

*Prepared for:*



**Virginia Electric and Power Company**

5000 Dominion Boulevard

Glen Allen, Virginia 23060

**Post-Closure Care Plan  
Lower Ash Pond CCR Closure**

**Virginia Electric and Power Company**

**Chesterfield Power Station**

**Chesterfield County, Virginia**

**Project Number: MV1373**

*Prepared by:*

**Geosyntec**   
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## **ACRONYMS**

CCB	Coal Combustion Byproducts
CCR	Coal Combustion Residuals
CCR Closure Plan	Lower Ash Pond 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
DCR	Virginia Department of Conservation and Recreation
Dominion	Virginia Electric and Power Company d/b/a Dominion
EPA	United States Environmental Protection Agency
Station	Dominion Chesterfield Power Station
LAP	Lower Ash Pond
VAC	Virginia Administrative Code
VDEQ	Virginia Department of Environmental Quality
VPDES Permit	Virginia Pollutant Discharge Elimination System Permit No. VA0004146
VSWMR	Virginia Solid Waste Management Regulations



## **1. CERTIFICATION**

This Post-Closure Care Plan has been developed for the Lower Ash Pond (LAP), located at the Chesterfield Power Station (Station), in Chesterfield County, Virginia. The Station and LAP are owned by the Virginia Electric and Power Company d/b/a Dominion Virginia Power (Dominion). The LAP was constructed by Dominion in 1964 as a component of the Station's wastewater treatment system, serving as a settling pond for Station wastewater including coal combustion residuals (CCR). Discharge from the LAP is regulated under the Virginia Department of Environmental Quality (VDEQ) Virginia Pollutant Discharge Elimination System Permit No. VA0004146 (VPDES Permit).

This Post-Closure Care Plan has been prepared in conformance with the United States Environmental Protection Agency's (EPA's) "Disposal of Coal Combustion Residuals From Electric Utilities" (CCR Rule), published in the Federal Register on April 17, 2015 (40 CFR 257) and incorporated into the Virginia Waste Management Regulations on January 27, 2016 (9 VAC 20-81-800 et seq.), and post-closure care requirements of the Virginia Solid Waste Management Regulations (VSWMR). This Post-Closure Care Plan generally follows the format guidelines for Solid Waste Disposal Facilities as described in the VDEQ's Submission Instruction No. 6 (Revised January 2012). The Plan also meets the requirements of Section 257.104(d) of the CCR Rule and the VSWMR.

Geosyntec Consultants



Scott Sheridan, PE

Principal

## **2. POST-CLOSURE RESPONSIBILITIES AND ACTIVITIES**

### **2.1 Post-Closure Period**

As required by Section 257.104(c) of the CCR Rule, the post-closure care period for the LAP will be 30 years. Post-closure care will commence after VDEQ's approval of the final closure of the LAP.

### **2.2 Post-Closure Contact**

The post-closure contact for this facility will be:

Ms. Paula A. Hamel  
Director, Generation Environmental Services  
Dominion Resources Services, Inc.  
5000 Dominion Blvd  
Glen Allen, VA 23060  
(804) 273-3024  
[paula.a.hamel@dom.com](mailto:paula.a.hamel@dom.com)

## **3. INSPECTIONS, MONITORING AND MAINTENANCE**

### **3.1 Inspections**

Inspections will be performed by a Dominion employee or independent registered engineer or other qualified person. A CCR Surface Impoundment Inspection Checklist, example provided in Appendix A, will be used to document inspections. The closed CCR impoundment 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 will be performed semi-annually and comply with requirements outlined in 40 CFR 257.90-98 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 the LAP. Leachate collection monitoring will not be required as there is no leachate collection system in place.

### **3.3 Maintenance**

Based upon the facility inspection schedule, maintenance will be performed as required by Section 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 as per the CCR Closure Construction Specifications. Application of fertilizer, selective herbicides, rodent control measures, etc., will be implemented as necessary and repairs will be monitored until CCR Closure Construction 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. Backfilling will be performed in accordance with the LAP CCR Closure Plan and the Lower Ash Pond CCR Closure Construction Quality Assurance Plan; 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 to ensure design run on and run-off specifications are maintained.

Dominion will be responsible for post closure care, monitoring, inspection, and maintenance of this facility.

### **3.4 Training**

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

## **4. POST-CLOSURE USES**

The closed LAP will be covered with vegetation, with the exception of durable surfaces such as concrete drainage channels and road surfaces and maintained as an open area. Limited access to the road along the southern border of the LAP will be permitted to Chesterfield County to provide access to the Dutch Gap Conservation Area.

The LAP will be completely enclosed with security fencing, with locking gates and signs with the exception of the western side along the thermal channel. Access will be limited to authorized

personnel. Chesterfield County access to the Dutch Gap Conservation Area will be on a limited basis only.

In addition, a deed restriction will be placed on the area pursuant to 40 CFR 257.102(i).

## **5. OPINION OF PROBABLE ESTIMATED COST FOR CCR POST-CLOSURE CARE**

An opinion of probable estimated cost for the LAP CCR post-closure care is \$10,135,857.

## **6. POST-CLOSURE TERMINATION**

The post-closure care period will be a minimum of 30 years following completion of closure. At the end of the post-closure period, Dominion will submit a demonstration for termination to VDEQ for review and approval. 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 complete and posted on Dominion's publicly available website.

**APPENDIX A**

**LOWER ASH POND POST-CLOSURE CARE INSPECTION CHECKLIST**



## **APPENDIX A**

# **Lower Ash Pond Post-Closure Care Example Inspection Checklist**

EXAMPLE



# Dominion CCR POST-CLOSURE CARE INSPECTION CHECKLIST\*

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

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					



# Dominion CCR POST-CLOSURE CARE INSPECTION CHECKLIST\*

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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					

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



# Dominion CCR POST-CLOSURE CARE INSPECTION CHECKLIST\*

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

## Definitions

<b>Monitor</b>	Observation indicates a safe condition protective of the environment.
<b>Investigate</b>	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.
<b>Repair</b>	Observation indicates a condition that requires a near term repair to ensure that condition does not worsen and become a serious concern.
<b>Escalate</b>	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]: