. CONSTITUENTS FOR DETECTION MONITORING

Common Names[1]
Boron
Calcium
Chloride
Fluoride
pH
Sulfate
Total Dissolved Solids (TDS)

[1] Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

APPENDIX B. CONSTITUENTS FOR ASSESSMENT MONITORING

Common Name[1]
Antimony
Arsenic
Barium
Beryllium
Cadmium
Chromium
Cobalt
Fluoride
Lead
Lithium
Mercury
Molybdenum
Selenium
Thallium
Radium 226 and 228 combined

[1]Common names are those widely used in government regulations, scientific publications, and commerce; synonyms may exist for many chemicals.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

APPENDIX C. BORINGS IN DRILLING PLAN

Size of site	Total Number of Borings Required	Number of Borings Drilled at Least Ten Feet into the Uppermost Saturated Zone
5 acres or less	4	3
> 5-10	5	3
> 10-15	6	3
>15-20	7	3
>20-25	8	4
>25-30	9	4
>30-35	10	4
>35-40	11	4
>40-45	12	5
etc.		

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

APPENDIX D. BOREHOLE DEPTH CALCULATION TABLE

Owner/Operator's Name _____

Location or Name of Proposed Site

_____

Date Prepared _____

By Whom_____

Name or Number of Boring	The Deepest Proposed Placement of Waste in terms of Mean Sea Level Minus 30'	Surface Elevation of Boring	Total Depth of Borings (Column 3-Column 2)

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

APPENDIX E. PROCEDURES FOR CALCULATING CLOSURE COST ESTIMATES FOR FINANCIAL ASSURANCE

This Appendix presents the worksheet for calculating final closure cost estimates. The tasks and services included in this worksheet are based on the more complex closure requirements for MSWLFs. Some tasks and services may not be required for construction/demolition and non-hazardous industrial waste landfills, nor for other types of solid waste facilities requiring financial assurance. Owner/operators will be able to input site-specific information to calculate the necessary financial assurance.

Table E.1
All site data necessary to calculate estimates of closure and post-closure costs can be gathered by completing Table E.1. Data from Table E.1 should be inserted into Table E.2 of this Appendix and Table F.1 of Appendix F to complete calculations.

Table E.1 Site Data

FACILITY NAME:

PERMIT NUMBER:

DESCRIPTION	QUANTITY	UNITS
Total Permitted Area		acres
Active Portion		
Composite Lined		acres
Soil Lined		acres
Area of Largest Cell/Phase Requiring Final Cap		
Composite Lined		acres
Soil Lined		acres

Perimeter Fencing		linear feet
Groundwater Monitoring Wells		VLF
Methane Gas Probes		VLF
Terraces		linear feet
Letdown Channels		linear feet
Perimeter Drainage Ditches		linear feet
Average Daily Flow		tons/day
Landfill Disposal Cost		$/ton

VLF = Vertical linear feet. The sum of the depths of all monitoring wells

Table E.2
Table E.2 can be used to calculate closure cost estimates for landfills for which site specific data are available. The table is designed to be executed as a computer spreadsheet, but will work equally as well using hand calculations.

- Input site-specific quantities from Table E.1 into Table E.2, making sure the requisite units are used. Some quantities are already given by the table.
- Input current year unit costs obtained from the ODEQ website.*
- For each line of Task/Service items 1 through 4, multiply the value input for quantity by the multiplier and current year unit cost, and enter the resultant value in the Subtotal column.
- Line 5. Identify each task required by the Closure Plan that is not identified in Table H.2. Calculate cost estimates in accordance with OAC 252:517-17-51(d), and input total in the Subtotal column.

- Line 6. Add Subtotals for Task/Service items 1 through 5.
- Lines 7, 8, and 9. Compute Administrative Services, Technical and Professional Services and Closure Contingency costs by multiplying Line 6 by the multiplier for each respective Item. Enter the resultant values.
- Line 10. Add lines 6 through 9.

* Unit costs for use in completing this table will be updated for inflation by ODEQ on an annual basis. Current costs will be posted on the ODEQ website. Users of this chart shall use costs prepared by the ODEQ or adjust currently approved costs for inflation as of April 1st of each subsequent year using the procedure in OAC 252:517-17-34(a)(2).

Table E.2 Closure Cost Estimate

FACILITY NAME:

PERMIT NUMBER:

	Task/Service	Quantity	Units	Multiplier[a]	Unit Cost[b]	Subtotal
1	PRELIMINARY SITE WORK					
1.1	Conduct Site Evaluation	1	lump sum	1		
1.2	Dispose Final Wastes					
	Average Daily Flow	c[c]	tons/day			
	Disposal Cost	d[d]	tons/day	5(5 days of waste)	e[e]	
1.3	Remove Temporary Building(s)	1	lump sum	1		
1.4	Remove Equipment	1	lump sum	1		

1.5	Repair/Replace		linear feet	0.25(25% of fencing)		
1.6	Clean Leachate Line(s)	1	lump sum	1		
2	MONITORING EQUIPMENT					
2.1	Rework/Replace Monitoring Well(s)		VLF	0.25(25% of wells)		
2.2	Plug Abandoned Monitoring Well(s)		VLF	0.25 (25% of wells)		
2.3	Rework/Replace Methane Probe(s)		VLF	0.25 (25% of probes)		
2.4	Plug Abandoned Methane Probe(s)		VLF	0.25 (25% of probes)		
2.5	Rework/Replace Remediation and/or Gas Control Equipment	1	lump sum	0.05(5% of equipment capital cost)	2f	
3	CONSTRUCTION					
3.1	Complete Site Grading to include on-and off-site borrow areas		acres	1		
3.2	Construct Final Cap					

	Compacted On-site Clay Cap or		cubic yards	1		
	Compacted Off-site Clay Cap or		cubic yards	1		
	Install Geosynthetic Clay Liner Cap		square feet	1		
3.3	Construct Landfill Gas Venting Layer					
	Place Sand or		acres	1		
	Install Net and Geotextile		square feet	1		
3.4	Install Passive Landfill Gas Vents		acres	1		
3.5	Install Flexible Membrane		square feet	1		
3.6	Drainage Layer					
	Place Sand or		acres	1		
	Install Net and Geonet		square feet	1		
3.7	Place On-site Topsoil		cubic yards	1		
	Place Off-site Topsoil		cubic yards	1		

3.8	Establish Vegetative Cover, including on-and off-site borrow areas		acres	1		
4	DRAINAGE/EROSION CONTROL					
4.1	Construct Terraces		linear feet	1		
4.2	Construct Letdown Channels		linear feet	1		
4.3	Clean Perimeter Drainage Ditches		linear feet	0.50(50% of ditches)		
5	TASKS NOT IDENTIFIED					
6	SUBTOTAL					
7	ADMINISTRATIVE SERVICES	1	lump sum	0.10(10%)	g[a]	
8	TECHNICAL and PROFESSIONAL SERVICES	1	lump sum	0.12(12%)	g	
9	CLOSURE CONTINGENCY	1	lump sum	0.10(10%)	g	
10	TOTAL FINAL CLOSURE					h[b]

a. Multipliers are determined by the *Solid Waste Financial Assurance Program Report*, December 22, 2000.

b. Unit costs for use in completing this table will be updated for inflation by ODEQ on an annual basis. Current costs will be posted on the ODEQ website. Users of this chart shall use costs

prepared by ODEQ or adjust currently approved costs for inflation as of April 1st each year using the procedure in OAC 252:517-17-34(a)(2).

c. New facilities: Insert the value for "W" in OAC 252:517-17-8(b). Existing facilities: Insert reported total tonnage for the previous year, divided by 312 operating days per year (52 weeks per year x 6 operating days per week).

d. Insert number of tons/day from above.

e. Insert landfill disposal cost per ton of waste ($/ton).

f. Input capital cost for gas control/remediation equipment, if installed at the site.

g. Input Subtotal from line 6.

h. Add rows 6 through 9.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

APPENDIX F. PROCEDURE FOR CALCULATING POST-CLOSURE COST ESTIMATES FOR FINANCIAL ASSISTANCE

This Appendix presents the worksheet for calculating final post-closure cost estimates. The tasks and services included in this worksheet are based on the more complex closure requirements for MSWLFs. Some tasks and services may not be required for construction/demolition and non-hazardous industrial waste landfills, nor for other types of solid waste facilities requiring financial assurance. Owner/operators will be able to input site-specific information to calculate the necessary financial assurance.

F.1 Calculating Post-closure Costs

Table F.1 can be used to estimate Post-closure Costs. Table F.1 may be utilized in the same manner as Table E.2 of Appendix E.

- Input site-specific quantities from Table E.1 of Appendix E into Table F.1, making sure the requisite units are used. Some quantities are already given by the table.
  Input current year unit costs obtained from the ODEQ website.*
- For each line of Task/Service items 1 through 5, multiply the value input for quantity by the multiplier and current year unit cost*, and enter the resultant value in the subtotal column.
- Line 6. Identify each task required by the Post-closure Plan that is not identified in Table F.2. Calculate cost estimates in accordance with OAC 252:517-17-51(d), and input total in the Subtotal column.
- Line 7. Add Subtotals for Task/Service Items 1 through 6.
- Lines 8, 9, and 10. Compute Administrative Services, Technical and Professional Services and Post-closure Contingency costs by multiplying Line 7 by the multiplier for each respective Item. Enter the resultant values.
- Line 11. Add lines 7 through 10.

* Unit costs for use in completing this table will be updated for inflation by ODEQ on an annual basis. Current costs will be posted on the ODEQ website. Users of this chart shall use costs prepared by the ODEQ or adjust currently approved costs for inflation as of April 1st of each subsequent year using the procedure in OAC 252:517-17-34(a)(2).

