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.

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 runoff 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^-8 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.
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.

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) [RESERVED] 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) [RESERVED]

(e) 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).

(f) 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 (e)(1)(A) through (C) of this Section is eligible for the alternative timeframes specified in paragraphs (e)(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 written 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 $1 \times 10^{-5}$ 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 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) **[RESERVED]** 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).


(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).