Big Rivers
ELECTRIC CORPORATION

Sebree Station
9000 Highway 2096
Robards, KY 42452
www.bigrivers.com

October 20, 2022

RE: Big Rivers Electric Corporation Green Station (AI 4196).
Notification of Intent to Close the Green Station Surface Impoundment.

This document serves as the Notification of Intent to Initiate Closure of the Green Station surface impoundment in accordance with 40 C.F.R. 257.102(g).

The closure will adhere to the written closure plan dated June 20, 2022, attached herein, which includes a Professional Engineer's (PE) certification. Any amendment to the written closure plan will be performed in conjunction with 40 CFR Part 257.102(b)(3).

Per the ***Green Station Closure Extension Demonstration*** (40 CFR Part 257.102(f)(2)) filed with the United States Environmental Protection Agency on November 25, 2020, the closure of this surface impoundment will be completed no later than October 17, 2023.

BURNS McDONNELL

Closure Plan for the Green Station CCR Surface Impoundment

Big Rivers ELECTRIC CORPORATION

Your Touchstone Energy® Cooperative

Big Rivers Electric Corporation

Robert D. Green Generating Station

Coal Combustion Residual Rule Compliance

Closure Plan for the Green Station CCR Surface Impoundment

Prepared for

Big Rivers Electric Corporation
Robert D. Green Generating Station
Roberts, Kentucky

Revision 3
6/20/2022

Prepared by

Burns & McDonnell Engineering Company, Inc.
Kansas City, Missouri

INDEX AND CERTIFICATION

Big Rivers Electric Corporation
Closure Plan for the Green Station CCR Surface Impoundment

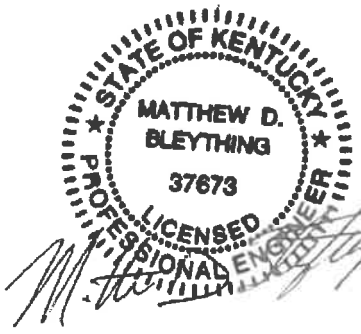
Report Index

Certification

I hereby certify, as a Professional Engineer in the State of Kentucky, that the information in this document was assembled under my direct supervisory control. This report is not intended or represented to be suitable for reuse by Big Rivers Electric Corporation or others without specific verification or adaptation by the Engineer.

Matthew D. Bleything, P.E. Kentucky License #37673

Date: 6/20/22



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LIST OF ABBREVIATIONS

Abbreviation	Term/Phrase/Name
BREC	Big Rivers Electric Corporation
CCR	Coal Combustion Residuals
CFR	Code of Federal Regulations
EPA	Environmental Protection Agency
FGD	Flue Gas Desulfurization
KAR	Kentucky Administrative Regulations
KDWM	Kentucky Division of Waste Management
KPDES	Kentucky Pollution Discharge Elimination System
KDOW	Kentucky Department of Water
RCRA	Resource Conservation and Recovery Act
U.S.C.	United States Code

1.0 INTRODUCTION

On April 17, 2015, the Environmental Protection Agency (EPA) issued the final version of the federal Coal Combustion Residuals (CCR) Rule to regulate the disposal of coal combustion residual materials generated at coal-fired units. The rule is administered as part of the Resource Conservation and Recovery Act (RCRA, 42 United States Code [U.S.C.] §6901 et seq.), using the Subtitle D approach.

Big Rivers Electric Corporation (BREC) is subject to the CCR Rule and as such must develop a Closure Plan per 40 Code of Federal Regulations (CFR) §257.102. This document serves as BREC's Closure Plan for the Green Station (Green) CCR Surface Impoundment (Ash Pond).

According to §257.102(b)(1), the Closure Plan must contain the following:

- A description of how the CCR unit will be closed.
  - For in-place closure: A description of the final cover system, the methods for installing the final cover system, and the methods for achieving compliance with the standards outlined in §257.102(d).
  - For closure by removal: A description of the procedures to remove the CCR and decontaminate the CCR unit as outlined in §257.102(c).
- An estimate of the maximum amount of material ever stored in the CCR unit over its active life.
- An estimate of the largest area of the CCR unit ever requiring a final cover as required by §257.102(d) at any time during the CCR unit's active life.
- A schedule for completing closure activities, including the anticipated year of closure and major milestones for permitting and construction activities.