Table F.1 Post-closure Estimate

FACILITY NAME:

PERMIT NUMBER:

	Task/Service	Quantity	Units	Multiplier[a]	Unit Cost[b]	Subtotal
1	SITE MAINTENANCE					
1.1	Site Inspections	4	per year	30 (30 yrs) 8 (8 yrs)		
1.2	General Maintenance	1	per year	30 (30 yrs) 8 (8 yrs)		
1.3	Remediation and/or Gas Control Equipment	1	lump sum	0.3[c]	1[c]	
2	MONITORING EQUIPMENT					
2.1	Rework/Replace Monitoring Well(s)		VLF	0.25(25% of wells)		
2.2	Plug Abandoned Well(s)		VLF	0.25(25% of wells)		

2.3	Final Plugging of Monitoring Wells		VLF	1		
2.4	Rework/Replace Methane Probe(s)		VLF	0.25(25% of probes)		
2.5	Plug Abandoned Probe(s)		VLF	0.25(25% of probes)		
2.6	Final Plugging of Methane Probes		VLF	1		
2.7	Final Plugging of Piezometer(s)		VLF	1		
3	SAMPLING and ANALYSIS					
3.1	Groundwater Monitoring Wells		wells	60(2/yr x 30yrs) 16(2/yr x 8 yrs)	MSWLF&NHIW C&D	
3.2	Methane Gas Probes		probes	60(2/yr x 30yrs)		
3.3	Surface Water Monitoring Points		points	60(2/yr x 30yrs)		

3.4	Leachate		sample	60(2/yr x 30yrs)		
4	FINAL COVER MAINTENANCE					
4.1	Mow and Fertilize Vegetative Cover		acres	30(30 yrs) 8(8 yrs)		
4.2	Repair Erosion, Settlement, and Subsidence for On-site Soils		acres	60(60 yrs) 16(16 yrs)		
	Repair Erosion, Settlement, and Subsidence for Off-site Soils		acres	30(30 yrs) 8(8 yrs)		
4.3	Reseed Vegetative Cover		acres	0.20(20% reseeded over post-closure period)		

5	LEACHATE MANAGEMENT					
5.1	Clean Leachate Line(s)	1	per year	30 (30 yrs)		
5.2	Maintain Leachate Collection System and Equipment	1	per year	30 (30 yrs)		
5.3	Collect, Treat, Transport, and Dispose Leachate		gal/yr	30 (30 yrs)		
6	TASKS NOT IDENTIFIED					
7	SUBTOTAL					
8	ADMINISTRATIVE SERVICES	1	lump sum	0.06 (6%)	f[a]	
9	TECHNICAL and PROFESSIONAL SERVICES	1	lump sum	0.07 (7%)	f	
10	POST-CLOSURE CONTINGENCY	1	lump sum	0.10 (10%)	f	
11	TOTAL POST CLOSURE					g[a]

a. Multipliers are determined by the *Solid Waste Financial Assurance Program Report*, December 22, 2000.

b. Unit costs for use in completing this table will be updated for inflation by ODEQ on an annual basis. Current costs will be posted on the ODEQ website. Users of this chart shall use costs prepared by ODEQ or adjust currently approved costs for inflation as of April 1st of each subsequent year using the procedure in OAC 252:517-17-34(a)(2).

c. 5% of equipment capital cost, maintenance performed once per 5 yrs for 30 years.

d. Input capital cost for gas control/remediation equipment, if installed at the site.

e. If the approved groundwater monitoring plan requires monitoring for alternative constituents, unit costs shall be calculated in accordance with OAC 252:517-17-52(b) or (c).

f. Input subtotal from line 7.

g. Add lines 7 through 10.

[Source: Added at 33 Ok Reg 1469, eff 9-15-16]

Following the EPA rulemaking revising certain provisions of 40 CFR Part 257(D)[48], the Department initiated rulemaking efforts to ensure Chapter 517 was consistent with the federal CCR requirements. The Department's revisions to Chapter 517, as set out below, were formally approved and adopted by Declaration by Mary Fallin, Governor of the State of Oklahoma on June 13, 2017, and become effective on September 15, 2017.

252:517-9-1. General provisions

(a) **Applicability.** ~~Except as provided for in OAC 252:517-15-5 for inactive CCR surface impoundments, a~~ All CCR landfills, CCR surface impoundments, and lateral expansions of CCR units are subject to the groundwater monitoring and corrective action requirements under OAC 252:517-9-1 through OAC 252:517-9-9.

(b) **Initial timeframes.**

(1) **Existing CCR landfills and existing CCR surface impoundments.** No later than October 17, 2017, the owner or operator of the CCR unit must be in compliance with the following groundwater monitoring requirements:

(A) Install the groundwater monitoring system as required by OAC 252-517-9-2;

(B) Develop the groundwater sampling and analysis program to include selection of the statistical procedures to be used for evaluating groundwater monitoring data as required by OAC 252:517-9-4;

(C) Initiate the detection monitoring program to include obtaining a minimum of eight independent samples for each background and downgradient well as required by OAC 252:517-9-5(b); and

(D) Begin evaluating the groundwater monitoring data for statistically significant increases over background levels for the constituents listed in Appendix A of this Chapter as required by OAC 252:517-9-5.

(2) **New CCR landfills, new CCR surface impoundments, and all lateral expansions of CCR units.** Prior to initial receipt of CCR by the CCR unit, the owner or operator must be in compliance with the groundwater monitoring requirements specified in paragraph (b)(1)(A) and (B) of this Section. In addition, the owner or operator of the CCR unit must initiate the detection monitoring program to include obtaining a minimum of eight independent samples for each background well as required by OAC 252:517-9-5(b).

(c) **Groundwater monitoring and corrective action.** Once a groundwater monitoring system and groundwater monitoring program has been established at the CCR unit as required by this Chapter, the owner or operator must conduct groundwater monitoring and, if necessary, corrective action throughout the active life and post-closure care period of the CCR unit.

(d) **Control releases.** In the event of a release from a CCR unit, the owner or operator must immediately take all necessary measures to control the source(s) of releases so as to reduce or eliminate, to the maximum extent feasible, further releases of contaminants into the environment. The owner or operator of the CCR

[48] *See* 81 Fed. Reg. 51802-51808 (August 5, 2016), becoming effective on October 4, 2016.

unit must comply with all applicable requirements in OAC 252:517-9-7, OAC 252:517-9-8, and OAC 252:517-9-9.

(e) **Annual groundwater monitoring and corrective action report.** For existing CCR landfills and existing CCR surface impoundments, no later than January 31, 2018, and annually thereafter, the owner or operator must prepare an annual groundwater monitoring and corrective action report. For new CCR landfills, new CCR surface impoundments, and all lateral expansions of CCR units, the owner or operator must prepare the initial annual groundwater monitoring and corrective action report no later than January 31 of the year following the calendar year a groundwater monitoring system has been established for such CCR unit as required by this Chapter, and annually thereafter. For the preceding calendar year, the annual report must document the status of the groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year. For purposes of this Section, the owner or operator has prepared the annual report when the report is placed in the facility's operating record as required by OAC 252:517-19-1(h)(1). At a minimum, the annual groundwater monitoring and corrective action report must contain the following information, to the extent available:

(1) A map, aerial image, or diagram showing the CCR unit and all background (or upgradient) and downgradient monitoring wells, to include the well identification numbers, that are part of the groundwater monitoring program for the CCR unit;

(2) Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken;

(3) In addition to all the monitoring data obtained under OAC 252:517-9-1 through OAC 252:517-9-9, a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs;

(4) A narrative discussion of any transition between monitoring programs (e.g., the date and circumstances for transitioning from detection monitoring to assessment monitoring in addition to identifying the constituent(s) detected at a statistically significant increase over background levels); and

(5) Other information required to be included in the annual report as specified in OAC 252:517-9-1 through OAC 252:517-9-9.

(f) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(h), the notification requirements specified in OAC 252:517-19-2(h), and the internet requirements specified in OAC 252:517-19-3(h).

(g) **DEQ approval required.** The annual groundwater monitoring and corrective action report shall be submitted to the DEQ for approval.

252:517-15-5. Inactive CCR surface impoundments

(a) **Applicability.** ~~Except as provided by paragraph (b) of this Section, I~~ Inactive CCR surface impoundments are subject to all of the requirements of this Chapter applicable to existing CCR surface impoundments.

~~(b) **Inactive CCR surface impoundment exemption.** An owner or operator of an inactive CCR surface impoundment that completes closure of such CCR unit, and meets all of the requirements of either paragraphs (b)(1) through (4) of this Section or paragraph (b)(5) of this Section no later than April 17, 2018, is exempt from all other requirements of this Chapter.~~

~~(1) **Closure by leaving CCR in place.** If the owner or operator of the inactive CCR surface impoundment elects to close the CCR surface impoundment by leaving CCR in place, the owner or operator must ensure that, at a minimum, the CCR unit is closed in a manner that will:~~

~~(A) Control, minimize or eliminate, to the maximum extent feasible, post-closure infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters or to the atmosphere;~~

~~(B) Preclude the probability of future impoundment of water, sediment, or slurry;~~

~~(C) Include measures that provide for major slope stability to prevent the sloughing or movement of the final cover system; and~~

~~(D) Minimize the need for further maintenance of the CCR unit.~~

~~(2) **Free liquids; stabilization.** The owner or operator of the inactive CCR surface impoundment must meet the requirements of paragraphs (b)(2)(A) and (B) of this Section prior to installing the final cover system required under paragraph (b)(3) of this Section.~~

~~(A) Free liquids must be eliminated by removing liquid wastes or solidifying the remaining wastes and waste residues.~~

~~(B) Remaining wastes must be stabilized sufficient to support the final cover system.~~

~~(3) **Final cover system design.** The owner or operator must install a final cover system that is designed to minimize infiltration and erosion, and at a minimum, meets the requirements of paragraph (b)(3)(A) of this Section, or the requirements of an alternative final cover system specified in paragraph (b)(3)(B) of this Section.~~

~~(A) The final cover system must be designed and constructed to meet the criteria specified in paragraphs (b)(3)(A)(i) through (iv) of this Section.~~

~~(i) The permeability of the final cover system must be less than or equal to the permeability of any bottom liner system or natural subsoils present, or a permeability no greater than $1x10^{-5}$ centimeters/second, whichever is less.~~

~~(ii) The infiltration of liquids through the CCR unit must be minimized by the use of an infiltration layer that contains a minimum of 18 inches of earthen material.~~

~~(iii) The erosion of the final cover system must be minimized by the use of an erosion layer that contains a minimum of six inches of earthen material that is capable of sustaining native plant growth.~~

~~(iv) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.~~

~~(B) The owner or operator may select an alternative final cover system design, provided the alternative final cover system is designed and constructed to meet the criteria in paragraphs (b)(3)(B)(i) through (iii) of this Section.~~

~~(i) The design of the final cover system must include an infiltration layer that achieves an equivalent reduction in infiltration as the infiltration layer specified in paragraphs (b)(3)(A)(i) and (ii) of this Section.~~

~~(ii) The design of the final cover system must include an erosion layer that provides equivalent protection from wind or water erosion as the erosion layer specified in paragraph (b)(3)(A)(iii) of this Section.~~

~~(iii) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.~~

~~(4) **PE certification of final cover.** The owner or operator of the CCR surface impoundment must obtain a written certification from a qualified professional engineer stating that the design of the final cover system meets either the requirements paragraphs (b)(3)(A) or (B) of this Section.~~

~~(5) **Closure through removal of CCR.** The owner or operator may alternatively elect to close an inactive CCR surface impoundment by removing and decontaminating all areas affected by releases from the CCR surface impoundment. CCR removal and decontamination of the CCR surface impoundment are complete when all CCR in the inactive CCR surface impoundment is removed, including the bottom liner of the CCR unit.~~

