Closure / Post Closure Plan
Sunflower Electric Power Corporation
Holcomb Landfill

Prepared for:

AEC File No. 22088:4908
February 2023
Revised September 2023

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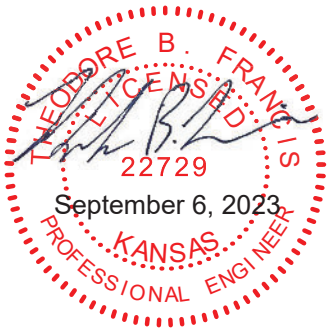
PROFESSIONAL ENGINEER CERTIFICATION

This Closure & Post-Closure Care Plan has been prepared under the supervision of the undersigned and according to 40 CFR 257.



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ABBREVIATION KEY

BWM	Bureau of Waste Management
CCR	Coal Combustion Residuals
CFR	Code of Federal Regulation
CQA	Construction Quality Assurance
QA/QC	Quality Assurance/Quality Control
EPA	United States Environmental Protection Agency
GCL	Geosynthetic Clay Liner
KDHE	Kansas Department of Health and Environment
KDOT	Kansas Department of Transportation
NRCS	Natural Resources Conservation Service
PE	Registered Professional Engineer
SAP	Sampling and Analysis Plan

1.0 INTRODUCTION

1.1 FACILITY DESCRIPTION

The facility is located in the south half of Section 20 and the north half of Section 29, Township 24S, Range 33W of the 6th Principal Meridian south of Holcomb, Finney County, Kansas. The facility accepts Coal Combustion Residuals (CCR) (fly ash and bottom ash) and on-site generated industrial waste (flue gas desulfurization waste, coal-derived waste, clean rubble, spent baghouse bags, and basin sludge). Approximately 190 acres are permitted for disposal through the Kansas Department of Health and Environment (KDHE) Bureau of Waste Management (BWM) Industrial Landfill Permit No. 0420.

Phases 1, 2A, and 2B of the Landfill were closed by the end of 2014 under KDHE authority as an industrial landfill, prior to the effective date of the Federal CCR Regulations (October 19, 2015). The Closure activities specified in this Plan are applicable to Phase 3A and any future expansions. The Post-Closure activities specified in this Plan are applicable to all Landfill Units/Phases.

The following federal and state regulations have been considered in the preparation of this Plan. Appendix 1 provides a cross reference of regulations for reference.

- 40 CFR 257.102 – Criteria for conducting the closure or retrofit of CCR units.
- 40 CFR 257.104 – Post-closure care requirements.
- KDHE Solid Wastes Section, Bureau of Waste Management K.A.R. 28-29-12, Notification of closure, closure plans, and long-term care.

The total estimated final waste volume of this facility is anticipated to be 18 million cubic yards, if developed to maximum capacity. The estimated largest area to ever require closure at any one time is 28.7 acres. Closure will be completed by leaving the CCR in place and installing a final cover system as specified herein, the Permit Design Drawings, and the facility Construction Quality Assurance (CQA) Plan.

The facility has demonstrated compliance with all Location Demonstrations stipulated in §257.60 through 64 and, as such, has no alternative closure requirements under §257.103.

1.2 RESPONSIBILITY AND KEY PERSONNEL

Responsible offices and personnel for closure and post-closure care are:

Environmental Department
Sunflower Electric Power Corporation
301 West 13th Street
Hays, Kansas 67601
785-628-2845

The facility will utilize technical consultants as necessary to formulate appropriate closure and post-closure tasks in accordance with site conditions and applicable regulations at the time of closure and post-closure care. The Corporate Office will maintain records for documenting the closure and post-closure care of the facility. This Plan shall also be placed in the facility's operating record and publicly accessible internet site as required by 40 CFR 257.105(i)(4) and 257.107(i)(4).

1.3 PLAN CONTENTS

This Plan consists of this document entitled "Closure/Post-Closure Plan" and is supplemented by the KDHE approved Facility Permit Design Drawings, Operating Plan, and CQA Plan. Revisions shall be annotated in Appendix 2 to track document changes over time.

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2.0 TASK SUMMARY AND SCHEDULE

2.1 NOTIFICATION AND TIMING OF CLOSURE & POST-CLOSURE ACTIVITIES

The following Notifications shall occur to the KDHE BWM within 30 days of placing in the Facility Operating Record and Publicly Available Internet Site, unless otherwise noted, and retained for 5 years. All records include written certification from a qualified professional engineer or approval from the KDHE or approval from EPA where EPA is the permitting authority.

- Written closure and post-closure plan and any amendment with certification
- Demonstration(s) for a time extension for initiating closure
- Demonstration(s) for a time extension for completing closure
- Notification of Intent to close a CCR unit with certification
- Completion of closure of a CCR unit with certification
- Notification of Deed notation
- Completion of post-closure care with certification (within 60 days)

Any disposal unit may be closed due to termination of the operations by the facility, a lack of waste, or the disposal unit reaches capacity. Initiation of closure activities must commence within 30 days of either of the following:

- The unit receives the known final receipt of waste, or
- The facility removes the known final volume of CCR for the purposes of beneficial reuse.

In addition, the facility must commence closure activities if the Landfill has not received waste or removed CCR for beneficial reuse for two years. The facility may secure two-year extensions, provided the facility documents there is a reasonable likelihood that the Landfill will accept waste or remove CCR for beneficial use in the foreseeable future. See 40 CFR 257.102(e)(2)(ii) & (iii) for documentation requirements for two-year extensions (provided in Appendix 1).