The seal on this report certifies that this document meets the requirements of 40 CFR §257.102(b). This closure plan is in addition to, not in place of, any other applicable site permits, environmental standards, or work safety practices.

The Ash Pond will not be subject to a Post-Closure Plan per §257.104(a)(2) as the impoundment will be closed through removal of the CCR pursuant to §257.102(c).

The closure completion date as presented in this Closure Plan matches the complete Green Station Closure Extension Demonstration (November 2020) that was prepared in response to 40 CFR §257.103(f)(2).

1.1 Impoundment Description

Green is an electric generating station near Robards, Kentucky. The plant consists of Unit 1 and Unit 2 which are respectively 250MW and 242MW (gross) units commercialized in 1979 and 1981 respectively. The plant ceased coal-fired operations of the boilers on April 4, 2022. The boilers have been converted for the combustion of natural gas for the production of power. The plant historically utilized the Ash Pond to manage the CCR and non-CCR wastestreams. The Ash Pond was constructed when the plant was built and has been in service for the life of the plant. The CCR wastestreams that were managed in the Ash Pond included sluiced bottom ash, economizer ash and Flue Gas Desulfurization (FGD) wastewater. All fly ash was handled dry. The various non-CCR wastewaters routed to the Ash Pond originate from the Unit 1 and 2 boiler sumps, metal cleaning wastes, clarifier blowdown, bottom ash hopper seal water, miscellaneous drains including roof drains, landfill leachate, and various stormwater sources. A site plan is included in Appendix A.

1.1.1 CCR Inventory and Extent

Depth of impounded water and CCR is 3 feet and 18 feet (at respective locations of maximum impounded water and CCR depths). Elevation of impounded water and CCR is 396 feet and 400 feet, respectively, above mean sea level. These approximate depths and respective elevations are based on the most recent (October 2018) flight derived topographic contours and bathymetric survey data.

The remaining storage capacity is approximately 230,000 cubic yards (if CCR can be placed to the elevation of the current water surface). This volume was calculated based on the maximum allowable storage volume and the current volume of CCR stored in the facility based on the most recent bathymetric survey.

The approximate volume of CCR currently stored in the Ash Pond is 1,000,000 cubic yards. The maximum storage capacity is 1,230,000 cubic yards. This volume was calculated based on the most recent bathymetric survey, and the best available as-built data for the construction prior to placement of CCR.

1.2 Closure Method

The Ash Pond will be closed through removal of CCR. CCR will be excavated from the Ash Pond to the bottom elevation shown on the original construction drawings. The CCR will be dewatered, removed, and hauled to the on-site CCR landfill for final placement. Construction of several wells or well-points may be required around the pond for water management prior to and during CCR removal. Once the CCR is removed from the Ash Pond, the existing pond will be repurposed as a non-CCR Wastewater Pond. No

additional modifications are expected, and the pond will continue to operate within current KPDES limits at the existing Outfall 009.

To facilitate the pond closure, the existing non-CCR wastestreams will need to be managed. The pond water level will be lowered as much as feasible after ceasing receipt of CCR, prior to the construction contractor coming on site. When the construction contractor begins construction, the remaining non-CCR wastestreams will be managed using a series of temporary berms, ditches, and pumps to divert non-CCR wastestreams to other locations. Additionally, wells, well points and other means of water management may be employed by the construction contractor. Dewatering operations will be in accordance with KDOW, KPDES Permit requirements. The sequencing of construction and means and methods for the water management will be determined by the construction contractor once a contract is finalized with BREC.

When the CCR removal is complete and the new Wastewater Pond is in service, all remaining stormwater and non-CCR wastestreams will continue to be managed in the new pond and will continue to discharge through the existing KPDES outlet. The contractor will then finalize construction by seeding and stabilizing the remaining disturbed areas.

Visual observations will be conducted by a qualified third party Professional Engineer and KDWM representatives to verify that the CCR material has been removed from the impoundment consistent with 401 KAR 46:110 Section 9 and 40 CFR 257.102(c). BREC does not plan to perform sampling or analysis to confirm CCR removal. A projected schedule will be provided to KDWM once a construction contractor is selected to allow for inspection of ongoing work by KDWM representatives. Additional waste to be removed includes utility waste such as incidental soil, rock, or other materials excavated as a part of the CCR removal. Incidental materials may remain commingled with the CCR during transportation and disposal in the onsite CCR Landfill(s).