~~(6) **PE certification of timeline.** The owner or operator of the CCR surface impoundment must obtain a written certification from a qualified professional engineer that closure of the CCR surface impoundment under either paragraphs (b)(1) through (4) or (b)(5) of this Section is technically feasible within the timeframe in paragraph (b) of this Section.~~

~~(7) **Failure to complete closure.** If the owner or operator of the CCR surface impoundment fails to complete closure of the inactive CCR surface impoundment within the timeframe in paragraph (b) of this Section, the CCR unit must comply with all of the requirements applicable to existing CCR surface impoundments under this Chapter.~~

~~(c) **Required notices and progress reports.** An owner or operator of an inactive CCR surface impoundment that closes in accordance with paragraph (b) of this Section must complete the notices and progress reports specified in paragraphs (c)(1) through (3) of this Section.~~

~~(1) The owner or operator must prepare and place in the facility's operating record a notification of intent to initiate closure of the CCR surface impoundment. The notification must state that the CCR surface impoundment is~~

~~an inactive CCR surface impoundment closing under the requirements of paragraph (b) of this Section. The notification must also include a narrative description of how the CCR surface impoundment will be closed, a schedule for completing closure activities, and the required certifications under paragraphs (b)(4) and (6) of this Section, if applicable.~~

~~(2) The owner or operator must prepare periodic progress reports summarizing the progress of closure implementation, including a description of the actions completed to date, any problems encountered and a description of the actions taken to resolve the problems, and projected closure activities for the upcoming year. The annual progress reports must be completed according to the following schedule and submitted to the DEQ:~~

~~(A) The first annual progress report must be prepared no later than 13 months after completing the notification of intent to initiate closure required by paragraph (c)(1) of this Section.~~

~~(B) The second annual progress report must be prepared no later than 12 months after completing the first progress report required by paragraph (c)(2)(A) of this Section.~~

~~(C) The owner or operator has completed the progress reports specified in paragraph (c)(2) of this Section when the reports are placed in the facility's operating record as required by OAC 252:517-19-1(i)(2).~~

~~(3) The owner or operator must prepare and place in the facility's operating record a notification of completion of closure of the CCR surface impoundment. The notification must be submitted within 60 days of completing closure of the CCR surface impoundment and must include a written certification from a qualified professional engineer stating that the CCR surface impoundment was closed in accordance with the requirements of either paragraph (b)(1) through (4) or (b)(5) of this Section.~~

~~(d) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(i), the notification requirements specified in OAC 252:517-19-2(i), and the internet requirements specified in OAC 252:517-19-3(i).~~

(b) **Timeframes for certain inactive CCR surface impoundments.**

(1) An inactive CCR surface impoundment for which the owner or operator has completed the actions by the deadlines specified in paragraphs (b)(1)(A) through (C) of this Section is eligible for the alternative timeframes specified in paragraphs (b)(2) through (6) of this Section. The owner or operator of the CCR unit must comply with the applicable recordkeeping, notification, and internet requirements associated with these provisions. For the inactive CCR surface impoundment:

(A) The owner or operator must have prepared and placed in the facility's operating record by December 17, 2015, a notification of intent to initiate closure of the inactive CCR surface impoundment pursuant to OAC 252:517-19-1(i)(1);

(B) The owner or operator must have provided notification to the State Director and/or appropriate Tribal authority by January 19, 2016, of the intent to initiate closure of the inactive CCR surface impoundment pursuant to OAC 252:517-19-2(h)(1); and

(C) The owner or operator must have placed on its CCR Web site by January 19, 2016, the notification of intent to initiate closure of the inactive CCR surface impoundment pursuant to OAC 252:517-19-3(i)(1).

(2) **Location restrictions.**

(A) No later than April 16, 2020, the owner or operator of the inactive CCR surface impoundment must:

(i) Complete the demonstration for placement above the uppermost aquifer as set forth by OAC 252:517-5-1(a), (b), and (c)(3);

(ii) Complete the demonstration for wetlands as set forth by OAC 252:517-5-2(a), (b), and (c)(3);

(iii) Complete the demonstration for fault areas as set forth by OAC 252:517-5-3(a), (b), and (c)(3);

(iv) Complete the demonstration for seismic impact zones as set forth by OAC 252:517-5-4(a), (b), and (c)(3); and

(v) Complete the demonstration for unstable areas as set forth by OAC 252:517-5-5(a), (b), (c), and (d)(3).

(B) An owner or operator of an inactive CCR surface impoundment who fails to demonstrate compliance with the requirements of paragraph (e)(2)(A) of this section is subject to the closure requirements of OAC 252:517-15-6(b)(1).

(3) **Design criteria**. The owner or operator of the inactive CCR surface impoundment must:

(A) No later than April 17, 2018, complete the documentation of liner type as set forth by OAC 252:517-11-2(a) and (b).

(B) No later than June 16, 2017, place on or immediately adjacent to the CCR unit the permanent identification marker as set forth by OAC 252:517-11-4(a)(1).

(C) No later than October 16, 2018, prepare and maintain an Emergency Action Plan as set forth by OAC 252:517-11-4(a)(3).

(D) No later than April 17, 2018, compile a history of construction as set forth by OAC 252:517-11-4(b) and (c).

(E) No later than April 17, 2018, complete the initial hazard potential classification, structural stability, and safety factor assessments as set forth by OAC 252:517-11-4(a)(2), (b), (d), (e), and (f).

(4) **Operating criteria.** The owner or operator of the inactive CCR surface impoundment must:

(A) No later than April 18, 2017, prepare the initial CCR fugitive dust control plan as set forth in OAC 252:517-13-1(b).

(B) No later than April 17, 2018, prepare the initial inflow design flood control system plan as set forth in OAC 252:517-13-3(c).

(C) No later than April 18, 2017, initiate the inspections by a qualified person as set forth by OAC 252:517-13-4(a).

(D) No later than July 19, 2017, complete the initial annual inspection by a qualified professional engineer as set forth by OAC 252:517-13-4(b).

(5) **Groundwater monitoring and corrective action.** The owner or operator of the inactive CCR surface impoundment must:

(A) No later than April 17, 2019, comply with groundwater monitoring requirements set forth in OAC 252:517-9-1(b) and 252:517-9-5(b); and

(B) No later than August 1, 2019, prepare the initial groundwater monitoring and corrective action report as set forth in OAC 252:517-9-1(e).

(6) **Closure and post-closure care.** The owner or operator of the inactive CCR surface impoundment must:

(A) No later than April 17, 2018, prepare an initial written closure plan as set forth in OAC 252:517-15-7(b); and

(B) No later than April 17, 2018, prepare an initial written post-closure care plan as set forth in OAC 252:517-15-9(d).

252:517-15-7. Criteria for conducting the closure or retrofit of CCR units

(a) **Closure of CCR unit; retrofit of CCR surface impoundment.** Closure of a CCR landfill, CCR surface impoundment, or any lateral expansion of a CCR unit must be completed either by leaving the CCR in place and installing a final cover system or through removal of the CCR and decontamination of the CCR unit, as described in paragraphs (b) through (j) of this Section. Retrofit of a CCR surface impoundment must be completed in accordance with the requirements in paragraph (k) of this Section.

(b) **Written closure plan.**

(1) **Content of the plan.** The owner or operator of a CCR unit must prepare a written closure plan that describes the steps necessary to close the CCR unit at any point during the active life of the CCR unit consistent with recognized and generally accepted good engineering practices. The written closure plan must include, at a minimum, the information specified in paragraphs (b)(1)(A) through (F) of this Section.

(A) A narrative description of how the CCR unit will be closed in accordance with this Section.

(B) If closure of the CCR unit will be accomplished through removal of CCR from the CCR unit, a description of the procedures to remove the CCR and decontaminate the CCR unit in accordance with paragraph (c) of this Section.

(C) If closure of the CCR unit will be accomplished by leaving CCR in place, a description of the final cover system, designed in accordance with paragraph (d) of this Section, and the methods and procedures to be used to install the final cover. The closure plan must also discuss how the final cover system will achieve the performance standards specified in paragraph (d) of this Section.

(D) An estimate of the maximum inventory of CCR ever on-site over the active life of the CCR unit.

(E) An estimate of the largest area of the CCR unit ever requiring a final cover as required by paragraph (d) of this Section at any time during the CCR unit's active life.

(F) A schedule for completing all activities necessary to satisfy the closure criteria in this Section, including an estimate of the year in which all closure activities for the CCR unit will be completed. The schedule should provide sufficient information to describe the sequential steps that will be taken to close the CCR unit, including identification of major milestones such as coordinating with and obtaining necessary approvals and permits from other agencies, the dewatering and stabilization phases of CCR surface impoundment closure, or installation of the final cover system, and the estimated timeframes to complete each step or phase of CCR unit closure. When preparing the written closure plan, if the owner or operator of a CCR unit estimates that the time required to complete closure will exceed the timeframes specified in paragraph (f)(1) of this Section, the written closure plan must include the site-specific information, factors and considerations that would support any time extension sought under paragraph (f)(2) of this Section.

(2) **Timeframes for preparing the initial written closure plan.**

(A) Existing CCR landfills and existing CCR surface impoundments. No later than October 17, 2016, the owner or operator of the CCR unit must prepare an initial written closure plan consistent with the requirements specified in paragraph (b)(1) of this Section.

(B) New CCR landfills and new CCR surface impoundments, and any lateral expansion of a CCR unit. No later than the date of the initial receipt of CCR in the CCR unit, the owner or operator must prepare an initial written closure plan consistent with the requirements specified in paragraph (b)(1) of this Section.

(C) The owner or operator has completed the written closure plan when the plan, including the certification required by paragraph (b)(4) of this Section, has been placed in the facility's operating record as required by OAC 252:517-19-1(i)(4).

(3) **Amendment of a written closure plan.**

(A) The owner or operator may amend the initial or any subsequent written closure plan developed pursuant to paragraph (b)(1) of this Section at any time.

(B) The owner or operator must amend the written closure plan whenever:

(i)There is a change in the operation of the CCR unit that would substantially affect the written closure plan in effect; or

(ii)Before or after closure activities have commenced, unanticipated events necessitate a revision of the written closure plan;

(C) The owner or operator must amend the closure plan at least 60 days prior to a planned change in the operation of the facility or CCR unit, or no later than 60 days after an unanticipated event requires the need to revise an existing written closure plan. If a written closure plan is revised after closure activities have commenced for a CCR unit, the owner or operator must amend the current closure plan no later than 30 days following the triggering event.

(4) **PE certification.** The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the initial and any amendment of the written closure plan meets the requirements of this Section.

(5) **DEQ approval required.** The owner or operator of the CCR unit must submit the initial closure plan and any amendment of the closure plan to the DEQ for approval.