Closure activities have commenced when the Facility takes any steps to implement this closure plan. Closure must be completed within six months of commencing closure activities. Closure timeframes may be extended provided the Facility prepares a demonstration discussing the basis for additional time in one-year increments for a maximum of two one-year increments as described in 40 CFR 257.102(f)(2)(i) & (ii) & (iii).

2.2 CLOSURE AND POST-CLOSURE PLANS

The facility will conduct all closure and post-closure activities in accordance with the approved closure and post-closure plan prepared by a professional engineer licensed to practice in Kansas, and other applicable regulations. According to regulation the Closure and Post-Closure Plan is to be placed in the Facility operating record and the Publicly Available Internet Site, by October 17, 2016 or no later than the date of initial receipt of waste for new landfill and any lateral expansions.

This Plan may be amended at any time and must be amended whenever there is a change in operation that would substantially affect the Plan or before or after closure activities have been initiated and unanticipated events necessitate a revision. The Plan must be amended at least 60 days prior to a planned change in operation, no later than 60 days after an unanticipated event requires revision prior to closure commencement, and no later than 30 days after an unanticipated event requires revision if closure has already commenced. Only the most-recent version of the Plan must be maintained in the Facility Operating Record and the Publicly Available Internet Site.

2.3 DEED NOTATIONS

Per Kansas Regulation, the Facility has a permanent Restrictive Covenant on the site dated April 14, 2006, and recorded December 3, 2008 in book 286 page 918 by the Finney County Register of Deeds. Appendix 3 provides a copy of the Covenant. The Covenant indicates the property use of solid waste disposal under Permit No. 0420 issued by the KDHE with post-closure use of establishing and maintaining ground cover as native grassland. The Restrictive Covenant requires written approval from the KDHE before any work is done to any monitoring devices or systems, before improvement of the site is performed, or before any excavation or construction of permanent structures, drainage ditches, changes to the contour or dirt work, changes in the vegetation grown, production or sale of food chain crops, or removal of any security fencing, signs, or devices installed to restrict public access to waste storage or disposal areas.

Following closure of the Landfill, the Facility will amend the Restrictive Covenant from generic solid waste disposal, as indicated in the current Covenant, to Coal Combustion Residual disposal to comply with 40 CFR 257.102(i)(2)(i).

2.4 CLOSURE ACTIVITIES

The facility will perform the following final closure activities:

- Install additional stormwater controls for exposed waste areas.
- Excavate and dispose liner from evaporation basin in Landfill.
- Perform final grading of waste.
- Install final cover system at or below the designated elevations and grades across the site as stipulated in the Permit Design Drawings. The final cover system will include a low-permeability barrier layer and a protective vegetation layer.
- Removal of all uncovered wastes, unnecessary improvements, and equipment after final closure. After closure, the site has no proposed uses other than native grass management.
- Certification of final closure, signed by a professional engineer licensed in the State of Kansas, stating that the site was closed in substantial accordance with the closure plans and applicable regulations. Certification is required following all closure activities. Supporting documentation for the certification will include a site diagram and description of existing conditions upon final closure. The facility will submit each certification and supporting documentation to the KDHE Bureau of Waste Management, as required.

- Filing a notation on the facility property deed or other appropriate record with the County Register of Deeds office stating that the site was used as a CCR landfill and future use is restricted.

2.5 LONG-TERM CARE

Post-Closure care over a 30-year period following the final closure of the site will include maintenance and monitoring of the final cover, ground water monitoring, surface water control, and access control systems. During the post-closure period, the facility will perform the following activities:

- Site inspections to document surface cracking, stressed vegetation, significant erosion, changes in slope angles, systems defects, and security checks. Noticeable damage or deficiencies will be corrected immediately and documented.

- Perform ground water monitoring activities as required by the Facility Groundwater Sampling and Analysis Plan.

- Recordkeeping activities documenting all site inspections and monitoring events, and associated corrective actions, if any.

- A statement of completion of post-closure performance, submitted to the KDHE at the conclusion of the post-closure period, stating that the site was maintained and monitored in accordance with the approved post-closure plan and all applicable regulations.

Upon closure of the disposal units, and during the 30-year post-closure period, the disposal units will remain idle. The post-closure period may be extended if the Facility is under Assessment Monitoring as described in the Facility Groundwater Sampling and Analysis Plan (SAP) and 40 CFR 257.95.

2.6 POST-CLOSURE USE

The post-closure use of the property shall not disturb the integrity and effectiveness of the final cover or any other components of the containment system unless the owner or operator submits justification that disturbance of the final cover or other components of the containment system, including removal of waste, will not increase the potential threat to public health, safety, or the environment.

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3.0 CLOSURE PROCEDURES

3.1 PREPARATION FOR FINAL COVER

Prior to installation of the final cover for site closure the following tasks shall occur:

- Install temporary stormwater controls
- Close evaporation basin
- Final grading of waste

Note, installation of temporary stormwater controls and closure of the evaporation basin will not occur during the closure of individual phases/units.

3.1.1 Installation of Temporary Stormwater Controls

Temporary earthen berms will be installed as stormwater control around any areas with exposed waste. The primary purpose of the temporary berms is to retain stormwater that contacts exposed waste during the closure of the evaporation basin. Generally, the berms will be installed at the toe of the landfill cell or at the transition from exposed waste to areas that have an intermediate soil cover. For these purposes, intermediate soil cover shall consist of at least 12 inches of clean native soils. In general, 3,600 cubic feet of stormwater retention shall be required per acre contained. A 5-foot berm installed with 3:1 side slopes should be adequate, however this will require formal evaluation at the time of closure activities. Temporary stormwater controls are required for any exposed waste.

