



**OHIO VALLEY ELECTRIC CORPORATION**

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P. O. Box 468  
Piketon, Ohio 45661  
740-289-7200

WRITER'S DIRECT DIAL NO:  
740-289-7259

February 26, 2025

**Submitted Electronically**

Ms. Anne Vogel, Director  
Ohio Environmental Protection Agency  
50 West Town Street, Suite 700  
P.O. Box 1049  
Columbus, OH 43216-1049

Dear Ms. Vogel:

**Re: Ohio Valley Electric Corporation  
Updated Closure and Post-Closure Plans  
Kyger Creek Station Boiler Slag Pond**

As required by 40 CFR 257.102(b) and requirements of 257.104(d), the Ohio Valley Electric Corporation (OVEC) is providing notification to the State Director of the Ohio Environmental Protection Agency that an updated closure and post-closure plan for the Kyger Creek Station Boiler Slag Pond has been placed on the facility's operating record and on the company's publicly accessible internet site, which can be viewed at <http://www.ovec.com/CCRCompliance.php>.

If you have any questions, or require any additional information, please call me at (740) 289-7259.

Sincerely,

A handwritten signature in black ink that reads "Jeremy Galloway". The signature is written in a cursive, flowing style.

Jeremy Galloway  
Environmental Specialist

JDG:zsh



June 10, 2024  
Revision 1

Ohio Valley Electric Corporation  
3932 U.S. Route 23  
P.O. Box 468  
Piketon, Ohio 45661

**RE: Closure and Post-Closure Plan  
Boiler Slag Pond (CCR Unit)  
EPA Final Coal Combustion Residuals (CCR) Rule  
Kyger Creek Station  
Cheshire, Gallia County, Ohio**

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## **1.0 PURPOSE**

As described in 40 CFR §257.102 and §257.104, an owner or operator of a CCR unit is required to demonstrate that certain measures will be adopted to close and maintain the facility. This letter documents Stantec's certification of the Closure and Post-Closure Plan for Ohio Valley Electric Corporation (IKEC) Kyger Creek Station's Boiler Slag Pond complies with requirements in the EPA Final CCR Rule 40 CFR §257.102(b) and §257.104(d).

## **2.0 SUMMARY OF FINDINGS**

The attached plan documents the closure and post-closure measures that meet the requirements specified in 40 CFR §257.102(b) and §257.104(d).

## **3.0 QUALIFIED PROFESSIONAL ENGINEER CERTIFICATION**

I, Jacqueline S. Harmon, being a Professional Engineer in good standing in the State of Ohio, do hereby certify, to the best of my knowledge, information, and belief:

1. that the information contained in this certification is prepared in accordance with the accepted practice of engineering;
2. that the information contained herein is accurate as of the date of the attached plan and the date of my signature below;
3. that the Closure and Post-Closure Plan for the OVEC Kyger Creek Station's CCR Unit meets the requirements described in 40 CFR §257.102(b) and §257.104(d).

June 10, 2024

Page 2 of 2

**RE: Closure and Post-Closure Plan  
Boiler Slag Pond (CCR Unit)  
EPA Final Coal Combustion Residuals (CCR) Rule  
Kyger Creek Station  
Cheshire, Gallia County, Ohio**

SIGNATURE

*Jacqueline S. Harmon*

DATE

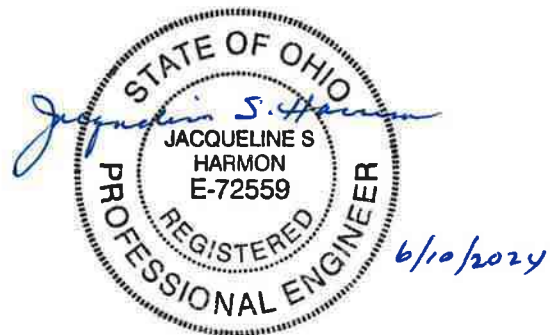
*6/10/2024*

ADDRESS:

Stantec Consulting Services Inc.  
10200 Alliance Road, Suite 300  
Cincinnati, OH 45242

TELEPHONE: (513) 842-8200

ATTACHMENT: Closure and Post-Closure Plan





## **CLOSURE AND POST-CLOSURE PLAN**

Boiler Slag Pond

Kyger Creek Station  
Cheshire, Gallia County, Ohio

June 10, 2024

Revision 1

Prepared for:

Ohio Valley Electric Corporation  
Piketon, Ohio



Prepared by:

Stantec Consulting Services Inc.  
Cincinnati, Ohio

## Closure and Post-Closure Plan

Revision Date	Description of Revision
October 11, 2016	Revision 0 – Initial Submittal
June 10, 2024	Revision 1 – Revised Closure Activities
Revisions will be logged according to qualified professional engineer certification.	