Once all CCR material has been removed, groundwater monitoring will be conducted as indicated in Section 1.2.2 to confirm CCR removal and decontamination has been completed pursuant to §257.102(c) of the CCR Rule.

1.2.1 Closure Schedule

According to §257.101 of the CCR Rule, closure of the existing impoundment must commence no later than 6 months following the date on which a closure event is triggered, or no later than 30 days following the last known receipt of CCR or non-CCR wastewater by the impoundment. The plant ceased coal-fired operations of the boilers on April 4, 2022. However, the Ash Pond will continue to manage non-CCR

wastestreams. The closure project documents have been finalized and construction anticipated to begin in June 2022.

The estimated closure schedule is as follows:

Mobilization	July 2022
Pond Dewatering	July 2022 – August 2023
Removal of CCR	July 2022 – August 2023
Winter Shutdown	December 2022 – March 2023
Finished Surfacing and Demobilization	August 2023 – September 2023
Deadline to complete removal of CCR	October 17, 2023

1.2.2 Closure Completion

When BREC has removed the CCR from the impoundment, certified by a third-party Professional Engineer and inspected by KDWM, BREC will submit a construction progress report for acceptance under 401 KAR 46:110.

Groundwater monitoring will continue pursuant to 401 KAR 46:110 Section 8 and the CCR rule, 40 CFR 257.94, until such time that the CCR has been removed, as certified by a Professional Engineer and a CPR accepted by KDWM. It should be noted that the Green Ash Pond has remained in Detection Monitoring since the pond has been regulated under 40 CFR 257.

At the conclusion of closure by removal and cessation of the detection monitoring program, BREC will submit to the KDWM-Solid Waste Branch for review and approval, a groundwater monitoring well abandonment plan meeting the requirements of 401 KAR 6:350 for abandonment of the said Ash Pond groundwater monitoring well network. A subsequent CPR documenting the monitoring well abandonments will be submitted to KDWM for review. Once the well abandonment CPR is accepted, a permit revision will be issued reflecting the acceptance of the CPR by KDWM and the termination of the CCR Surface impoundment activity.

Within 30 days of completion of closure of the impoundment, BREC must prepare a notification of closure of the impoundment and place it in the facility's CCR Operating Record and on BREC's CCR public website. This notification shall include certification by a Professional Engineer in the State of Kentucky verifying that closure has been completed in accordance with this Closure Plan and the requirements of §257.102.