(c) **Closure by removal of CCR.** An owner or operator may elect to close a CCR unit by removing and decontaminating all areas affected by releases from the CCR unit. CCR removal and decontamination of the CCR unit are complete when constituent concentrations throughout the CCR unit and any areas affected by releases from the CCR unit have been removed and groundwater monitoring concentrations do not exceed the groundwater protection standard established pursuant to OAC 252:517-9-6(h) for constituents listed in Appendix B to this Chapter.

(d) **Closure performance standard when leaving CCR in place.**

(1) **Closure standards.** The owner or operator of a CCR unit must ensure that, at a minimum, the CCR unit is closed in a manner that will:

(A) Control, minimize or eliminate, to the maximum extent feasible, post-closure infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters or to the atmosphere;

(B) Preclude the probability of future impoundment of water, sediment, or slurry;

(C) Include measures that provide for major slope stability to prevent the sloughing or movement of the final cover system during the closure and post-closure care period;

(D) Minimize the need for further maintenance of the CCR unit; and

(E) Be completed in the shortest amount of time consistent with recognized and generally accepted good engineering practices.

(2) **Drainage and stabilization of CCR surface impoundments.** The owner or operator of a CCR surface impoundment or any lateral expansion of a CCR surface impoundment must meet the requirements of paragraphs (d)(2)(A) and (B) of this Section prior to installing the final cover system required under paragraph (d)(3) of this Section.

(A) Free liquids must be eliminated by removing liquid wastes or solidifying the remaining wastes and waste residues.

(B) Remaining wastes must be stabilized sufficient to support the final cover system.

(3) **Final cover system.** If a CCR unit is closed by leaving CCR in place, the owner or operator must install a final cover system that is designed to minimize infiltration and erosion, and at a minimum, meets the requirements of paragraph (d)(3)(A) of this Section, or the requirements of the alternative final cover system specified in paragraph (d)(3)(B) of this Section.

(A) The final cover system must be designed and constructed to meet the criteria in paragraphs (d)(3)(A)(i) through (iv) of this Section. The design of the final cover system must be included in the written closure plan required by paragraph (b) of this Section.

(i) The permeability of the final cover system must be less than or equal to the permeability of any bottom liner system or natural subsoils present, or a permeability no greater than $1x\ 10^{-5}$ cm/sec, whichever is less.

(ii) The infiltration of liquids through the closed CCR unit must be minimized by the use of an infiltration layer that contains a minimum of 18 inches of earthen material.

(iii) The erosion of the final cover system must be minimized by the use of an erosion layer that contains a minimum of six inches of earthen material that is capable of sustaining native plant growth.

(iv) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.

(B) The owner or operator may select an alternative final cover system design, provided the alternative final cover system is designed and constructed to meet the criteria in paragraphs (f)(3)(B)(i) through (iv) of this Section. The design of the final cover system must be included in the written closure plan required by paragraph (b) of this Section.

(i) The design of the final cover system must include an infiltration layer that achieves an equivalent reduction in infiltration as the infiltration layer specified in paragraphs (d)(3)(A)(i) and (ii) of this Section.

(ii) The design of the final cover system must include an erosion layer that provides equivalent protection from wind or water erosion as the erosion layer specified in paragraph (d)(3)(A)(iii) of this Section.

(iii) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.

(C) The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the design of the final cover system meets the requirements of this Section.

(e) **Initiation of closure activities.** Except as provided for in paragraph (e)(4) of this Section and OAC 252:517-15-8, the owner or operator of a CCR unit must commence closure of the CCR unit no later than the applicable timeframes specified in either paragraph (e)(1) or (2) of this Section.

(1) **Commencing closure.** The owner or operator must commence closure of the CCR unit no later than 30 days after the date on which the CCR unit either:

(A) Receives the known final receipt of waste, either CCR or any non-CCR waste stream; or

(B) Removes the known final volume of CCR from the CCR unit for the purpose of beneficial use of CCR.

(2) **Conditions.**

(A) Except as provided by paragraph (e)(2)(B) of this Section, the owner or operator must commence closure of a CCR unit that has not received CCR or any non-CCR waste stream or is no longer removing CCR for the purpose of beneficial use within two years of the last receipt of waste or within two years of the last removal of CCR material for the purpose of beneficial use.

(B) Notwithstanding paragraph (e)(2)(A) of this Section, the owner or operator of the CCR unit may secure an additional two years to initiate closure of the idle unit provided the owner or operator provides written documentation that the CCR unit will continue to accept wastes or will start removing CCR for the purpose of beneficial use. The documentation must be supported by, at a minimum, the information specified in paragraphs (e)(2)(B)(i) and (ii) of this Section. The owner or operator may obtain two-year extensions provided the owner or operator continues to be able to demonstrate that there is reasonable likelihood that the CCR unit will accept wastes in the foreseeable future or will remove CCR from the unit for the purpose of beneficial use. The owner or operator must place each completed demonstration, if more than one time extension is sought, in the facility's operating record as required by OAC 252:517-19-1(i)(5) prior to the end of any two-year period.

(i) Information documenting that the CCR unit has remaining storage or disposal capacity or that the CCR unit can have CCR removed for the purpose of beneficial use; and

(ii) Information demonstrating that that there is a reasonable likelihood that the CCR unit will resume receiving CCR or non-CCR waste streams in the foreseeable future or that CCR can be removed for the purpose of beneficial use. The narrative must include a best estimate as to when the CCR unit will resume receiving CCR or non-CCR waste streams. The situations listed in paragraphs (e)(2)(B)(ii)(I) through (IV) of this Section are examples of situations that would support a determination that the CCR unit will resume receiving CCR or non-CCR waste streams in the foreseeable future.

(I) Normal plant operations include periods during which the CCR unit does not receive CCR or non-CCR waste streams, such as the alternating use of two or more CCR units whereby at any point in time one CCR unit is receiving CCR while CCR is being removed from a second CCR unit after its dewatering.

(II) The CCR unit is dedicated to a coal-fired boiler unit that is temporarily idled (e.g., CCR is not being generated) and there is a reasonable likelihood that the coal-fired boiler will resume operations in the future.

(III) The CCR unit is dedicated to an operating coal-fired boiler (i.e., CCR is being generated); however, no CCR are being placed in the CCR unit because the CCR are being entirely diverted to beneficial uses, but there is a reasonable likelihood that the CCR unit will again be used in the foreseeable future.

(IV) The CCR unit currently receives only non-CCR waste streams and those non-CCR waste streams are not generated for an extended period of time, but there is a reasonable likelihood that the CCR unit will again receive non-CCR waste streams in the future.

(C) In order to obtain additional time extension(s) to initiate closure of a CCR unit beyond the two years provided by paragraph (e)(2)(A) of this Section, the owner or operator of the CCR unit must include with the demonstration required by paragraph (e)(2)(B) of this Section the following statement signed by the owner or operator or an authorized representative: I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(3) **Commencement activities.** For purposes of this Chapter, closure of the CCR unit has commenced if the owner or operator has ceased placing waste and completes any of the following actions or activities:

(A) Taken any steps necessary to implement the written closure plan required by paragraph (b) of this Section; or

(B) Taken any steps necessary to comply with any standards that are a prerequisite, or are otherwise applicable, to initiating or completing the closure of a CCR unit.

(4) **Timeline exceptions.** The timeframes specified in paragraphs (e)(1) and (2) of this Section do not apply to any of the following owners or operators:

~~(A) An owner or operator of an inactive CCR surface impoundment closing the CCR unit as required by OAC 252:517-15-5(b);~~

~~(B)~~(A) An owner or operator of an existing unlined CCR surface impoundment closing the CCR unit as required by OAC 252:517-15-6(a);

~~(C)~~(B) An owner or operator of an existing CCR surface impoundment closing the CCR unit as required by OAC 252:517-15-6(b);

~~(D)~~(C) An owner or operator of a new CCR surface impoundment closing the CCR unit as required by OAC 252:517-15-6(c); or

~~(E)~~(D) An owner or operator of an existing CCR landfill closing the CCR unit as required by OAC 252:517-15-6(d).

(f) **Completion of closure activities.**

(1) **Closure timeframes.** Except as provided for in paragraph (f)(2) of this Section, the owner or operator must complete closure of the CCR unit:

(A) For existing and new CCR landfills and any lateral expansion of a CCR landfill, within six months of commencing closure activities.

(B) For existing and new CCR surface impoundments and any lateral expansion of a CCR surface impoundment, within five years of commencing closure activities.

(2) **Extensions of closure timeframes.**

(A) **Applicability.** The timeframes for completing closure of a CCR unit specified under paragraphs (f)(1) of this Section may be extended if the owner or operator can demonstrate that it was not feasible to complete closure of the CCR unit within the required timeframes due to factors beyond the facility's control. If the owner or operator is seeking a time extension beyond the time specified in the written closure plan as required by paragraph (b)(1) of this Section, the demonstration must include a narrative discussion providing the basis for additional time beyond that specified in the closure plan. The owner or operator must place each completed demonstration, if more than one time extension is sought, in the facility's operating record as required by OAC 252:517-19-1(i)(6) prior to the end of any two-year period. Factors that may support such a demonstration include:

(i) Complications stemming from the climate and weather, such as unusual amounts of precipitation or a significantly shortened construction season;

(ii) Time required to dewater a surface impoundment due to the volume of CCR contained in the CCR unit or the characteristics of the CCR in the unit;

(iii) The geology and terrain surrounding the CCR unit will affect the amount of material needed to close the CCR unit; or

(iv) Time required or delays caused by the need to coordinate with and obtain necessary approvals and permits from a state or other agency.

(B) **Maximum time extensions.**

(i) CCR surface impoundments of 40 acres or smaller may extend the time to complete closure by no longer than two years.

(ii) CCR surface impoundments larger than 40 acres may extend the timeframe to complete closure of the CCR unit multiple times, in two-year increments. For each two-year extension sought, the owner or operator must substantiate the factual circumstances demonstrating the need for the extension. No more than a total of five two-year extensions may be obtained for any CCR surface impoundment.

(iii) CCR landfills may extend the timeframe to complete closure of the CCR unit multiple times, in one-year increments. For each one-year extension sought, the owner or operator must substantiate the factual circumstances demonstrating the need for the extension. No more than a total of two one-year extensions may be obtained for any CCR landfill.

(C) **Certification statement.** In order to obtain additional time extension(s) to complete closure of a CCR unit beyond the times provided by

paragraph (f)(1) of this Section, the owner or operator of the CCR unit must include with the demonstration required by paragraph (f)(2)(A) of this Section the following statement signed by the owner or operator or an authorized representative: I certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

(3) **PE certification.** Upon completion, the owner or operator of the CCR unit must obtain a certification from a qualified professional engineer verifying that closure has been completed in accordance with the closure plan specified in paragraph (b) of this Section and the requirements of this Section.

(g) **Notification of intent to close.** No later than the date the owner or operator initiates closure of a CCR unit, the owner or operator must prepare a notification of intent to close a CCR unit. The notification must include the certification by a qualified professional engineer for the design of the final cover system as required by OAC 252:517-15-7(d)(3)(iii), if applicable. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by OAC 252:517-19-1(i)(7).