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# 1 Introduction

This EPA Final Coal Combustion Residuals (CCR) Rule closure and post-closure plan contains the current plan and is subject to change. This document describes the CCR closure and post-closure activities at the Ohio Valley Electric Corporation's (OVEC's) Kyger Creek Station to ensure that the Boiler Slag Pond (BSP) will be closed and maintained in accordance with the CCR closure and post-closure requirements of 40 CFR §257.102 and §257.104, respectively. This unit exists within an area where CCR has been historically managed and stored and is monitored by a certified groundwater monitoring well system. It will be closed in accordance with this closure and post-closure plan.

## 2 Written Closure Plan – 40 CFR 257.102(b)(1)

**40 CFR 257.102(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 the 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 and obtaining necessary approvals and permits from other agencies, the dewatering and stabilization phase 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.*



## Closure and Post-Closure Plan

### Written Closure Plan – 40 CFR 257.102(b)(1)

## 2.1 Closure Activities - §257.102(b)(1)(i)

The BSP has acted as a CCR storage facility since the Kyger Creek Station began operating in 1955. It has served as a settling facility, managing process flows from the station and approximately 30 acres of direct stormwater into the basin. The BSP will be closed by removal in accordance with the requirements found in the EPA CCR Rule.

To prepare for closure of the BSP, significant permitting and construction steps have been taken:

- Permitting has been completed allowing diversion of process flows and stormwater previously routed through the BSP through other existing outfalls.
- Design and construction of a boiler slag handling system (BSHS) to divert process flows.
- Design and construction of a low-volume waste treatment system (LVWTS) consisting of two lined ponds to manage process flows and stormwater from the station and stormwater within the BSP during closure activities.
- Wastewater sources previously associated with the BSP have been redirected to the new LVWTS under the current NPDES permit (Ohio EPA permit number 01B00005\*TD). The LVWTS is approved to discharge through Outfall 001.
- Notification of Intent to Close the BSP was provided to the Ohio Environmental Protection Agency (Ohio EPA) on October 13, 2023 under the requirements of 40 CFR §257.102(g). The notification was posted to the Kyger Creek Station Operating Record and added to the publicly accessible internet site.
- Wastewater flows into the BSP ceased no later than October 15, 2023 under the requirements of 40 CFR §257.103(f)(1)(vi)(A).
- Dewatering is ongoing as part of closure activities. Flows from dewatering are pumped into the LVWTS and discharged through Outfall 001.
- Detailed design of the BSP closure is ongoing.

Flows to the BSP have been diverted, and closure has been initiated for the surface impoundment. For closure, the BSP footprint will be dried, stabilized, and free of water residue. CCRs will be removed based on visual verification with an additional six inches of overexcavation to facilitate CCR removal. Any CCR material not used for offsite beneficial use will be sent to the on-site CCR landfill.

## 2.2 Closure Type - Closure by Removal – §257.102(b)(1)(ii)

The closure will be accomplished by removal of the CCRs. The closure design elements will meet the CCR closure by removal performance standards outlined in 40 CFR 257.102(c) and described in Section 3.0.





## Closure and Post-Closure Plan

### Written Closure Plan – 40 CFR 257.102(b)(1)

#### 2.3 Maximum CCR Inventory - §257.102(b)(1)(iv)

Based on available BSP records, the estimated maximum inventory of CCR ever on-site is approximately 512 acre-feet or 826,000 cubic yards.

#### 2.4 Largest Area Requiring Removal and Final Cover - §257.102(b)(1)(v)

Based on available records, the estimated largest area ever requiring a final cover during the active life was approximately 25 acres.

#### 2.5 Schedule of Closure Activities - §257.102(b)(1)(vi)

The following sequential steps necessary for completing the closure activities of 40 CFR 257.102 and their estimated scheduled completion dates are provided in Table 1.

**Table 1. Estimated Schedule of Closure Activities**

	<b>Closure Activity</b>	<b>Start Date (day)</b>
	Outfall permit modifications	Complete
	Construction of BSHS and LVWTS	Complete
	Provide notice of intent to close	October 13, 2023
	Wastewater flows into the SFAP ceased.	October 15, 2023
1.	Dewatering of surface impoundment	Ongoing
2.	Detailed design of surface impoundment closure	Ongoing
3.	Submit Permit-to-Install/Plan Approval Application to Ohio EPA	Fall 2024
4.	Excavation, stabilization, and regrading of surface impoundment	Begins Spring 2025
5.	Completion of separator dike final cover system and BSP closure	October 15, 2028
6.	Completion of post-closure care period	Add 30 years to completion of closure

#### 2.6 Estimated Year of Closure Completion - §257.102(b)(1)(vi)

The estimated year for completion of closure activities is 2028.

#### 2.7 Request for Time Extension

If it is estimated that the time required to complete closure will exceed the regulatory timeframes allowed under 40 CFR § 257.102(f), site-specific information, factors, and considerations will be provided to support any time extensions requested.