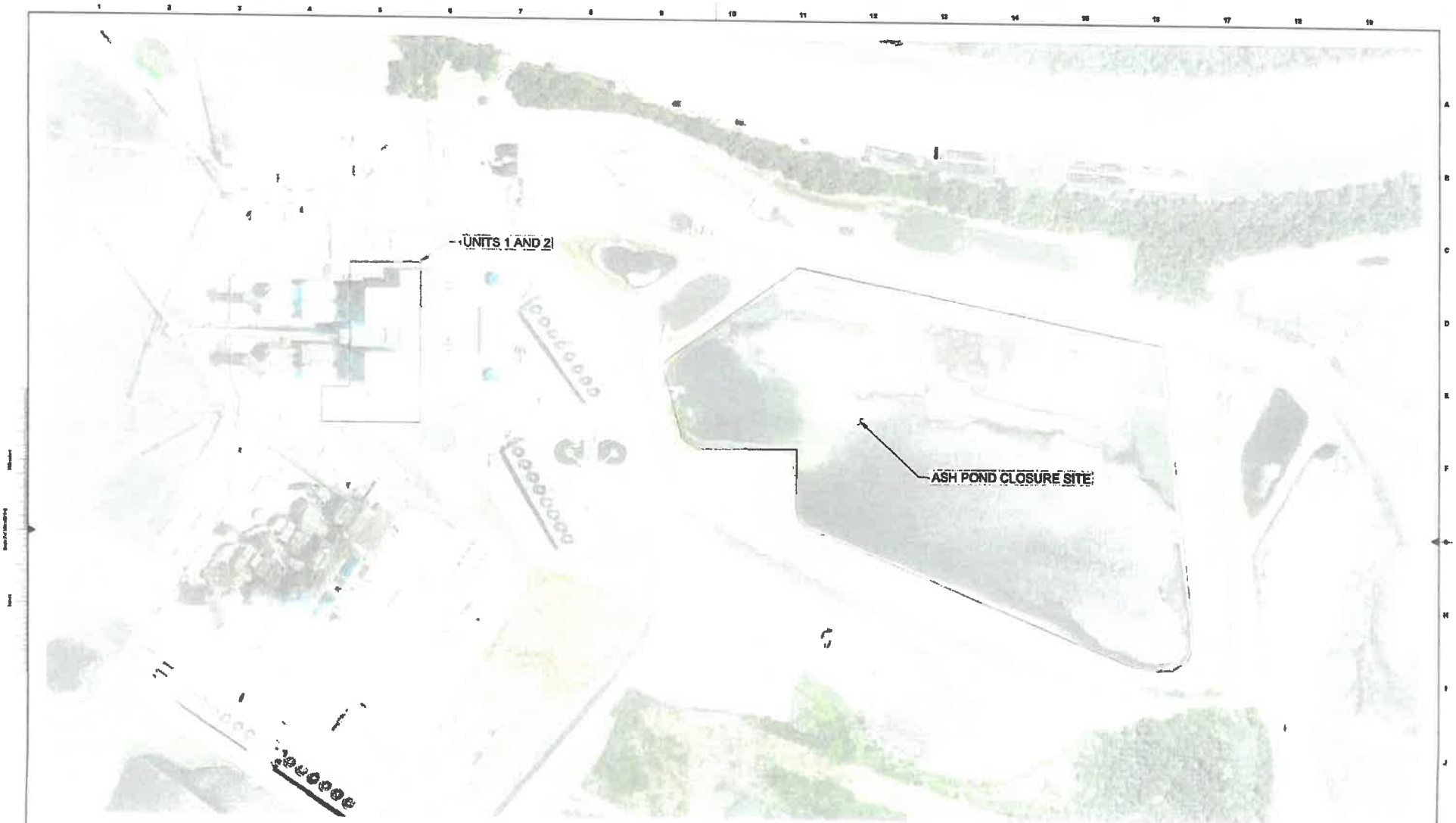
2.0 REVISIONS AND AMENDMENTS

The initial Closure Plan was placed in the CCR Operating Record on October 11, 2016. If the Closure Plan is revised, the written Closure Plan will be amended no later than 30 days following the triggering event. Additionally, the written Closure Plan will be amended at least 60 days prior to a planned change in the operation of the Impoundment, or no later than 60 days after an unanticipated event. The initial Closure Plan and any amendment will be certified by a qualified professional engineer in the State of Kentucky for meeting the requirements of §257.102 of the CCR Rule. All amendments and revisions must be placed on the CCR public website within a reasonable amount of time following placement in the facility's CCR Operating Record. A record of revisions made to this document is included in Section 3.0 of this document.

3.0 RECORD OF REVISIONS AND UPDATES

Date	Revisions Made	By Whom
10/11/2016	Initial Issue	Associated Engineers, Inc.
09/13/2017	Revision 1	Associated Engineers, Inc.
11/24/2020	Revision 2 – Updated schedule and added detail to closure method	Burns & McDonnell
06/17/2022	Revision 3 – Updated closure method to closure by removal	Burns & McDonnell

APPENDIX A – SITE PLAN



FOR PERMITTING PURPOSES ONLY

no.	date	by	chd	description
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no.	date	by	chd	description

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WEBSTER COUNTY, KENTUCKY

GREG GREEN STATION
CCR & ELG COMPLIANCE PROJECT
ASH POND CLOSURE SITE PLAN

project: 132721 | contract:
drawing: SK-C001 | rev: A
sheet: | sheets:

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May 17, 2019

RE: Big Rivers Electric Corporation Reid and HMP&L Station II (AI 4196). Notification of Intent to Close the Reid-HMP&L Station II surface impoundment.

This document serves as the Notification of Intent to Initiate Closure of the Reid-HMP&L Station II surface impoundment in accordance with 40 C.F.R. 257.102(g).