(h) **Notification of closure.** Within 30 days of completion of closure of the CCR unit, the owner or operator must prepare a notification of closure of a CCR unit. The notification must include the certification by a qualified professional engineer as required by OAC 252:517-15-7(f)(3). The owner or operator has completed the notification when it has been placed in the facility's operating record as required by OAC 252:517-19-1(i)(8).

(i) **Deed notations.**

(1) Except as provided by paragraph (i)(4) of this Section, following closure of a CCR unit, the owner or operator must record a notation on the deed to the property, or some other instrument that is normally examined during title search.

(2) The notation on the deed must in perpetuity notify any potential purchaser of the property that:

(A) The land has been used as a CCR unit; and

(B) Its use is restricted under the post-closure care requirements as provided by OAC 252:517-15-9(d)(1)(iii).

(3) Within 30 days of recording a notation on the deed to the property, the owner or operator must prepare a notification stating that the notation has been recorded. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by OAC 252:517-19-1(i)(9).

(4) An owner or operator that closes a CCR unit in accordance with paragraph (c) of this Section is not subject to the requirements of paragraphs (i)(1) through (3) of this Section.

(j) **Recordkeeping.** The owner or operator of the CCR unit must comply with the closure recordkeeping requirements specified in OAC 252:517-19-1(i), the closure notification requirements specified in OAC 252:517-19-2(i), and the closure Internet requirements specified in OAC 252:517-19-3(i).

(k) **Criteria to retrofit existing CCR surface impoundment.**

(1) **Retrofit existing CCR surface impoundment.** To retrofit an existing CCR surface impoundment, the owner or operator must:

(A) First remove all CCR, including any contaminated soils and sediments from the CCR unit; and

(B) Comply with the requirements in OAC 252:517-11-3.

(C) A CCR surface impoundment undergoing a retrofit remains subject to all other requirements of this Chapter, including the requirement to conduct any necessary corrective action.

(2) **Written retrofit plan.**

(A) **Content of the plan.** The owner or operator must prepare a written retrofit plan that describes the steps necessary to retrofit the CCR unit consistent with recognized and generally accepted good engineering practices. The written retrofit plan must include, at a minimum, all of the following information:

(i) A narrative description of the specific measures that will be taken to retrofit the CCR unit in accordance with this Section.

(ii) A description of the procedures to remove all CCR and contaminated soils and sediments from the CCR unit.

(iii) An estimate of the maximum amount of CCR that will be removed as part of the retrofit operation.

(iv) An estimate of the largest area of the CCR unit that will be affected by the retrofit operation.

(v) A schedule for completing all activities necessary to satisfy the retrofit criteria in this Section, including an estimate of the year in which retrofit activities of the CCR unit will be completed.

(B) **Timeframes for preparing the initial written retrofit plan.**

(i) No later than 60 days prior to date of initiating retrofit activities, the owner or operator must prepare an initial written retrofit plan consistent with the requirements specified in paragraph (k)(2) of this Section. For purposes of this Chapter, initiation of retrofit activities has commenced if the owner or operator has ceased placing waste in the unit and completes any of the following actions or activities:

(I) Taken any steps necessary to implement the written retrofit plan;

(II) Submitted a completed application for any required state or agency permit or permit modification; or

(III) Taken any steps necessary to comply with any state or other agency standards that are a prerequisite, or are otherwise applicable, to initiating or completing the retrofit of a CCR unit.

(ii) The owner or operator has completed the written retrofit plan when the plan, including the certification required by paragraph (k)(2)(D) of this Section, has been placed in the facility's operating record as required by OAC 252:517-19-1(j)(1).

(C) **Amendment of a written retrofit plan.**

(i) The owner or operator may amend the initial or any subsequent written retrofit plan at any time.

(ii) The owner or operator must amend the written retrofit plan whenever:

(I) There is a change in the operation of the CCR unit that would substantially affect the written retrofit plan in effect; or

(II) Before or after retrofit activities have commenced, unanticipated events necessitate a revision of the written retrofit plan.

(iii) The owner or operator must amend the retrofit plan at least 60 days prior to a planned change in the operation of the facility or CCR unit, or no later than 60 days after an unanticipated event requires the revision of an existing written retrofit plan. If a written retrofit plan is revised after retrofit activities have commenced for a CCR unit, the owner or operator must amend the current retrofit plan no later than 30 days following the triggering event.

(D) **PE certification.** The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the activities outlined in the written retrofit plan, including any amendment of the plan, meet the requirements of this Section.

(E) **DEQ approval required.** The owner or operator of the CCR unit must submit the written retrofit plan, and any amendment of the plan, to the DEQ for approval.

(3) **Deadline for completion.** Deadline for completion of activities related to the retrofit of a CCR unit. Any CCR surface impoundment that is being retrofitted must complete all retrofit activities within the same time frames and procedures specified for the closure of a CCR surface impoundment in OAC 252:517-15-7(f) or, where applicable, OAC 252:517-15-8.

(4) **PE certification; DEQ approval required.** Upon completion, the owner or operator must obtain a certification from a qualified professional engineer verifying that the retrofit activities have been completed in accordance with the retrofit plan specified in paragraph (k)(2) of this Section and the requirements of this Section. The certified report shall be submitted to DEQ for approval.

(5) **Notification of intent.** No later than the date the owner or operator initiates the retrofit of a CCR unit, the owner or operator must prepare a notification of intent to retrofit a CCR unit. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by OAC 252:517-19-1(j)(5).

(6) **Notification of completion.** Within 30 days of completing the retrofit activities specified in paragraph (k)(1) of this Section, the owner or operator

must prepare a notification of completion of retrofit activities. The notification must include the certification by a qualified professional engineer as required by paragraph (k)(4) of this Section. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by OAC 252:517-19-1(j)(6).

(7) **Retrofit cessation.** At any time after the initiation of a CCR unit retrofit, the owner or operator may cease the retrofit and initiate closure of the CCR unit in accordance with the requirements of OAC 252:517-15-7.

(8) **Recordkeeping.** The owner or operator of the CCR unit must comply with the retrofit recordkeeping requirements specified in OAC 252:517-19-1(j), the retrofit notification requirements specified in OAC 252:517-19-2(j), and the retrofit Internet requirements specified in OAC 252:517-19-3(j).

252:517-15-9. Post-closure care requirements

(a) **Applicability.**

(1) Except as provided by either paragraph (a)(2)~~or (3)~~ of this Section, OAC 252:517-15-9 applies to the owners or operators of CCR landfills, CCR surface impoundments, and all lateral expansions of CCR units that are subject to the closure criteria under OAC 252:517-15-7.

(2) An owner or operator of a CCR unit that elects to close a CCR unit by removing CCR as provided by OAC 252:517-15-7(c) is not subject to the post-closure care criteria under this Section.

~~(3) An owner or operator of an inactive CCR surface impoundment that elects to close a CCR unit pursuant to the requirements under OAC 252:517-15-5(b) is not subject to the post-closure care criteria under this Section.~~

(b) **Post-closure care maintenance requirements.** Following closure of the CCR unit, the owner or operator must conduct post-closure care for the CCR unit, which must consist of at least the following:

(1) Maintaining the integrity and effectiveness of the final cover system, including making repairs to the final cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the final cover;

(2) If the CCR unit is subject to the design criteria under OAC 252:517-11-1, maintaining the integrity and effectiveness of the leachate collection and removal system and operating the leachate collection and removal system in accordance with the requirements of OAC 252:517-11-1; and

(3) Maintaining the groundwater monitoring system and monitoring the groundwater in accordance with the requirements of OAC 252:517-9-1 through OAC 252:517-9-9.

(c) **Post-closure care period.**

(1) Except as provided by paragraph (c)(2) and (3) of this Section, the owner or operator of the CCR unit must conduct post-closure care for 30 years.

(2) If at the end of the post-closure care period the owner or operator of the CCR unit is operating under assessment monitoring in accordance with OAC 252:517-

9-6, the owner or operator must continue to conduct post-closure care until the owner or operator returns to detection monitoring in accordance with OAC 252:517-9-6.

(3) The DEQ may extend the post-closure monitoring and care period if:

(A) sampling shows the presence of elevated levels of any constituent;

(B) evidence of contamination resulting from site operations is found to exist;

(C) prior maintenance or monitoring of the site is found to be inadequate;

(D) the site is producing leachate that must be treated prior to discharge; or

(E) if other conditions are present that indicate a need for additional post-closure monitoring and care.

(4) When the post-closure period is extended, the DEQ may require the maintenance of existing financial assurance, the posting of additional assurance, and/or may require corrective action.

(d) **Written post-closure plan.**

(1) **Content of the plan.** The owner or operator of a CCR unit must prepare a written post-closure plan that includes, at a minimum, the information specified in paragraphs (d)(1)(A) through (C) of this Section.

(A) A description of the monitoring and maintenance activities required in paragraph (b) of this Section for the CCR unit, and the frequency at which these activities will be performed;

(B) he name, address, telephone number, and email address of the person or office to contact about the facility during the post-closure care period; and

(C) A description of the planned uses of the property during the post-closure period. Post-closure use of the property shall not disturb the integrity of the final cover, liner(s), or any other component of the containment system, or the function of the monitoring systems unless necessary to comply with the requirements in this Chapter. Any other disturbance is allowed if the owner or operator of the CCR unit demonstrates that disturbance of the final cover, liner, or other component of the containment system, including any removal of CCR, will not increase the potential threat to human health or the environment. The demonstration must be certified by a qualified professional engineer, and notification shall be provided to the State Director that the demonstration has been placed in the operating record and on the owners or operator's publicly accessible Internet site.

(2) **Deadline to prepare the initial written post-closure plan.**

(A) **Existing CCR landfills and existing CCR surface impoundments.** No later than October 17, 2016, the owner or operator of the CCR unit must prepare an initial written post-closure plan consistent with the requirements specified in paragraph (d)(1) of this Section.

(B) **New CCR landfills, new CCR surface impoundments, and any lateral expansion of a CCR unit.** No later than the date of the initial receipt of CCR in the CCR unit, the owner or operator must prepare an initial written post-closure plan consistent with the requirements specified in paragraph (d)(1) of this Section.

(C) **Completion.** The owner or operator has completed the written post-closure plan when the plan, including the certification required by paragraph (d)(4) of this Section, has been placed in the facility's operating record as required by OAC 252:517-19-1(i)(4).

(3) **Amendment of a written post-closure plan.**

(A) The owner or operator may amend the initial or any subsequent written post-closure plan developed pursuant to paragraph (d)(1) of this Section at any time.

