

# Coal Combustion Residuals (CCR) Post-Closure Care Plan Solid Waste Permit Number WV0110256

Virginia Electric and Power Company d/b/a Dominion Energy Virginia Mount Storm Power Station Phase B Disposal Area Grant County, West Virginia

GAI Project Number: C141182.02

December 2021



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# **Certification/Statement of Professional Opinion**

This Coal Combustion Residuals CCR Unit Post-Closure Care Plan (Plan) for the Mount Storm Power Station Phase B Disposal Area was prepared by GAI Consultants, Inc. (GAI). The Plan was based on certain information that, other than for information GAI originally prepared, GAI has relied on, but not independently verified. This Certification/Statement of Professional Opinion is therefore limited to the information available to GAI at the time the Plan was written. On the basis of and subject to the foregoing, it is my professional opinion as a Professional Engineer licensed in the State of West Virginia that the Plan has been prepared in accordance with good and accepted engineering practices as exercised by other engineers practicing in the same discipline(s), under similar circumstances, at the same time, and in the same locale. It is my professional opinion that the Plan was prepared consistent with the requirements of section 257.104 of the United States Environmental Protection Agency's "Disposal of Coal Combustion Residuals from Electric Utilities," published in the Federal Register on April 17, 2015 with an effective date of October 19, 2015 (40 CFR 257 Subpart D).

The use of the words "certification" and/or "certify" in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty or legal opinion.

GAI Consultants, Inc.

John R. Klamut, PE Engineering Manager

Date 12/1/2021

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## **Acronyms**

CCB Coal Combustion Byproducts
CCR Coal Combustion Residuals

CCR Closure Plan Phase B Disposal Area CCR Closure Plan

CCR Rule "Standards for the Disposal of Coal Combustion Residuals in Landfills and

Surface Impoundments" 40 CFR 257 (2015)

CFR Code of Federal Regulations
Dominion Dominion Energy Virginia

EPA United States Environmental Protection Agency

Phase B Disposal Area
Station Mount Storm Power Station

WVDEP West Virginia Department of Environmental Protection



#### 1.0 Introduction

This Post-Closure Care Plan has been developed for the Phase B Disposal Area (Phase B), located at the Mount Storm Power Station (Station) in Grant County, West Virginia. The Station and Phase B are owned by the Virginia Electric and Power Company d/b/a Dominion Energy Virginia (Dominion). Phase B was permitted by Dominion in 1986 as a component of the Station's ash disposal system, serving as a landfill containing coal combustion byproducts (CCB), which include coal combustion residuals (CCR). Phase B is regulated under the West Virginia Department of Environmental Protection (WVDEP) Class F Industrial Landfill Facility Permit No. WV0110256.

Dominion has written this post-closure care plan for Phase B to comply with the United States Environmental Protection Agency's (EPA's) "Disposal of Coal Combustion Residuals from Electric Utilities" (CCR Rule), which was published in the Federal Register on April 17, 2015 (with an effective date of October 19, 2015) (40 CFR 257).

This Post-Closure Care Plan meets the requirements of § 257.104(d) of the CCR Rule.

# 2.0 Post-Closure Responsibilities and Activities

#### 2.1 Post-Closure Period

As required by § 257.104(c) of the CCR Rule, the post-closure care period for Phase B is a minimum of 30 years. Post-closure care will commence after WVDEP's approval of the final closure of Phase B.

#### 2.2 Post-Closure Contact

Mr. Dennis Slade with Dominion is designated as the contact person during the post-closure period. The contact information is as follows:

Mr. Dennis Slade 120 Tredegar Street Richmond, VA 23219 (804) 317-7079 dennis.a.slade@dominionenergy.com

# 3.0 Inspections, Monitoring and Maintenance

#### 3.1 Inspections

Inspections will be performed by a Dominion employee, independent registered engineer, or other qualified person. An example of the Post-Closure Care Inspection Checklist is provided in Appendix A and is typical of what will be used to document inspections. The closed CCR landfill will be inspected at a frequency appropriate to maintain environmental and structural integrity of the cover system, but no less than monthly for the first year after closure, and quarterly thereafter.

#### 3.2 Monitoring

Groundwater monitoring throughout the post-closure period shall be performed semi-annually and comply with requirements outlined in 40 CFR § 257.90 – 257.98 and in the Facility's *Groundwater Monitoring Plan*. Monitoring will not be required for landfill gas generation, as there are no putrescible wastes placed within Phase B. Phase B is not subject to leachate monitoring requirements under §257.104(b)(2) because the landfill is not new or a lateral expansion under § 257.70.



#### 3.3 Maintenance

Based upon the Phase B inspection schedule, maintenance will be performed as required by §257.104(b) of the CCR Rule and in accordance with this Post-Closure Care Plan, including:

- The vegetated final cover will be mowed a minimum of once per year or as necessary to deter the growth of woody vegetation, deter rodent habitat, and to allow access for inspection;
- Areas determined to be deficient in vegetative cover will be seeded, fertilized and mulched in order to deter erosion;
- Maintenance of the Groundwater Monitoring System will be performed in accordance with the Groundwater Monitoring Plan and include repairing and/or replacing damaged materials or components as needed;
- Areas exhibiting rill erosion of four inches or deeper will be repaired to maintain design grade/specifications and reseeded. Application of fertilizer, selective herbicides, rodent control measures, etc., will be implemented as necessary and repairs will be monitored until Closure Plan specifications are met;
- Areas exhibiting evidence of sliding or displacement due to settling will be examined to
  determine the cause of the movement. These areas will be backfilled with an appropriate
  material to maintain positive drainage, vegetation growth, and the integrity of the site; and
- Maintenance will consist of removing sediment and/or undesirable vegetation from the channels once accumulated sediments reach a depth of 25 percent of the hydraulic capacity.
   Damage to linings and hydraulic structures will be repaired or replaced if necessary.

Dominion will be responsible for post closure care, monitoring, inspection, and maintenance of Phase B.

## 3.4 Training

Personnel responsible for conducting maintenance, inspection, and monitoring tasks will be competent individuals trained to perform their assigned tasks.

#### 4.0 Post-Closure Uses

The closed Phase B will be covered with vegetation, with the exception of durable surfaces such as concrete-lined drainage channels and road surfaces and maintained by the Station as open space.

Phase B will be completely enclosed with security fencing, with locking gates and signs. Access will be limited to authorized personnel.

#### **5.0 Post-Closure Termination**

The post-closure care period will be a minimum of 30 years following completion of closure. As required by Section 257.104(e) of the CCR Rule, no less than 60 days after the completion of post-closure care, a notification will be prepared verifying that post-closure care has been completed and posted on the company's publicly accessible website.



# APPENDIX A Example Phase B Disposal Area Post-Closure Care Inspection Checklist



Site Name	Weather	
Date of Inspection	Temperature	
Inspected By	Rain in Last 24 Hours	

## Interior & Exterior Slopes

Conditions Present	Comments	Monitor	Investigate	Repair	Escalate
Animal Burrows					
Bare Spots/Erosion					
Horizontal Alignment					
Sinkhole/Depression					
Seeps, Standing Water					
Slide, Slough, Bulges					
Vegetation – High					
Vegetation – Stressed					
Condition of Sign/Fences/Gates					



<sup>\*</sup>This is an example checklist. A site-specific plan will be developed prior to the start of post-closure care.

## Closure area

Conditions Present	Comments	Monitor	Investigate	Repair	Escalate
Animal Burrows					
Bare Spots/Erosion					
Horizontal Alignment					
Sinkhole/Depression					
Seeps, Standing Water					
Slide, Slough, Bulges					
Vegetation – High					
Vegetation – Stressed					
Roadways & Parking Lot					

## **Channels and Sedimentation Ponds**

Conditions Present	Comments	Monitor	Investigate	Repair	Escalate
<b>Channel Lining Condition</b>					
Deposition in Channels					
Channels undercutting					
Standing Water/Ponding					
Erosions Adjacent to Channels					
Slide, Slough, Bulges					
Scour at/downstream of Spillway					

<sup>\*</sup>This is an example checklist. A site-specific plan will be developed prior to the start of post-closure care.



Previous Conditions for Repair or Escalation have been mitigated and the condition has	Yes	No
returned to monitor status? If no, provide date for completion in Comments box below.		

#### **Definitions**

Monitor	Observation indicates a safe condition protective of the environment.
Investigate	Observation indicates a condition that has changed from a monitor condition and requires investigation to determine whether condition is unsafe or not protective of the environment.
Repair	Observation indicates a condition that requires a near term repair to ensure that condition does not worsen and become a serious concern.
Escalate	Observation indicates a condition that must be addressed immediately to ensure the safety of the surface impoundment, facilities, or public or protection of the environment.

General Comments [Document any unusual events or conditions]:				
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<sup>\*</sup>This is an example checklist. A site-specific plan will be developed prior to the start of post-closure care.