The closure will adhere to the written closure plan dated October 11, 2016, attached here, which includes a Professional Engineer's (PE) certification that the final cover system will meet the requirements of 40 CFR 257.102, as required by 40 CFR 257.102(d)(3)(iii). Any amendment to the written closure plan will be performed in conjunction with 40 CFR Part 257.102(b)(3).

Per 40 CFR Part 257.102(f), the closure of this surface impoundment will be completed by April 17, 2024 (i.e. within five (5) years of commencing closure).

Big Rivers
ELECTRIC CORPORATION

Your Touchstone Energy® Cooperative

Reid/HMPL Station CCR Surface Impoundment

Disposal of Coal Combustion Residuals (CCR) from Electric Utilities Final Rule Closure and Post-Closure Care Plan

October 11, 2016

Prepared By:

ASSOCIATED ENGINEERS, INC.
2740 North Main St. • Madisonville, KY 42431
Phone: (270) 821-7732 • Fax: (270) 821-7789

Project ID: 160027C

Big Rivers Electric Corporation
Disposal of Coal Combustion Residuals (CCR) from Electric Utilities Final Rule
Closure and Post-Closure Care Plan

CCR Surface Impoundment Information

Name:	Reid/HMPL Station CCR Surface Impoundment
Operator:	Sebree Generating Station
Address:	9000 Highway 2096 Robards, Kentucky 42452
CCR Unit Identification Number:	Kentucky State Dam Inventory System ID No. 0855

Qualified Professional Engineer

Name:	David A. Lamb
Company:	Associated Engineers, Inc.
Kentucky P.E. Number:	17822

Regulatory Applicability

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 and a written post-closure care plan consistent with recognized and generally accepted good engineering practices as specified below. The owner or operator of an existing CCR unit must prepare the written initial closure and post-closure care plans no later than October 17, 2016 as follows:

§ 257.102 Criteria for conducting the closure or retrofit of CCR units.

(a) Closure of a CCR unit 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)(i) through (vi) of this section.

(i) A narrative description of how the CCR unit will be closed in accordance with this

section.

(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.

(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.

(iv) An estimate of the maximum inventory of CCR ever on-site over the active life of the CCR unit.

(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.

(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 surface impoundment 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.

(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.

(d) Closure performance standard when leaving CCR in place - (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:

(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;

(ii) Preclude the probability of future impoundment of water, sediment, or slurry;

(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;

(iv) Minimize the need for further maintenance of the CCR unit; and

(v) Be completed in the shortest amount of time consistent with recognized and generally accepted good engineering practices.

§ 257.103 Alternative closure requirements.

The owner or operator of a CCR landfill, CCR surface impoundment, or any lateral expansion of a CCR unit that is subject to closure pursuant to § 257.101(a)[detected at statistically significant levels above the groundwater protection standard], (b)(1) [not demonstrated compliance with any location standard], or (d)[not demonstrated compliance with the location restriction for unstable areas], may continue to receive CCR in the unit provided the owner or operator meets the requirements of either paragraph (a) or (b) of this section.

(a)(1) *No alternative CCR disposal capacity.* Notwithstanding the provisions of § 257.101(a), (b)(1), or (d), a CCR unit may continue to receive CCR if the owner or operator of the CCR unit certifies that the CCR must continue to be managed in that CCR unit due to the absence of alternative disposal capacity both on-site and off-site of the facility.

(b)(1) *Permanent cessation of a coal-fired boiler(s) by a date certain.* Notwithstanding the provisions of § 257.101(a), (b)(1), and (d), a CCR unit may continue to receive CCR if the owner or operator certifies that the facility will cease operation of the coal- fired boilers within the timeframes specified in paragraphs (b)(2) through (4) of this section, but in the interim period (prior to closure of the coal-fired boiler), the facility must continue to use the CCR unit due to the absence of alternative disposal capacity both on- site and off-site of the facility.

§ 257.104 Post-closure care requirements.

(a) *Applicability.*

(1) Except as provided by either item (2) or (3) of this section, post-closure requirements apply 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.

(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.

(3) An owner or operator of an inactive CCR surface impoundment that elects to

close a CCR unit pursuant to the requirements under § 257.100(b) [Inactive Surface Impoundments] 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;

(c) *Post-closure care period.*

(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) 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 [Assessment Monitoring Program], 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.