(B) The owner or operator must amend the written closure plan whenever:

(i) There is a change in the operation of the CCR unit that would substantially affect the written post-closure plan in effect; or

(ii) After post-closure activities have commenced, unanticipated events necessitate a revision of the written post-closure plan.

(C) The owner or operator must amend the written post-closure plan at least 60 days prior to a planned change in the operation of the facility or CCR unit, or no later than 60 days after an unanticipated event requires the need to revise an existing written post-closure plan. If a written post-closure plan is revised after post-closure activities have commenced for a CCR unit, the owner or operator must amend the written post-closure plan no later than 30 days following the triggering event.

(4) **PE certification.** The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the initial and any amendment of the written post-closure plan meets the requirements of this Section.

(5) **DEQ approval required.** The owner or operator of the CCR unit must submit the initial post-closure plan and any amendment of the post-closure plan to the DEQ for approval.

(e) **Notification of completion of post-closure care period.** No later than 60 days following the completion of the post-closure care period, the owner or operator of the CCR unit must prepare a notification verifying that post-closure care has been completed and submit it to the DEQ. The notification must include the certification by a qualified professional engineer verifying that post-closure care has been completed in accordance with the closure plan specified in paragraph (d) of this Section and the requirements of this Section. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by OAC 252:517-19-1(i)(13).

(f) **Recordkeeping.** The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in OAC 252:517-19-1(i), the notification requirements specified in OAC 252:517-19-2(i), and the Internet requirements specified in OAC 252:517-19-3(i).

PART THREE: CHAPTER 4

CHAPTER 4. RULES OF PRACTICE AND PROCEDURE

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[Authority: 27A O.S., §§ 1-3-101, 2-2-101, 2-2-201, 2-3-201(C)(3), 2-3-402(B), 2-5-101 et seq, 2-6-101 et seq, 2-7-101 et seq, 2-9-101 et seq, 2-10-101 et seq, 2-11-101 et seq, 2-12-101 et seq, 2-14-101 et seq, 2-15-101 et seq; and 51 O.S., § 24A.5(3), 75 O.S., § 302]
[Source: Codified 6-11-01]

SUBCHAPTER 1. GENERAL PROVISIONS

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252:4-1-1. Purpose and authority

(a) **Purpose.** This Chapter describes the practices and procedures of the Environmental Quality Board, Advisory Councils, and the Department of Environmental Quality.

(b) **Authority.** This Chapter is authorized by the Administrative Procedures Act, 75 O.S. § 302, and the Environmental Quality Code, 27A O.S. § 2-2-101.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-1-2. Definitions

The following words and terms, when used in this Chapter, shall have the following meaning, unless the context clearly indicates otherwise:

"Administratively complete" means an application that contains the information specified in the application form and rules in sufficient detail to allow the DEQ to begin technical review.

"Administrative hearing" is defined at 27A O.S. §2-1-102 and is synonymous with "individual proceeding" as that term is defined in the Administrative Procedures Act, 75 O.S. §250.1 *et seq.*

"Administrative Law Judge" is synonymous with "hearing examiner" as that term is defined in the Administrative Procedures Act.

"Advisory Councils or Council" means any of the following Councils: the Air Quality Advisory Council, the Hazardous Waste Management Advisory Council, the Radiation Management Advisory Council, the Solid Waste Management Advisory Council, and the Water Quality Management Advisory Council.

"APA" means the Oklahoma Administrative Procedures Act, 75 O.S. § 250.1 *et seq.*

"Application" means *"a document or set of documents, filed with the [DEQ], for the purpose of receiving a permit or the modification, amendment or renewal thereof from the [DEQ]... any subsequent additions, revisions or modifications submitted to the [DEQ] which supplement, correct or amend a pending application."* [27A O.S. § 2-14-103(1)]

"Board" means the Environmental Quality Board.

"Code" means the Oklahoma Environmental Quality Code, 27A O.S. § 2-1-101 *et seq.*

"Complaint" means any written or oral information submitted to DEQ alleging site-specific environmental pollution except information gained from facility inspections, or self-reported incidents.

"Department or DEQ" means the Department of Environmental Quality.

"Enforcement action" means:

(A) a written communication from the DEQ to an alleged violator that identifies the alleged violations and directs or orders that the violations be corrected and/or their effect remedied;

(B) an administrative action to revoke or suspend a permit or license;

(C) a consent order or proposed consent order;

(D) a civil petition, a complaint in municipal court, or a complaint in federal district court;

(E) a referral by the DEQ to the Oklahoma Attorney General's office, a state District Attorney's office, a U.S. Attorney's office, or a state or federal law enforcement agency for investigation.

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

"False complaint" means any written or oral information submitted to DEQ alleging site-specific environmental pollution by a person who knowingly and willfully gives false information or misrepresents material information.

"Individual proceeding" is defined in the APA [75 O.S. § 250.3(7)]. It includes an administrative evidentiary hearing to resolve issues of law or fact between parties, resulting in an order.

"Mediation" means a voluntary negotiating process in which parties to a dispute agree to use a mediator to assist them in jointly exploring and settling their differences, with a goal of resolving their differences by a formal agreement created by the parties.

"Notice of deficiencies" means a written notice to an applicant, describing with reasonable specificity the deficiencies in a permit application and requesting supplemental information.

"Off-site", as used in hazardous waste, solid waste and Underground Injection Control (UIC) tier classifications, means a facility which receives waste from various sources for treatment, storage, processing, or disposal.

"On-site", as used in hazardous waste, solid waste and UIC tier classifications, means a facility owned and operated by an industry for the treatment, storage, processing, or disposal of its own waste exclusively.

"Program" means a regulatory section or division of the DEQ.

"Respondent" means a person or legal entity against whom relief is sought.

"Submittal" means a document or group of documents provided as part of an application.

"Supplement" means a response to a request for additional information following completeness and technical reviews, and information submitted voluntarily by the applicant.

"Technical review" means the evaluation of an application for compliance with applicable program rules.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01; Amended at 33 Ok Reg 1429, eff 9-15-16]

252:4-1-3. Organization

(a) **Environmental Quality Board.** The Environmental Quality Board consists of thirteen (13) members, appointed by the Governor with the advice and consent of the Senate, selected from the environmental profession, general industry, hazardous waste industry, solid waste industry, water usage, petroleum industries, agriculture industries, conservation districts, local city or town governments, rural water districts, and statewide nonprofit environmental organizations. (See further 27A O.S. § 2-2-101.)

(b) **Advisory Councils.** There are five advisory councils. Each council consists of nine to twelve members appointed by the Speaker of the House of Representatives, the President Pro Tempore of the Senate or the Governor. (See further 27A O.S. §2-2-201)

(c) **DEQ.** The DEQ consists of the following divisions: Administrative Services, Air Quality, Land Protection, Water Quality, Environmental Complaints and Local Services, External Affairs, and State Environmental Laboratory Services.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01; Amended at 30 Ok Reg 1055, eff 7-1-13; Amended at 33 Ok Reg 1429, eff 9-15-16]

252:4-1-4. Office location and hours; communications

(a) **Office location and hours.** The principal office of the DEQ is 707 N. Robinson, Oklahoma City, Oklahoma 73102. The mailing address is P.O. Box 1677, Oklahoma City, Oklahoma 73101-1677. Office hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday except state holidays.

(b) **Communications.** Unless a person is working with a particular person or departmental area, written communication to the DEQ shall be addressed to the Executive Director.

(1) **Board.** Communications to the Board may be made through the Executive Director.

(2) **Council.** Communications to a Council may be made through the Division Director of the program with which the Council works.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-1-5. Availability of a record

(a) **Availability.** Records of the Board, Advisory Councils, and DEQ, not otherwise confidential or privileged from disclosure by law, shall be available to the public for inspection and copying at the DEQ's principal office during normal business hours. Information, data or materials required to be submitted to the DEQ in a permit application process shall be made available to the public in accordance with the Oklahoma Uniform Environmental Permitting Act (27A O.S.§ 2-14-101 *et seq.*) and the rules in this Chapter. The DEQ may take reasonable precautions in order to ensure the safety and integrity of records under its care.

(b) **Removal.** A record may be removed from the DEQ's offices or storage areas only with prior authorization from and under the supervision of the Records Coordinator or his/her designee.

(c) **Reproduction.**

(1) **By DEQ.** The DEQ may limit the number of copies made and the time and personnel available for reproduction of records requested by a member of the public.

(2) **Commercial reproduction.** With advance notice to the DEQ, a person may arrange for the pick-up, reproduction and return of records by a commercial copying service at his/her own expense, only if the Records Coordinator or his/her designee determines that the DEQ's staff

(e) **Hearing continuation.** A Council or the Board may continue the hearing by majority vote. Notice of the continuation shall be announced at the hearing and shall not require publication.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-5-6. Council actions

(a) **Contents of recommendation.** On behalf of a Council, the DEQ shall prepare a recommendation submittal on proposed permanent rules, which shall include the text of the proposed rules, a summary of pertinent minutes of Council meetings, and a summary of comments received. Recommendations may also be made for rules with a finding of emergency. The Council may recommend that any proposed rule be adopted by the Board on a permanent and emergency basis simultaneously.

(b) **On remand.** The Council shall reconsider any rulemaking recommendation remanded by the Board.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-5-7. Presentation to Board

(a) **Compliance with APA.** When proposed rules are presented to the Board, the DEQ shall indicate the rulemaking procedures which have been followed.

(b) **Board packets.** The DEQ shall prepare a board packet consisting of the text of proposed rules, an executive summary, a rule impact statement, an economic impact/environmental benefit statement (if applicable), a summary of comments received on proposed rules at rulemaking hearings and during written comment periods, the Council's recommendations and a summary of pertinent Council meeting minutes (if applicable). The Board packets shall be sent to members with the proposed agenda of the Board meeting at which rules are to be considered. Board packets for emergency rules may vary.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-5-8. Board actions

(a) **Referral.** The Board may refer any rulemaking matter to the DEQ or an appropriate Council for review, comment or recommendation.

(b) **Proposed permanent rules.** The Board will not consider proposed permanent rules for adoption without the appropriate Council's recommendation except those rules for which no council has jurisdiction.

(c) **Proposed emergency rules.** The Board may adopt emergency rules without the advice of a Council in accordance with 27A O.S. § 2-2-101.

(d) **Final language of rules.** The rules adopted or repealed by the Board may vary from the Council recommendation except for rules recommended by the Air Quality Council. (See further, Oklahoma Clean Air Act at 27A O.S. § 2-5-106.)

(e) **Remand.** The Board may remand a Council's rulemaking recommendation for reconsideration.