3.1.2 Closure of Evaporation Basin

The primary purpose of the existing, Hypalon-lined, 6-acre evaporation basin is to collect any stormwater from the active landfill areas that may contact waste. Due to the arid nature of the site, the evaporation basin rarely contains water. If standing water or heavily saturated soils are present during commencement of closure activities, allow basin to dry out before proceeding. The flumes to the basin may be blocked, if necessary, to minimize inflow of stormwater to the basin. Temporary landfill stormwater controls must be installed prior to closure of the evaporation basin. When the basin is suitably dry, the liner and any accumulated sediments will be removed and placed in the landfill for permanent disposal. In addition, the base of the basin will be over excavated as needed to ensure all potentially contaminated sediments and soils from the liner removal process are disposed in the landfill. These soils shall be used as final grading of the waste mass and to provide a stable cover for the disposed liner. After closure of the evaporation basin, it will function as an infiltration basin for stormwater at the site.

3.1.3 Final Grading of Waste

Final grading of the waste shall consist of compacting and adding native soils as necessary to provide a stable, uniform foundation for the final cover. This may also include relocating waste within the landfill to adjust side slopes or ensure the final elevations are within the elevations per the KDHE-approved design drawings. Temporary stormwater controls are required during any exposed waste grading. After final grading of the waste, the facility shall perform a survey as described in the Facility CQA Plan. Final grades shall have a minimum grade of 2% and preferred maximum slope of 5H:1V and no steeper than 3H:1V to ensure slope stability and to ensure stormwater does not pond on the landfill.

3.2 FINAL COVER

3.2.1 Cover Requirements

Final cover will consist of a two-layer system comprised of a low-permeability infiltration barrier layer, overlain by a minimum 6-inch thick, protective vegetation (a.k.a. erosion) layer. The coefficient of permeability of the low permeability layer shall be equal to or less than the natural subsoils (landfill bottom) and no greater than the equivalent of 18 inches of soil with permeability of 1.0×10^{-5} centimeters per second (cm/sec). To meet or stay below the ultimate final grade, slope, and elevation requirements, operators will cut and fill as necessary. The low-permeability layer will minimize post-closure infiltration of stormwater into the waste and thereby minimizing the potential for leachate generation.

3.2.2 Material Evaluation

The Site is dominated by Aeolian dune sands, which do not provide adequate material for a low-permeability barrier. The Facility has performed an evaluation of methods to provide an infiltration barrier meeting the final cover permeability requirements as stipulated by regulation. The following options are viable and will be further evaluated to determine the most cost-effective and efficient method at the time of closure:

- Geosynthetic Clay Liner (GCL).
- Mixture of Native Sands and Bentonite, 18 inch thick.
- Mixture of Native Sands and Imported Clayey Soils, 18 inch thick.

In addition to costs, the evaluation will also include geotechnical evaluations of the specific material sourced, development of specific procedure for construction/installation, and preparation of an updated closure timeline accounting for delivery lead times.

3.2.3 Cover Installation Procedures

Cover installation procedures will be dictated by the preferred material used for the infiltration barrier layer, generally for soil materials the process is as follows. The facility will construct the low-permeability layer of final cover by compacting suitable materials, placed as determined by the Standard Proctor procedure (ASTM D 698). The soils should be placed at a moisture content between -3% and +2% relative to the optimum water content as determined for the material in accordance with the above ASTM Specification. The soils will be compacted with heavy equipment such as loaded tandem axle trucks or paddle wheel scrapers or loaders. The upper-most surface of the lift should be left in a relatively rough condition for receipt of the subsequent lift to promote inter-lift bonding and to reduce the formation of distinct horizontal planes between lifts.

During construction of the low permeability final cover layer, the facility will coordinate quality assurance and quality control (QA/QC) programs to ensure suitable borrow materials and construction procedures. A field engineer or materials technician will visually observe borrow materials before and after compaction to verify conformance with pre-designated construction materials. The technician will perform field density tests to determine compaction percentage and moisture on each lift and will collect undisturbed samples (Shelby tube) of compacted materials after construction is complete to verify vertical conductivity. A geotechnical consulting engineer will determine the frequency of tests based on pre-construction testing.

For GCL, installation will be performed in accordance with manufacturer's recommendations. The QA/QC program will focus on observing placement and periodic material testing to ensure the GCL, as delivered, meets project requirements.

A minimum 6-inch-thick erosion protection layer will be placed over the low permeability layer in a semi-compacted to uncompacted state. The protective layer soil will be amended if necessary to support the growth of vegetation. The facility may coordinate with the Kansas State University Extension Office (KSUEO) and the Finney County Extension Office to determine the necessary soil amendments to implement the vegetation plan. Vegetation establishment will ensure that cover materials stay in place and prevent sloughing or movement of the cover system during the post-closure care period and minimize the need for future maintenance of the unit.

3.2.4 Seeding

The facility has evaluated several variations of seeding and mulching combinations for full-scale implementation. Suitable results were obtained with a KDOT/NRCS Native Seed Mixture, 28-4-5 fertilizer, and hydro mulch meeting a minimum of KDOT specifications.

Table 3-1: Grass Seeding Schedule

Seed Variety	Pure Live Seed Application Rate
Harrison Oats	25 pounds / acre
Quickguard Triticale Hybrid	23 pounds / acre
Mandan Canada Wildrye	12 pounds / acre
Barton Western Wheatgrass	7 pounds / acre
El Reno Sideoats Grama	6 pounds / acre
Texoka Buffalograss	5 pounds / acre
Lovington Blue Grama	3 pounds / acre
Goldstrike Sand Bluestem	3 pounds / acre
Sand Dropseed	1 pound / acre
Sand Lovegrass	1 pound / acre

Further information regarding the final grass seed may be obtained from the KSUEO at 913-532-5776. Due to the arid nature of the site, irrigation will be required until the grasses can be established.

3.2.5 Irrigation

The site is equipped with a traveling gun irrigation system, supplied by an on-site irrigation well. To establish vegetation, the cap will require 1 inch per week either rainfall or irrigation throughout the growing season (April through October) for the first two years after seeding. After the first two years, irrigation may be reduced, if conditions warrant, with an anticipated timeframe of 5 years for phase out of irrigation.

3.3 INSTALLATION OF CONTROL SYSTEMS

The final grade configuration of the site will control erosion and surface drainage across the site. Surface water flow velocities will be maintained below significant erosive levels by utilizing proper site grades, vegetation, swales, slope benches, and silt fences, as necessary. Drainage ditches will route surface water into the abandoned evaporation basin for infiltration.

3.4 CLOSURE SCHEDULE

The Landfill facility, if developed to full capacity, has a remaining life of over 300 years. It is anticipated that the currently open unit (Phase 3A) will reach capacity 23 years from the date of this plan, or 2045, provided waste generation rates remain comparable to those in 2022. Final cover of the last active disposal area will be installed within 6 months of the last waste receipt. The facility will provide written notification no more than 60 days prior to the closure of any disposal unit.

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4.0 POST-CLOSURE CARE PROCEDURES

4.1 FINAL COVER MAINTENANCE

The facility will maintain the integrity of the final cover, including thickness, slope, and vegetation standards, as outlined in Section 3.2 in this Plan. Noticeable damage or deficiencies observed during site inspections will be addressed immediately. In areas where settlement, subsidence or erosion has occurred, the operator will resurface the final cover to original grade for re-vegetation as appropriate. Additionally, cover maintenance will include mowing and reseeding as necessary.

4.2 SURFACE IMPROVEMENTS/MAINTENANCE

The facility will ensure repair of all on-site improvements including drainage structures, fences, gates, and signs. Erosion and surface drainage will be controlled by proper grading and vegetative cover, as well as cleaning out of ditches and swales. Surface drainage will be maintained by proper grading and vegetative cover per Section 3.0 of this plan.

4.3 ENVIRONMENTAL MONITORING REQUIREMENTS

The facility will monitor groundwater conditions according to the Groundwater Sampling and Analysis Plan (SAP) throughout the post-closure period.

In the future, the facility may also be required to collect surface water samples as part of any required National Pollution Discharge Elimination System (NPDES) permit. The facility will coordinate with the KDHE Bureau of Water regarding this issue. The post-closure inspections will include a visual check for stressed vegetation and leachate at the ground surface.

4.4 LEACHATE COLLECTION AND REMOVAL SYSTEM

A leachate collection and removal system is not required for Phases 1, 2A, 2B, or 3A. A leachate collection system meeting the design criteria in 40 CFR 257.70(d) will be installed and maintained during the post-closure care period for all lateral phase expansions. This Section will be revised if a leachate collection system is installed at the Facility.

4.5 ACCESS CONTROL / SITE SECURITY

The CCR Landfill Facility is located within the Holcomb Station property which encompasses nearly 7 square miles in rural Finney County. The property boundary is fenced with 5-strand barb wire with locked gates at all entry points. The main access point is gated and guarded. The landfill is 0.33 miles from the nearest property line to the east and 1.25 miles from the nearest public road to the west and is not visible from the road. All these factors will limit the potential for unauthorized access during the post-closure care period. Access control and site security will be evaluated for adequacy during the post-closure care inspections.

4.6 PLANNED USES

The facility has no plans for future use of the site other than management of site vegetation. In the event that future uses other than landfill activities are considered, the facility will ensure the integrity of the final cover and the containment system unless the following applies:

a. The disturbance is necessary to comply with regulations; or
b. The facility submits justification that disturbance of the final cover or other components of the containment system, including removal of waste, will not increase the potential threat to public health, safety, or the environment.

Any post-closure use must be approved by the KDHE BWM. An updated restricted covenant must be filed with KDHE BWM at closure.

4.7 SITE INSPECTIONS

Due to the arid nature of the site, after initial closure activities, personnel will be present on a regular basis performing irrigation. If issues are found during irrigation activities, the personnel are to notify management for rectification. Documented Post-closure inspections will occur quarterly for one year. Inspection frequency will be reduced as final cover conditions are found to be stable and depending on the need for periodic maintenance. Sunflower will then reduce the inspection frequency to semi-annually beginning year two, then transition to annually after 10 years. Site inspections will focus on the following elements (See Appendix 3 for example Inspection Form):

- Site Security
  - Fencing Intact
  - Signage Intact
  - Gates Intact and Locked
- Vegetation
  - Bare spots or stressed vegetation
  - Trees or other unwanted vegetation present (to be removed/rectified)
- Cover Integrity
  - Erosion – wind and water
  - Seepage
  - Animal Burrows
  - Settling or depressions
  - Sloughing of slopes
- Drainage Features
  - Erosion
  - Functioning properly
- Monitoring Wells (addressed via SAP)

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5.0 SCHEDULE

Table 5-1 is a proposed schedule of activities for the closure and the post-closure care period. Table 5-2 is a schedule of activities to be conducted during the post-closure care period.