(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)(i) through (iii) of this section.

(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;

(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

(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, 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 - Existing CCR landfills and existing CCR surface impoundments. No later than October 17, 2016.

(3) Amendment of a written post-closure plan.

(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.

(ii) The owner or operator must amend the written closure plan whenever:

(A) There is a change in the operation of the CCR unit that would substantially affect the written post-closure plan in effect; or

(B) After post-closure activities have commenced, unanticipated events necessitate a revision of the written post-closure plan.

(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.

(4) 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.

(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 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.

Description of Impoundment

An aerial photo of the CCR unit is provided as Attachment A and an excerpt from U.S. Geological Survey (USGS) 7.5 minute Robards and Delaware topographic quadrangle maps showing the location of the CCR unit is provided as Attachment B.

The CCR unit has been in place for 40 plus years and is used for the placement of coal combustion residual material; currently slurried bottom ash. The immediate watershed that drains to the CCR unit, and in which the CCR unit is considered to be located, is unnamed and 25.45 acres in size.

The CCR unit is a combined incised/earthen embankment structure. Embankments form the west, south and east sides of the impoundment and the north side is incised. The original terrain on which the pond was constructed generally sloped toward the west. Although the Green River is located less than 0.5 miles from the site, the structure does not extend significantly into the floodplain. Underlying preconstruction soils consisted of Loring-Grenada, Loring-Zanesville-Wellston (Henderson County) and Loring-Wellston-Zanesville (Webster County) soil associations which are generally characterized as well drained to moderately well drained soils on nearly level to sloping uplands.

The embankment reaches its greatest relief of approximately 42 feet on the west side. The Burns & McDonnell Engineering Co. October 8, 1971 design drawings show the inboard slope and central core portion of the dike to be constructed of compacted soil fill and the outboard slope to be consisted of sand fill. A sand blanket drain was designed for the outboard third of the base of the dike for the majority of the length and the plans show a crushed limestone drainage layer with a minimum thickness of 18 inches topped with a minimum six inches thick sand layer which extends across the entire width of the dike cross section in the southwest corner. The plans also show a cut-off trench in the original ground below dike crest and extending for the entire length of the dike.

Depth of impounded water and CCR is 16 feet and 39 feet (at respective locations of maximum impounded water and CCR depths). Elevation of impounded water and CCR is 426 feet and 440 feet, respectively, above mean sea level. These approximate depths and respective elevations are based on the most recent (December 2015) flight derived topographic contours and bathymetric survey data.

The remaining storage capacity is approximately 85,000 cubic yards (if CCR can be placed to the elevation of the current water surface). This volume was calculated based on the maximum allowable storage volume and the current volume of CCR stored in the facility based on the most recent bathymetric survey.

The approximate volume of impounded water and CCR is 767,000 cubic yards (approximate water volume is 85,000 cubic yards and approximate CCR volume is 682,000 cubic yards). This volume was calculated based on the maximum storage capacity, the current amount of CCR stored in the facility based on the most recent bathymetric survey, and the best available as-built data for the structure construction prior to placement of CCR.

The impoundment discharge consists of a rectangular concrete drop structure with a variable height steel debris skimmer. The pool elevation can be controlled by adding or removing stop logs. The discharge structure connects to a 24-inch diameter smooth walled metal pipe underground conveyance.

Reid/HMPL CCR Impoundment Closure Plan

The closure plan for the Reid/HMPL CCR impoundment includes, at a minimum:

1. Narrative description of how the CCR unit will be closed in accordance with this section:

At any time that closure may occur, the Reid/HMPL CCR impoundment will be closed with existing CCR in place. The material will be dewatered to enable the embankment soil materials to be placed on top of the CCR material and serve as cover material. The final cover system will be designed to minimize infiltration and erosion, and at a minimum, meet the requirements listed below or the requirements of an alternative final cover system.

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 $1x10^{-5}$ centimeters/second (cm/sec), whichever is less. It has been determined and documented that the bottom of the impoundment was not constructed to meet low permeability specifications.

b. 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.

c. The erosion of the final cover system must be minimized by the use of an erosion layer that contains a minimum of 6 inches of earthen material that is capable of sustaining native plant growth.

d. The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.