(f) **Notice to Council.** The DEQ shall provide each Council with copies of emergency rules adopted by the Board without the Council's recommendation and of any rules adopted by the Board which vary from that Council's recommendation.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-5-9. Rulemaking record

The DEQ shall maintain a rulemaking record on all rules adopted or revoked by the Board.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

SUBCHAPTER 7. ENVIRONMENTAL PERMIT PROCESS

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PART 1. THE PROCESS

252:4-7-1. Authority

The rules in this Subchapter implement the Oklahoma Uniform Environmental Permitting Act, 27A O.S. § 2-14-101 *et seq.*, and apply to applicants for and holders of DEQ permits and other authorizations.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-2. Preamble

The Uniform Environmental Permitting Act requires that DEQ licenses, permits, certificates, approvals and registrations fit into an application category, or Tier, established under the uniform environmental permitting rules. Tier I is the category for those things that are basically administrative decisions which can be made by a technical supervisor with no public participation except for the landowner. Tier II is the category for those permit applications that have some public participation (notice to the public, the opportunity for a public meeting and public comment), and the administrative decision is made by the Division Director. Tier III is the category for those permit applications that have extensive public participation (notice to the public, the opportunity for a public meeting and public comment, and the opportunity for an administrative evidentiary hearing), and the administrative decision is made by the Executive Director.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-3. Compliance

Applicants and permittees are subject to the laws and rules of the DEQ as they exist on the date of filing an application and afterwards as changed.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-4. Filing an application

(a) **Tier I.** The applicant shall file (2) copies of a Tier I application unless the application form or instructions specifies that only one (1) copy is needed. Applicants seeking permits for alternative individual on-site sewage disposal systems and alternative small public on-site sewage disposal systems (OAC 252:641) shall file one copy with the local DEQ office for the county in which the real property is located.

(b) **Tier II & III.** The applicant shall file three (3) copies of Tier II and Tier III applications with the DEQ and place one (1) copy for public review in the county in which the site, facility or activity is located.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-5. Fees

Fees shall be submitted with the application and, except as herein provided, will not be refunded.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-6. Receipt of applications

When an application and appropriate fee are received, each program shall:

(1) file stamp the application with the date of receipt, the Division and/or program name and an identification number;

(2) assign the application to a permit reviewer; and

(3) enter this information in a database or log book.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-7. Administrative completeness review

The reviewer shall have 60 calendar days from the file-stamped date of filing to determine if the application is administratively complete.

(1) **Not complete.** If the reviewer decides that the application is not complete, he/she shall immediately notify the applicant by mail, describing with reasonable specificity the deficiencies and requesting supplemental information. The reviewer may continue to ask for specific information until the application is administratively complete. If the reviewer does not notify the applicant of deficiencies, the period for technical review shall begin at the close of the administrative completeness review period.

(2) **Complete.** When the application is administratively complete, the reviewer shall enter the date in the database or log book and immediately notify the applicant by mail. The period for technical review begins.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-8. Technical review

(a) Each program shall have the time period specified in Parts 3 through 5 of this Subchapter to review each application for technical compliance with the relevant rules and to reach a final determination. If the data in the application does not technically comply with the relevant rules or law, the reviewer may notify the applicant by mail, describing with reasonable specificity the deficiencies and requesting supplemental information.

(b) Any environmental permit that is not described in this Subchapter shall be reviewed with all due and reasonable speed.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-9. When review times stop

The time period for review stops during:

(1) litigation;

(2) public review and participation, including waiting periods, comment periods, public meetings, administrative hearings, DEQ preparation of response to comments and/or review by state or federal agencies;

(3) requests for supplemental information; and

(4) the time in which an applicant amends his/her application of his/her own accord.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-10. Supplemental time

The Notice of Deficiencies and request for supplemental information may state that up to 30 additional calendar days may be added to the application processing time. Requests for supplemental information may also state that additional days for technical review equal to the number of days the applicant used to respond may be added to the review time.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-11. Extensions

Extensions to the time lines of this Subchapter shall only be made by agreement or when the Executive Director certifies that circumstances outside the DEQ's control, including acts of God, a substantial and unexpected increase in the number of applications filed, or additional review duties imposed on the DEQ from an outside source, prevent the reviewer from meeting the time periods.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-12. Failure to meet deadline

Where failure to meet a deadline is imminent, then:

(1) At least thirty (30) calendar days prior to the deadline the DEQ shall reassign staff and/or retain outside consultants to meet such deadline; or

(2) The applicant may agree to an extension of time for a specific purpose and period of time with refund of the entire application fee, unless a refund is prohibited by law.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-13. Notices

(a) **Statutory requirements for notice.** The Uniform Environmental Permitting Act requires an applicant to give notice in accordance with 27A O.S.§ 2-14-301.

(b) **Notice to landowner.** Applicants shall certify by affidavit that they own the real property, have a current lease or easement which is given to accomplish the permitted purpose or have provided legal notice to the landowner.

(c) **Notice content.** The applicant shall provide DEQ with a draft notice for approval prior to publication. All published legal notice(s) shall contain the:

(1) Name and address of the applicant;

(2) Name, address and legal description of the site, facility and/or activity;

(3) Purpose of notice;

(4) Type of permit or permit action being sought;

(5) Description of activities to be regulated;

(6) Locations where the application may be reviewed;

(7) Names, addresses and telephone numbers of contact persons for the DEQ and for the applicant;

(8) Description of public participation opportunities and time period for comment and requests; and

(9) Any other information required by DEQ rules.

(d) **Proof of publication.** Within twenty (20) days after the date of publication, an applicant shall provide the DEQ with a written affidavit of publication for each notice published. In case of a mistake in a published notice, the DEQ shall require a legal notice of correction or republication of the entire notice, whichever is appropriate. Inconsequential errors in spelling, grammar or punctuation shall not be cause for correction or republication.

(e) **Exception to notice requirement.** Applicants for solid waste transfer station permits may be exempt from public meeting requirements under 27A O.S.§ 2-10-307.

(f) **Additional notice.**

(1) Applicants for a NPDES, RCRA or UIC permit are subject to additional notice provisions of federal requirements adopted by reference as DEQ rules.

(2) Applicants for a proposed wastewater discharge permit that may affect the water quality of a neighboring state must give written notice to the environmental regulatory agency of that state. [27A O.S.§ 2-6-203(A)(7)]

(3) Applicants for a landfill permit shall provide notice by certified mail, return receipt requested, to owners of mineral interests and to adjacent landowners whose property may be substantially affected by installation of a landfill site. See *DuLaney v. OSDH*, 868 P.2d 676 (Okl. 1993).

(g) **Additional notice content requirements for Clean Air Act Permits.** In addition to the notice provisions of 27A O.S.§§ 2-14-301 and 2-14-302 and other provisions of this section, the following requirements apply.

(1) Applicants shall give notice by publication in a newspaper of general circulation in the area where the source is located; to persons on a mailing list developed by the DEQ, including those who request in writing to be on the list; and by other means if determined by the Executive Director to be necessary to assure adequate notice to the affected public.

(2) All published notice(s) for permit modification shall identify the emissions change involved in the modification.

(3) An applicant for a Part 70 permit that may affect the air quality of a neighboring state must give written notice

to the environmental regulatory agency of that state. [27A O.S.§ 2-5-112(E)]

(4) An operating permit may be issued to an applicant for a new Part 70 operating permit without public review if the operating permit is based on a construction permit that meets the requirements of 252:4-7-32(b)(1)(B) and the public notice for the construction permit contains the following language.

(A) This permit is subject to EPA review, EPA objection, and petition to EPA, as provided by 252:100-8-8 and 40 CFR § 70.8.

(B) If the operating permit has conditions which do not differ from the construction permit's operating conditions in any way considered significant under 252:100-8-7.2(b)(2), the operating permit will be issued without public notice and comment; and,

(C) The public will not receive another opportunity to provide comments when the operating permit is issued.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01; Amended at 20 Ok Reg 1115, eff 6-1-03; Amended at 30 Ok Reg 1055, eff 7-1-13]

252:4-7-14. Withdrawing applications

(a) **By applicant.** An applicant may withdraw an application at any time with written notice to the DEQ and forfeiture of fees.

(b) **By DEQ.** Except for good cause shown, when an applicant fails to supplement an application within 180 days after the mailing date of a Notice of Deficiencies, or by an agreed date, the DEQ shall void the application. The DEQ shall notify the applicant of an opportunity to show cause why this should not occur.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-15. Permit issuance or denial

(a) **Compliance required.** A new, modified or renewed permit or other authorization sought by the applicant shall not be issued until the DEQ has determined the application is in substantial compliance with applicable requirements of the Code and DEQ rules.

(b) **Conditions for issuance.** The Department may not issue a new, modified or renewed permit or other authorization sought by the applicant if:

(1) The applicant has not paid all monies owed to the DEQ or is not in substantial compliance with the Code, DEQ rules and the terms of any existing DEQ permits and orders. The DEQ may impose special conditions on the applicant to assure compliance and/or a separate schedule which the DEQ considers necessary to achieve required compliance; or

(2) Material facts were misrepresented or omitted from the application and the applicant knew or should have known of such misrepresentation or omission.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01; Amended at 19 Ok Reg 41, eff 8-17-01 (emergency); Amended at 19 Ok Reg 1007, eff 6-1-02; Amended at 30 Ok Reg 1055, eff 7-1-13]

252:4-7-16. Tier II and III modifications

For Tier II and III permit modification actions, only those issues relevant to the modification(s) shall be reopened for public review and comment.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-17. Permit decision-making authority

(a) **Designated positions.** The Executive Director may delegate in writing the power and duty to issue, renew, amend, modify and deny permits and take other authorization or registration action. Unless delegated to a Division Director by formal assignment or rule, the authority to act on Tier I applications shall be delegated to positions within each permitting program having technical supervisory responsibilities and, for local actions authorized by law, to environmental specialist positions held by the DEQ's local services representatives. The authority to act on emergency permits or Tier II applications shall be delegated to the Division Director of the applicable permitting division.

(b) **Revision.** The Executive Director may amend any delegation in writing.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-18. Pre-issuance permit review and correction

(a) **Applicant review.** The DEQ may offer an applicant the opportunity to review its permit for calculation and clerical errors or mistakes of fact or law beforea draft permit is issued.

(b) **Correction.** The DEQ may correct any permit before it is issued. Additionally, the DEQ may meet with any applicant to assess the applicant's request for significant corrections or changes in fact or law before a permit is issued.

(c) **Notice of significant corrections.** For permits based on Tier II and III applications, an applicant shall publish or re-publish legal notice in one newspaper local to the site of any correction or change proposed by the DEQ which significantly alters a facility's permitted size, capacity or limits.

(1) **Comments.** The DEQ may open a public comment period and/or reconvene a public meeting and/or administrative hearing to receive public comments on the proposed correction(s).

(2) **Burden of Persuasion.** The applicant bears the burden of persuading the agency that any changes or corrections requested comply with the law and that the permit should issue.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01; Amended at 30 Ok Reg 1055, eff 7-1-13]

252:4-7-19. Consolidation of permitting process

(a) **Discretionary.** Whenever an applicant applies for more than one permit for the same site, the DEQ may authorize, with the consent of the applicant, the review of the applications to be consolidated so that each required draft permit, draft denial and/or proposed permit is prepared at the same time and public participation opportunities are combined.