Table 5-1: Closure / Post-Closure Schedule

Activity	Description	Reg. Schedule	Preliminary Timeframe
Initiate Material Evaluation	Final evaluation of proposed materials to be used for infiltration barrier layer.	N/A – 6 months before initiation of closure activities	March 2045
Notification of Closure Activities	A notification of closure activities must be sent to the KDHE and placed in the Facility Operating Record and Publicly available internet site.	30 days prior to initiation of closure activities	September 2045
Initiate Closure Activities	Initiation of closure activities must be started by implementation of any portions of this plan.	30 days after last known final receipt of waste	October 2045
Closure Completion	Closure activities must be completed in the timeframes specified unless a demonstration of time extension is documented.	6 months after initiation of closure activities	March 2046
Notification of Closure Completion	A notification of closure completion must be sent to the KDHE and placed in the Facility Operating Record, and Publicly available internet site.	30 days after closure completion	April 2046
Post-Closure Care Completion	The post-closure care period will proceed for the length of time specified, unless it is extended due to requirements of Assessment Monitoring (See Facility Groundwater SAP)	30 years after closure completion	March 2076
Notification of Post-Closure Care Completion	After the designated post-closure care period a notification must be sent to the KDHE and placed in the Facility Operating Record, and Publicly available internet site.	60 days after completion of post-closure care	May 2076

Table 5-2: Post-Closure Care Activity Schedule

Activity	Description	Schedule
Irrigation	Irrigation of cap to establish vegetation, 1" per week during the growing season for the first two years then as-needed thereafter. Irrigation personnel to perform informal inspections of closed landfill.	From Closure to 5 years after completion of closure activities
Quarterly Formal Inspections	Quarterly, documented inspections of the landfill and ancillary appurtenances.	From Closure to 1 year after completion of closure activities
Semi-Annual Formal Inspections	Semi-annual, documented inspection of the landfill and ancillary appurtenances.	From Year 2 of closure to Year 10 after completion of closure activities
Annual Inspections	Annual, documented inspection of the landfill and ancillary appurtenances	From Year 10 of closure to 30 years after closure completion
Maintenance of Final Cover, Drainage Features, and/or Site Security Features	Maintain and/or fix as necessary any eroded soils, damaged vegetation, runoff controls, landscaping, ditches, fencing, signage, or other feature.	As needed. To be performed within 45 days of noticing deficiency.
Groundwater Monitoring	See Facility Groundwater SAP	

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APPENDIX 1

CLOSURE AND POST-CLOSURE REGULATORY CROSS-REFERENCE

Reg. Citation	Text	Plan Reference
257.102	**Criteria for conducting the closure or retrofit of CCR units**	
257.102(a)	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.	1.1
257.102(b)	Written Closure Plan	
257.102(b)(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)(i) through (vi) of this section.	3.0
257.102(b)(1)(i)	A narrative description of how the CCR unit will be closed in accordance with this section.	3.0
257.102(b)(1)(ii)	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.	N/A
257.102(b)(1)(iii)	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.	3.0
257.102(b)(1)(iv)	An estimate of the maximum inventory of CCR ever on-site over the active life of the CCR unit.	1.1
257.102(b)(1)(v)	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.	1.1

257.102(b)(1)(vi)	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.	5.0
257.102(b)(2)	Timeframes for preparing the initial written closure plan	
257.102(b)(2)(i)	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.	2.2
257.102(b)(2)(ii)	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.	2.2
257.102(b)(2)(iii)	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 § 257.105(i)(4).	1.2
257.102(b)(3)	Amendment of a written closure plan.	
257.102(b)(3)(i)	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.	2.2
257.102(b)(3)(ii)	The owner or operator must amend the written closure plan whenever:	2.2
257.102(b)(3)(ii)(A)	There is a change in the operation of the CCR unit that would substantially affect the written closure plan in effect; or	2.2
257.102(b)(3)(ii)(B)	Before or after closure activities have commenced, unanticipated events necessitate a revision of the written closure plan.	2.2

257.102(b)(3)(iii)	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.	2.2
257.102(b)(4)	The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority that the initial and any amendment of the written closure plan meets the requirements of this section.	Following Table of Contents
257.102(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 § 257.95(h) for constituents listed in appendix IV to this part.	N/A
257.102(d)	Closure performance standard when leaving CCR in place	
257.102(d)(1)	The owner or operator of a CCR unit must ensure that, at a minimum, the CCR unit is closed in a manner that will:	3.2.1
257.102(d)(1)(i)	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;	3.2.1
257.102(d)(1)(ii)	Preclude the probability of future impoundment of water, sediment, or slurry;	3.1.3
257.102(d)(1)(iii)	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;	3.1.3, 3.2.3
257.102(d)(1)(iv)	Minimize the need for further maintenance of the CCR unit; and	3.2.3
257.102(d)(1)(v)	Be completed in the shortest amount of time consistent with recognized and generally accepted good engineering practices.	3.2.2
257.102(d)(2)	Drainage and stabilization of CCR surface impoundments.	N/A
257.102(d)(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)(i) of this section, or the requirements of the alternative final cover system specified in paragraph (d)(3)(ii) of this section.	3.2.1

257.102(d)(3)(i)	The final cover system must be designed and constructed to meet the criteria in paragraphs (d)(3)(i)(A) through (D) 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.	3.2.1
257.102(d)(3)(i)(A)	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.	3.2.1
257.102(d)(3)(i)(B)	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.	3.2.2
257.102(d)(3)(i)(C)	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.	3.2.1
257.102(d)(3)(i)(D)	The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.	3.1.3
257.102(d)(3)(ii)	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 (d)(3)(ii)(A) through (C) 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.	3.2.2
257.102(d)(3)(ii)(A)	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)(i)(A) and (B) of this section.	3.2.2
257.102(d)(3)(ii)(B)	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)(i)(C) of this section.	3.1.3
257.102(d)(3)(ii)(C)	The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.	3.1.3
257.102(d)(3)(iii)	The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority that the design of the final cover system meets the requirements of this section.	1.3
257.102(e)	Initiation of closure activities. Except as provided for in paragraph (e)(4) of this section and § 257.103, 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.	2.1
257.102(e)(1)	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:	2.1