2. 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.

   It is not proposed that the closure of the Reid/HMPL CCR impoundment will include removal of CCR material from the unit.

3. 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.

   The Reid/HMPL CCR impoundment will be closed and covered with the CCR material in place. CCR material will be dewatered or drained as required to place soil cover material and the material will be compacted to meet the required permeability of not more than $1x10^{-5}$ centimeters/second (cm/sec). Appropriate soils testing will be conducted to document that the required thickness and permeability specifications have been met and may include laboratory and field testing procedures. The final cover will be vegetated with appropriate cover species and erosion of the final cover system must be minimized by the use of an erosion layer that contains a minimum of 6 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.

4. An estimate of the maximum inventory of CCR ever on-site over the active life of the CCR unit.

   Depth of impounded water and CCR is 16 feet and 39 feet (at respective locations of maximum impounded water and CCR depths). Elevation of impounded water and CCR is 426 feet and 440 feet, respectively, above mean sea level. These approximate depths and respective elevations are based on the most recent (December 2015) flight derived topographic contours and bathymetric survey data.

   The remaining storage capacity is approximately 85,000 cubic yards (if CCR can be placed to the elevation of the current water surface). This volume was calculated based on the maximum allowable storage volume and the current volume of CCR stored in the facility based on the most recent bathymetric survey.

   The approximate volume of impounded water and CCR is 767,000 cubic yards (approximate water volume is 85,000 cubic yards and approximate CCR volume is 682,000 cubic yards). This volume was calculated based on the maximum storage capacity, the current amount of CCR stored in the facility based on the most recent bathymetric survey, and the best available as-built data for the structure construction prior to placement of CCR.

5. An estimate of the largest area of the CCR unit ever requiring a final cover at any time during the CCR unit's active life.

   The estimated largest area of the CCR unit ever requiring a final cover at any time during the CCR unit's active life is approximately 20 acres.

6. 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 surface impoundment 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 extensions sought under paragraph (f)(2) of this section.

   The closure of the Reid/HMPL CCR impoundment will be implemented within any required timeframes per applicable environmental rules and regulations and in

consideration of any operational and financial constraints. The time required to complete closure is proposed not to exceed five years from commencing closure activities. Based on the current fill rate the impoundment has an estimated closure date of 2022.

Reid/HMPL CCR Impoundment Post-closure Plan

The post-closure plan for the Reid/HMPL CCR impoundment includes, at a minimum:

1. The monitoring and maintenance activities will include maintaining the integrity and effectiveness of the final cover system, including making repairs to the final 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. The name, address, telephone number, and email address of the person or office to contact about the facility during the post-closure care period follows:

   Thomas Shaw, Director Environmental
   Big Rivers Electric Corporation
   Address: 201 3rd Street Henderson, KY 42420
   Telephone Number: 270-844-6031
   Email Address: Thomas.Shaw@bigrivers.com

3. The planned uses of the property during the post-closure period will consist of maintaining the integrity of the power generating facility. Post-closure use of the property will 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 the rule or other environmental regulations or to facilitate operating considerations that are 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.

Sources of Information

Geotechnical and other information provided by Associated Engineers, Inc.

Engineering design drawings and other information provided by Big Rivers Electric Corporation

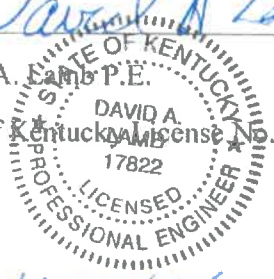
United States Geological Survey U.S. Geological Survey (USGS) 7.5 minute Robards and Delaware topographic quadrangle maps

Professional Engineer Certification [Per 40 CFR § 257.102-104]
Reid/HMPL CCR Impoundment Closure and Post-Closure Care Plan

I hereby certify that myself or an agent under my review has prepared this Closure and Post-Closure Care Plan System Plan (Plan), and being familiar with the provisions of the final rule to regulate the disposal of coal combustion residuals (CCR) as solid waste under subtitle D of the Resource Conservation and Recovery Act (RCRA), attest that this Plan has been prepared in accordance with good engineering practices and meets the intent of 40 CFR Part 257.102-104. To the best of my knowledge and belief, the information contained in this Plan is true, complete, and accurate.