(b) **Scope.** When consolidation is authorized by the DEQ:

(1) The procedural requirements for the highest specified tier shall apply to each affected application.

(2) The DEQ may also authorize the consolidation of public comment periods, process and public meetings, and/or administrative permit hearings.

(3) Final permits may be issued together.

(c) **Renewal.** The DEQ may coordinate the expiration dates of new permits issued to an applicant for the same facility or activity so that all the permits are of the same duration.

(d) **Multiple modifications.** Subsections (a) and (b) of this section shall also apply to multiple Tier II and III applications for permit modifications.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-20. Agency review of final permit decision

(a) **Agency review.** Unless a specific permit review process is otherwise provided in rules promulgated by the Board, an applicant who filed comments on the draft permit or participated in the public hearing, if any, may use the declaratory ruling procedure described in this Chapter to initiate agency review of a final permit decision.

(b) **Failure to file comments.** Any person who failed to file comments or participate in the public hearing on the draft permit may petition for declaratory ruling only to the extent of changes from the draft to the final permit decision.

(c) **Administrative record.** The administrative record for agency review of a final permit decision shall consist of:

(1) the permit application on file with the DEQ, as amended;

(2) all written comments received during the public comment period;

(3) the tape or transcript of the public meeting, if any;

(4) documents resulting from the DEQ's review of the permit application and public comments;

(5) the draft permit, fact sheet and response to comments, if any, issued by the DEQ;

(6) all published notices;

(7) the tape or transcript of the administrative hearing(s) held on a proposed Tier III permit, if any;

(8) the written materials submitted at an administrative hearing held on a proposed Tier III permit, if any;

(9) the final environmental impact statement and supplements, if any; and

(10) the final permit or denial.

[Source: Added at 30 Ok Reg 1055, eff 7-1-13]

PART 3. AIR QUALITY DIVISION TIERS AND TIME LINES

252:4-7-31. Air quality time lines

The following air quality permits and authorizations shall be technically reviewed and issued or denied within the time frames specified below.

(1) Construction permits:

(A) PSD and Part 70 Sources - 365 days.

(B) Minor Facilities - 180 days.

(2) Operating permits:

(A) Part 70 Sources - 540 days.

(B) Minor Facilities - 365 days.

(3) Relocation permits - 30 days.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-32. Air quality applications - Tier I

(a) **Minor facility permits.** The following air quality authorizations for minor facilities require Tier I applications.

(1) **New permits.** New construction, operating and relocation permits.

(2) **Modifications of permits.**

(A) Modification of a construction permit for a minor facility that will remain minor after the modification.

(B) Modification of an operating permit that will not change the facility's classification from minor to major.

(C) Extension of expiration date of a construction permit.

(b) **Part 70 source permits.** The following air quality authorizations for Part 70 sources require Tier I applications.

(1) **New permits.**

(A) New construction permit for an existing Part 70 source for any change considered minor under 252:100-8-7.2(b)(1).

(B) New operating permit that:

(i) is based on a construction permit that was processed under Tier II or III, and 252:100-8-8, and

(ii) has conditions which do not differ from the construction permit's operating conditions in any way considered significant under 252:100-8-7.2(b)(2).

(2) **Modifications of permits.**

(A) Modification of any operating permit condition that:

(i) is based on the operating conditions of a construction permit that was processed under Tier II or III, and 252:100-8-8, and

(ii) does not differ from those construction permit conditions in any way considered significant under 252:100-8-7.2(b)(2).

(B) A construction or operating permit modification that is minor under 252:100-8-7.2(b)(1).

(4) Modification of off-site hazardous waste facility permit in which the application is for new treatment, storage, or disposal methods or units which are significantly different from those permitted.

(5) Variance which is part of a Tier III application.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-55. Radiation management applications - Tier I

The following radiation management authorizations require Tier I applications:

(1) New, amended and renewed operating permits for radiation machines;

(2) New, amended and renewed permits for x-ray fluorescence spectroscopy instruments used to detect lead in paint;

(3) New and renewed specific licenses under the state agreement program not classified under Tiers II or III;

(4) Industrial radiography certifications;

(5) Approvals of license termination plans that require no decommissioning or remediation;

(6) Decommissioning and remediation plans required for remediation due to the use, storage or disposal of one or more radioactive materials with a half-life of 120 days or less;

(7) DEQ approvals of documentation showing residual radioactivity levels for a site or property are within acceptable limits as set by Chapter 410;

(8) Minor amendments of all authorizations classified under Tiers I, II or III; and

(9) Major amendments of all authorizations classified under Tier I.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-56. Radiation management applications - Tier II

The following radiation management authorizations require Tier II applications:

(1) Decommissioning and remediation plans required for on-site remediation due to the use, storage or disposal of one or more radioactive materials with a half-life of more than 120 days, except for those facilities described in 252:4-7-57(3)(A);

(2) New or renewed permits for the non-commercial treatment or disposal of radioactive waste, generated by the applicant, by incineration or the amendment of the incinerator permit for a capacity increase or for any expansion beyond permitted boundaries for the purpose of expanding operations or storage; and

(3) Major amendments of all authorizations classified under Tier II.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-57. Radiation management applications - Tier III

The following radiation management authorizations require Tier III applications:

(1) New or renewed permits for the land disposal of low-level radioactive waste received from others and the major amendment thereof;

(2) New or renewed permits for the commercial treatment or disposal of radioactive waste by incineration and the major amendment thereof; and

(3) Decommissioning and remediation plans and the major amendment thereof:

(A) for nuclear fuel cycle facilities or facilities and sites involved in the manufacturing or processing of licensed quantities of radioactive materials; and

(B) for sites that require both on- and off-site remediation due to the use, storage or disposal of one or more radioactive materials with a half-life of more than 120 days.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-58. Solid waste management applications - Tier I

The following solid waste management authorizations require Tier I applications.

(1) **New permits.**

(A) **Locally approved solid waste transfer stations.** Permit for a solid waste transfer station that, prior to application filing, received county commissioner approval according to 27A O.S. § 2-10-307.

(B) **Biomedical waste transfer stations using only sealed containers.** Biomedical waste transfer station permit when activities are limited to:

(i) consolidation of sealed containers; and/or

(ii) transfer of sealed containers from one vehicle or mode of transportation to another.

(C) **Disaster relief.** Emergency authorization for waste disposal resulting from a natural disaster.

(2) **Modifications.**

(A) **All facilities.**

(i) Modification of a solid waste permit to add methods, units or appurtenances for liquid bulking processes; yard waste composting; recycling operations; waste screening; or baling, chipping, shredding or grinding equipment or operations.

(ii) Modification to any solid waste permit to make minor changes.

(iii) Modification of plans for closure and/or post-closure.

(iv) Administrative modification of all permits and other authorizations.

(B) **On-site and off-site land disposal facilities.** Modification of an existing land disposal permit for a lateral expansion within permitted boundaries.

(C) **Capacity increases of less than 25% with exceptions.** The modification of a solid waste permit, excluding incineration permits, involving a request

for less than twenty-five percent (25%) increase in permitted capacity for storage, processing or disposal when the request is for equivalent methods, units or appurtenances as those permitted and which does not involve expansions of permitted boundaries.

(3) **Plans and other authorizations.** The approval of new and when applicable, modified or renewed:

(A) Plans for composting of yard waste only.

(B) Permit transfers.

(C) Non-hazardous industrial solid waste disposal plans.

(D) Technical plans.

(E) County solid waste management plans.

(F) Individual authorizations under a general permit.

(G) All other administrative approvals required by solid waste rules.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-59. Solid waste management applications - Tier II

The following solid waste management authorizations require Tier II applications.

(1) **New permits.**

(A) **On-site solid waste processing facilities with exception.** Permit for an on-site solid waste processing facility except yard waste composting as listed under Tier I.

(B) **Solid waste transfer stations with exceptions.** Permit for a solid waste transfer station except:

(i) a transfer station permit with county commissioner approval as listed under Tier I, or

(ii) a biomedical waste transfer station permit listed under Tier I.

(C) **On-site incinerators with exceptions.** Permit for an on-site incinerator except those exempt under solid waste rules or those that have an approved Air Quality permit or Solid Waste Management Plan.

(D) **On-site land disposal sites.** Permit for an on-site solid waste disposal site.

(E) **Material Recovery Facility (MRF).** Permit for a Material Recovery Facility if waste is not source-separated.

(2) **Modifications.**

(A) **All facilities.** Modification of a permit for a change in waste type.

(B) **On-site facilities.** Any modification of an on-site solid waste permit, except as listed under Tier I.

(C) **Off-site facilities.**

(i) Modification of any off-site solid waste permit involving a request for more than twenty-five percent (25%) but less than fifty percent (50%) increase in permitted capacity for storage, processing or disposal (excluding incineration) when the request is for equivalent methods, units or appurtenances as those permitted, except those listed under Tier I.

(ii) Modification of any off-site processing facility involving an expansion of permitted boundaries.

(D) **Incinerators.**

(i) Modification of an on-site incinerator permit for any increase in permitted capacity for storage, processing, or disposal.

(ii) Modification of an off-site incinerator permit involving a request for increases less than fifty percent (50%) in permitted capacity for storage, processing, or disposal when the request is for equivalent methods, units or appurtenances as those permitted.

(3) **General permit.** New, modified or renewed general permit.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-60. Solid waste management applications - Tier III

The following solid waste management authorizations require Tier III applications.

(1) **New permits.**

(A) **Off-site processing facilities with exceptions.** Permit for an off-site processing facility, unless otherwise specified in Tier I or Tier II.

(B) **Off-site land disposal facility.** Permit for an off-site solid waste land disposal site.

(C) **Off-site incinerator.** Permit for an off-site incinerator.

(2) **Modifications.**

(A) **Off-site facilities: significant increase in capacity.** Modification of any off-site solid waste permit involving a fifty percent (50%) or greater increase in permitted capacity for storage, processing, and/or disposal, including incineration.

(B) **Off-site land disposal facility.** Modification of an off-site solid waste land disposal permit for an expansion of permitted boundaries.

(C) **Off-site facilities: different methods, units or appurtenances.** Modification of an off-site solid waste permit in which the request involves different methods, units or appurtenances than those permitted, except those listed under Tier I.

(3) **Variance approvals.** All variances.

[Source: Added at 18 Ok Reg 1922, eff 6-11-01]

252:4-7-61. Brownfields applications - Tier I [REVOKED]

[Source: Added at 18 Ok Reg 1922, eff 6-11-01; Revoked at 28 Ok Reg 83, eff 9-17-10 (emergency), Revoked at 28 Ok Reg 642, eff 7-1-11]