257.102(e)(1)(i)	Receives the known final receipt of waste, either CCR or any non-CCR waste stream; or	2.1
257.102(e)(1)(ii)	Removes the known final volume of CCR from the CCR unit for the purpose of beneficial use of CCR.	2.1
257.102(e)(2)(i)	Except as provided by paragraph (e)(2)(ii) 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.	2.1
257.102(e)(2)(ii)	Notwithstanding paragraph (e)(2)(i) 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)(ii)(A) and (B) 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 § 257.105(i)(5) prior to the end of any two-year period.	2.1
257.102(e)(2)(ii)(A)	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	2.1
257.102(e)(2)(ii)(B)	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)(ii)(B)(1) through (4) 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.	2.1
257.102(e)(2)(ii)(B)(1)	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.	2.1

257.102(e)(2)(ii)(B)(2)	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.	2.1
257.102(e)(2)(ii)(B)(3)	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.	2.1
257.102(e)(2)(ii)(B)(4)	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.	2.1
257.102(e)(2)(iii)	In order to obtain additional time extension(s) to initiate closure of a CCR unit beyond the two years provided by paragraph (e)(2)(i) of this section, the owner or operator of the CCR unit must include with the demonstration required by paragraph (e)(2)(ii) 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.*	2.1
257.102(e)(3)	For purposes of this subpart, 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:	2.1
257.102(e)(3)(i)	Taken any steps necessary to implement the written closure plan required by paragraph (b) of this section;	2.1
257.102(e)(3)(ii)	Submitted a completed application for any required state or agency permit or permit modification; or	N/A
257.102(e)(3)(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 closure of a CCR unit.	N/A
257.102(e)(4)	The timeframes specified in paragraphs (e)(1) and (2) of this section do not apply to any of the following owners or operators:	N/A
257.102(e)(4)(i)	[Reserved]	N/A
257.102(e)(4)(ii)	An owner or operator of an existing unlined CCR surface impoundment closing the CCR unit as required by § 257.101(a);	N/A
257.102(e)(4)(iii)	An owner or operator of an existing CCR surface impoundment closing the CCR unit as required by § 257.101(b);	N/A
257.102(e)(4)(iv)	An owner or operator of a new CCR surface impoundment closing the CCR unit as required by § 257.101(c); or	N/A

257.102(e)(4)(v)	An owner or operator of an existing CCR landfill closing the CCR unit as required by § 257.101(d).	N/A
257.102(f)	Completion of closure activities.	
257.102(f)(1)	Except as provided for in paragraph (f)(2) of this section, the owner or operator must complete closure of the CCR unit:	2.1
257.102(f)(1)(i)	For existing and new CCR landfills and any lateral expansion of a CCR landfill, within six months of commencing closure activities.	2.1
257.102(f)(1)(ii)	For existing and new CCR surface impoundments and any lateral expansion of a CCR surface impoundment, within five years of commencing closure activities.	N/A
257.102(f)(2)(i)	Extensions of closure timeframes. 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 § 257.105(i)(6) prior to the end of any two-year period. Factors that may support such a demonstration include:	2.1
257.102(f)(2)(i)(A)	Complications stemming from the climate and weather, such as unusual amounts of precipitation or a significantly shortened construction season;	2.1
257.102(f)(2)(i)(B)	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;	N/A
257.102(f)(2)(i)(C)	The geology and terrain surrounding the CCR unit will affect the amount of material needed to close the CCR unit; or	2.1
257.102(f)(2)(i)(D)	Time required or delays caused by the need to coordinate with and obtain necessary approvals and permits from a state or other agency.	2.1
257.102(f)(2)(ii)	Maximum time extensions.	
257.102(f)(2)(ii)(A)	CCR surface impoundments of 40 acres or smaller may extend the time to complete closure by no longer than two years.	N/A
257.102(f)(2)(ii)(B)	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.	N/A

257.102(f)(2)(ii)(C)	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.	2.1
257.102(f)(2)(iii)	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)(i) 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.*	2.1
257.102(f)(3)	Upon completion, the owner or operator of the CCR unit must obtain a certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority 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.	2.1
257.102(g)	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 or the approval from the Participating State Director or the approval from EPA where EPA is the permitting authority for the design of the final cover system as required by § 257.102(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 § 257.105(i)(7).	2.1
257.102(h)	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 or the approval from the Participating State Director or the approval from EPA where EPA is the permitting authority as required by § 257.102(f)(3). The owner or operator has completed the notification when it has been placed in the facility's operating record as required by § 257.105(i)(8).	2.1
257.102(i)	Deed notations.	

257.102(i)(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.	2.3
257.102(i)(2)	The notation on the deed must in perpetuity notify any potential purchaser of the property that:	2.3
257.102(i)(2)(i)	The land has been used as a CCR unit; and	2.3
257.102(i)(2)(ii)	Its use is restricted under the post-closure care requirements as provided by § 257.104(d)(1)(iii).	2.3
257.102(i)(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 § 257.105(i)(9).	1.2
257.102(i)(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.	N/A
257.102(j)	The owner or operator of the CCR unit must comply with the closure recordkeeping requirements specified in § 257.105(i), the closure notification requirements specified in § 257.106(i), and the closure Internet requirements specified in § 257.107(i).	1.2
257.102(k)(1-8)	Criteria to retrofit an existing CCR surface impoundment.	N/A
257.103	**Alternative closure requirements.**	N/A
257.104	**Post-closure care requirements**	
257.104(a)	Applicability	
257.104(a)(1)	Except as provided by paragraph (a)(2) of this section, § 257.104 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 § 257.102.	1.1
257.104(a)(2)	An owner or operator of a CCR unit that elects to close a CCR unit by removing CCR as provided by § 257.102(c) is not subject to the post-closure care criteria under this section.	N/A
257.104(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:	4.0
257.104(b)(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;	4.1, 4.2
257.104(b)(2)	If the CCR unit is subject to the design criteria under § 257.70, 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 § 257.70; and	4.4