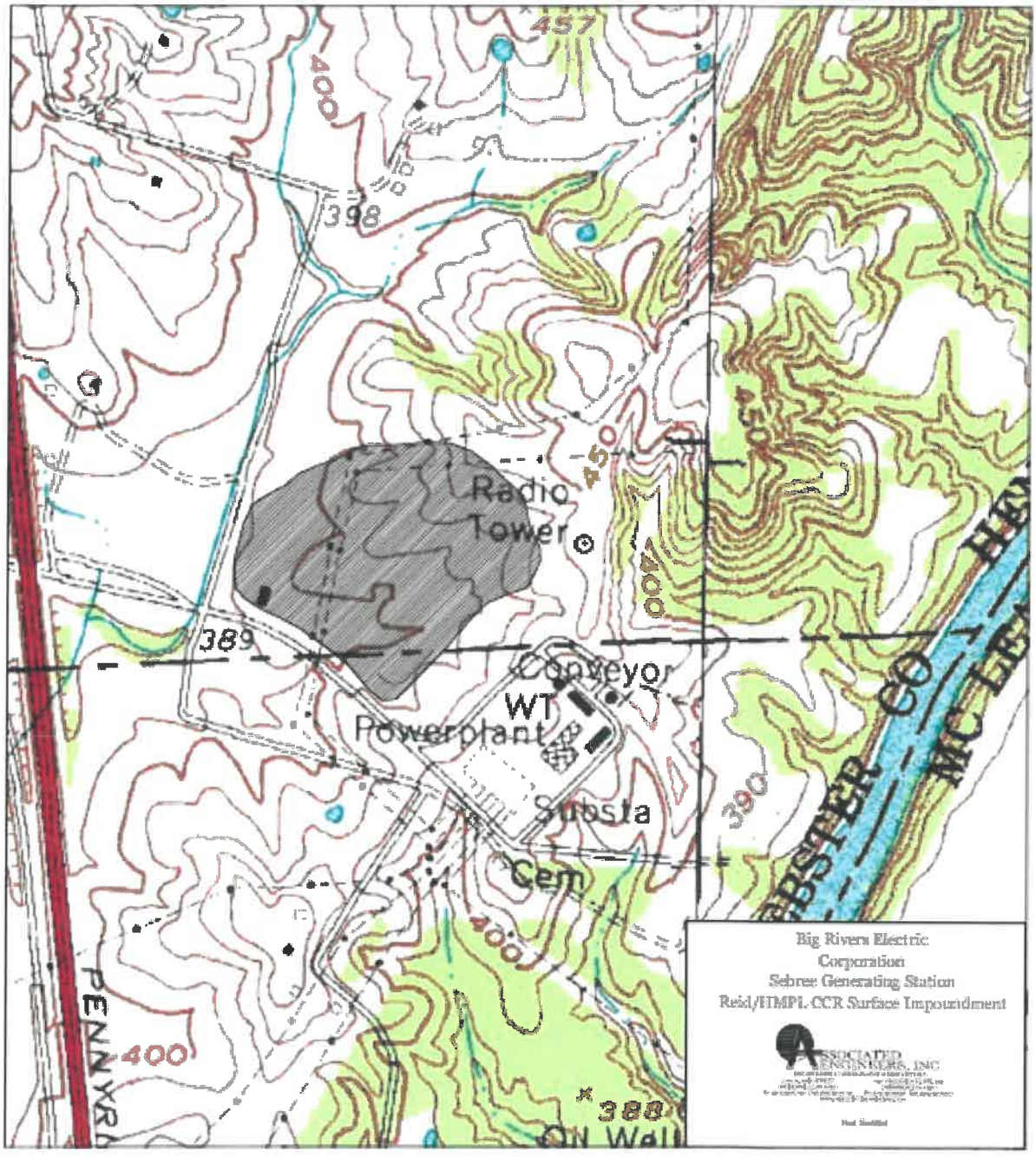
David A. Lamb P.E.

State of Kentucky License No. 17822



Date: 10/11/16

Attachment A. Aerial Photo of the Reid/HMPL CCR Surface Impoundment



Attachment B. Topographic Map showing the Reid/HMPL CCR Surface Impoundment