## Closure and Post-Closure Plan

### CCR Closure Performance Standards – 40 CFR 257.102(c)

## 2.8 Amendment of Closure Plan - §257.102(b)(3)

The owner or operator may amend the closure plan at any time and must do so at least 60 days prior to any planned change in the operation of the CCR unit that would substantially affect the written closure plan in effect. The closure plan must also be amended no later than 60 days after unanticipated events necessitate a revision of the written closure plan (30 days after if the triggering event takes place after closure activities have commenced). The amended closure plan requires a new certification from a qualified professional engineer that it meets the requirements of 40 CFR 257.102.

## 3.0 CCR Closure Performance Standards – 40 CFR 257.102(c)

*CCR Closure by Removal Standards – 40 CFR 257.102(c). 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 standards established pursuant to section 257.95(h) for constituents listed in appendix IV to this part.*

### 3.1 CCR Closure by Removal Standards - §257.102(c)

The BSP will be closed by removal. CCRs will be removed based on visual verification with an additional six inches of overexcavation to ensure decontamination. Regrading for the purpose of recontouring and creating positive drainage in support of the closed unit will occur after CCR removal.

A certified groundwater monitoring well system exists at the BSP. Groundwater monitoring will continue following closure activities to define when decontamination of the CCR unit is complete.

## 4.0 Written Post-Closure Plan – 40 CFR 257.104(d)(1)

**40 CFR 257.104(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*



## Closure and Post-Closure Plan

### Written Post-Closure Plan – 40 CFR 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, and notification shall be provided to the State Director that the demonstration has been placed in the operating record and on the owner's or operator's publicly accessible internet site.*

#### 4.1 Monitoring and Maintenance Activities- §257.104(d)(1)(i)

**40 CFR 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:*

- (1) *Maintaining the integrity and effectiveness of the final cover system, including making repairs to the final cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the final cover;*
- (2) *If the CCR unit is subject to the design criteria under §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*
- (3) *Maintaining the groundwater monitoring system and monitoring the groundwater in accordance with the requirements of §§257.90 through 257.98.*

In accordance with 40 CFR 257.104(d)(1)(i), post-closure care for the closed CCR unit will address the following systems as required under 40 CFR 257.104(b), along with the frequencies for the identified monitoring and maintenance activities:

- Groundwater monitoring system.

##### 4.1.1 FINAL COVER SYSTEM - §257.104(b)(1)

Since the unit is not being closed in place, it is not required to have a final cover system. Therefore, this section is not applicable.

##### 4.1.2 LEACHATE COLLECTION AND REMOVAL SYSTEM - §257.104(b)(2)

Since the unit is not a new CCR landfill or new lateral expansions of a CCR landfill, it is not subject to the requirements of 40 CFR 257.70. Therefore, this section is not applicable.



## Closure and Post-Closure Plan

### Written Post-Closure Plan – 40 CFR 257.104(d)(1)

#### 4.1.3 GROUNDWATER MONITORING SYSTEM - §257.104(b)(3)

The groundwater monitoring system has been designed and will be maintained in accordance with the EPA Final CCR Rule, 40 CFR §257.90 through 98. Regularly scheduled inspections and preventive maintenance activities will be conducted on the groundwater monitoring system, subject to specific groundwater monitoring compliance conditions and frequencies stipulated by the EPA Final CCR Rule.

The groundwater monitoring system will be maintained and monitored in accordance with the CCR Rule Groundwater Monitoring Plan. The monitoring system, sampling and analysis program will be continued during the post-closure period in accordance with the EPA Final CCR Rule.

#### 4.2 Contact Information - §257.104(d)(1)(ii)

The following contact information is provided for the post-closure period:

Owner: Ohio Valley Electric Corporation (OVEC)/  
Indiana-Kentucky Electric Corporation (IKEC)

Contact: 3932 U.S. Route 23  
P.O. Box 468  
Piketon, Ohio 45661

Phone: 740-289-7200

Email: [postclosurecare@ovec.com](mailto:postclosurecare@ovec.com)

#### 4.3 Planned Uses - §257.104(d)(1)(iii)

The post-closure use of the property will be undisturbed vacant land space. The only activities occurring on the closed CCR unit will be related to the post-closure care activities. All other activities will be prohibited.

Post-closure use of the property will not disturb the function of the monitoring systems unless necessary to comply with the requirements of the EPA Final CCR Rule under 40 CFR Part 257.

Any other disturbance is allowed if the owner or operator of the CCR unit demonstrates that disturbance of monitoring systems 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 owner's or operator's publicly accessible internet site.

#### 4.4 Amendment of Post Closure Plan - §257.104(d)(3)

The owner or operator may amend the post closure plan at any time and must do so at least 60 days prior to any planned change in the operation of the CCR unit that would substantially affect the written closure plan in effect. The post closure plan must also be amended no later than 60 days after an unanticipated



## **Closure and Post-Closure Plan**

### **Written Post-Closure Plan – 40 CFR 257.104(d)(1)**

event requires the need to revise the 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. The amended post closure plan requires a new certification from a qualified professional engineer that it meets the requirements of 40 CFR 257.104.