257.104(b)(3)	Maintaining the groundwater monitoring system and monitoring the groundwater in accordance with the requirements of §§ 257.90 through 257.98.	4.3
257.104(c)	Post-closure care period.	
257.104(c)(1)	Except as provided by paragraph (c)(2) of this section, the owner or operator of the CCR unit must conduct post-closure care for 30 years.	2.5
257.104(c)(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 § 257.95, the owner or operator must continue to conduct post-closure care until the owner or operator returns to detection monitoring in accordance with § 257.95.	2.5
257.104(d)	Written post-closure plan	
257.104(d)(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)(i) through (iii) of this section.	4.0
257.104(d)(1)(i)	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;	4.7
257.104(d)(1)(ii)	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	1.2
257.104(d)(1)(iii)	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 subpart. 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 or approved by the Participating State Director or approved from EPA where EPA is the permitting authority, 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.	2.6
257.104(d)(2)	Deadline to prepare the initial written post-closure plan	
257.104(d)(2)(i)	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.	2.2

257.104(d)(2)(ii)	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.	2.2
257.104(d)(2)(iii)	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 § 257.105(i)(4).	2.2
257.104(d)(3)	Amendment of a written post-closure plan.	
257.104(d)(3)(i)	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.	2.2
257.104(d)(3)(ii)	The owner or operator must amend the written closure plan whenever:	2.2
257.104(d)(3)(ii)(A)	There is a change in the operation of the CCR unit that would substantially affect the written post-closure plan in effect; or	2.2
257.104(d)(3)(ii)(B)	After post-closure activities have commenced, unanticipated events necessitate a revision of the written post-closure plan.	2.2
257.104(d)(3)(iii)	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.	2.2
257.104(d)(4)	The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer or an approval from the Participating State Director or an approval from EPA where EPA is the permitting authority that the initial and any amendment of the written post-closure plan meets the requirements of this section.	2.1
257.104(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. The notification must include the certification by a qualified professional engineer or the approval from the Participating State Director or the approval from EPA where EPA is the permitting authority 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 § 257.105(i)(13).	2.2

257.104(f)	The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(i), the notification requirements specified in § 257.106(i), and the Internet requirements specified in § 257.107(i).	2.1

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APPENDIX 2

PLAN AMENDMENT LOG

Amendment	Date
Initial Plan Preparation	July 2007
Update for clarity and for additional details on final cover	February 2023
Revised per KDHE comments	September 2023

APPENDIX 3

EXAMPLE INSPECTION FORM

HOLCOMB CCR LANDFILL
POST-CLOSURE INSPECTION FORM

Inspector Employee ID#: _____ Date: _____ Signature: _____

Vegetation – Inspect Landfill Cover for the following		**Corrective Action Needed and Notes** (identify needed maintenance and repairs, or any failed control measures that need replacement for each area)
Bare Spots or Stressed Vegetation	Yes ❑ No ❑	
Trees or other unwanted vegetation	Yes ❑ No ❑	
Cover Integrity – Inspect Landfill Cover for the following		
Erosion (wind or water)	Yes ❑ No ❑	
Seepage present	Yes ❑ No ❑	
Animal Burrows	Yes ❑ No ❑	
Evidence of Settling or Depressions	Yes ❑ No ❑	
Sloughing of Slopes	Yes ❑ No ❑	
Drainage Features – Inspect drainage features (let-downs, ditches, etc.) for the following		
Excessive Erosion of Let Downs or Ditches	Yes ❑ No ❑	
Blockages present	Yes ❑ No ❑	
Site Security – Inspect site security features for the following		
Fencing Intact	Yes ❑ No ❑	
Signs Intact	Yes ❑ No ❑	
Gates Intact and Locked	Yes ❑ No ❑	
Evidence of Intrusion	Yes ❑ No ❑	

APPENDIX 4

RESTRICTIVE COVENANT

286 918

AMENDED RESTRICTIVE COVENANT

This space reserved for Register of Deeds

Holcomb Common Facilities, LLC is the owner in fee simple of that certain real property located in Finney County, Kansas and more particularly described by the following legal description:

A tract of land located in the South Half of Section 20 and the North Half of Section 29, Township 24 South, Range 33 West, of the 6th P.M., Finney County, Kansas, more particularly described as follows:

Commencing at the Northeast corner of Section 31 as recorded in "Sunflower Addition" plat being a 1/2" R-bar, Grove; thence North 1°08'09" East a distance of 3949.66 feet; thence South 88°52'23" East a distance of 543.58 feet to a set 1/2" R-bar, Parks cap typical, being the point of beginning; thence North 1°07'37" East a distance of 1733.09 feet to a set 1/2" R-bar; thence North 22°09'41" West a distance of 612.17 feet to a set 1/2" R-bar; thence North 31°57'09" East a distance of 1836.78 feet to a set 1/2" R-bar; thence South 88°52'23" East a distance of 2665.73 feet to a set 1/2" R-bar; thence South 1°07'37" West a distance of 3872.69 feet to a set 1/2" R-bar; thence North 88°52'23" West a distance of 3364.92 feet to the point of beginning, containing 292.44 acres, more or less.

REGISTER OF DEEDS SEAL FINNEY COUNTY, KANSAS

DATA ENTRY
LAND INDEX

STATE OF KANSAS
SS. # 5912
FINNEY COUNTY
This instrument was filed for Record on the 3rd day of Dec, A.D. 2008 at 11 06 o'clock a M and duly recorded in book 286 Page 918 Fee $ 20.00
Ulrike Tappin
Register of Deeds
By Connie Hoffman, Deputy

By virtue of a deed dated September 30, 2002, recorded in Book 250, Page 124 , in the Office of the Register of Deeds, Finney County, Kansas.

WHEREAS, Holcomb Common Facilities, LLC is the successor in interest to Sunflower Electric Power Corporation by virtue of the deed recited above and is the sole owner of the property; and

WHEREAS, Sunflower Electric Power Corporation filed a Restrictive Covenant dated June 30, 1995 and the same was filed of record in Book 171, Page 102, of the records of the Finney County Register of deeds; and

WHEREAS, Holcomb Common Facilities, LLC as the owner and, the Kansas Department of Health and Environment, as the grantee of the easement included therein, seek to amend the terms of the Original Restrictive Covenant filed June 30, 1995 to revise the legal description of the tracts to which the Covenant applies and to revise the terms of said Covenant as to the permitted property use.

NOW THEREFORE, Holcomb Common Facilities, LLC, with the consent of the Kansas Department of Health and Environment, hereby amends the terms of the Restrictive Covenant filed June 30, 1995 to restrict its application to the tract of real estate described above and to further amend and modify the terms of such covenant to provide as follows:

1. PROPERTY USE

The property is at the date of filing in use as a solid waste disposal area under permit #420 issued by the Kansas Department of Health and Environment. After closure of the landfill, the property shall be used only for the following purposes and no others:

Establishing and maintaining ground cover as native grass land.

2. PROTECTION OF SYSTEMS, MARKERS

All future land uses must be conducted in a manner which will protect and preserve the integrity of the environment and all waste containment and monitoring systems designed, installed, and operated during the operation of the disposal areas or during the post-closure period.

All present and future owners and tenants of this property must preserve and protect all permanent survey markers and benchmark and all environmental monitoring stations installed on the property.

3. CONSTRUCTION: APPROVAL

Any subsequent property owners and/or tenants are required to consult with KDHE during planning of any improvement to the property and to obtain written approval from KDHE in Topeka, Kansas, before any work is done to any monitoring devices or systems, before improvement of this site is performed, or before any excavation or construction of permanent structures, drainage ditches, changes to the contour or dirt work, changes in the vegetation grown, production or sale of food chain crops, or removal of any security fencing, signs, or devices installed to restrict public access to waste storage or disposal areas.

4. EASEMENT TO KDHE

The Kansas Department of Health and Environment, its successors or assigns and any duly authorized agents or contractors employed by or on behalf of KDHE are hereby granted a permanent easement to enter or come upon the property to perform the following actions:

a. Complete any work necessary which may be specified in or be a part of a closure plan required to be submitted to the department;

b. Perform any maintenance or monitoring of any of the waste disposal area during the statutorily required post-closure period;

c. Sample, repair, or reconstruct any environmental monitoring stations constructed as a requirement for operating or post-closure care.

5. DISCLOSURE

Any offer or contract for the conveyance, sale, lease, or other interest in the property must contain full and complete disclosure of all terms, conditions and requirements for long term care and land use which is imposed by current statutes, rules and regulations or the site permit existing at the time of the offer or contract. The offer or contract must also contain provisions for proper and continued maintenance of the waste containment system and testing of the monitoring systems.

6. BINDING TERMS

These limitations, restrictions, easements, conditions, and covenants shall be permanent and shall run with the land and shall be binding on all parties now having or hereafter acquiring any right, title, or interest in the property or any part thereof. These covenants, easement, and all related documents can be extinguished only by written agreement between the property owner and the Kansas Department of Health and Environment

ACKNOWLEDGEMENT

Holcomb Common Facilities, LLC

By, _____
President & CEO, Sunflower Electric Holdings, Inc.,
Member

L. Earl Watkins, Jr.
(Name Printed)

4/14/06
(Date)

STATE OF KANSAS)
) ss:
COUNTY OF ELLIS)

BE IT REMEMBERED, that on this 14th day of April, 20 06, before me, the undersigned, a Notary Public in and for the County and State aforesaid, came L. Earl Watkins, Jr., authorized representative of Holcomb Common Facilities company, who is personally known to be such person who executed the above document on behalf of said corporation, and such person duly acknowledged the execution of the same to be his/her act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand, and affixed my official seal the day and year written above.

Nicole M. Pfannenstiel
Notary Public

My term expires: 6/12/2006

Nicole M. Pfannenstiel
Notary Public - State of Kansas
My Appt. Expires 6/12/2006

CONSENT 286 918

The Kansas Department of Health and Environment hereby expressly consents to the terms of this Amended Restrictive Covenant.

Kansas Department of Health and Environment

By, William L. Bider
(Print)

William L Bider
(Signature)

Title Dir - Bureau of Wst Mgt

Date 11-7-08

STATE OF KANSAS)
) ss:
COUNTY OF SHAWNEE)

BE IT REMEMBERED, that on this 7th day of November, 20 08, before me, the undersigned, a Notary Public in and for the County and State aforesaid, came William L. Bider, authorized representative of KDHE/BWM company, who is personally known to be such person who executed the above document on behalf of said corporation, and such person duly acknowledged the execution of the same to be his/her act and deed.

IN TESTIMONY WHEREOF, I have hereunto set my hand, and affixed my official seal the day and year written above.

Sarah R Fulton
Notary Public

My term expires: 2/25/2012

NOTARY PUBLIC - State of Kansas
SARAH R. FULTON
My Appt. Expires 2/25/2012