

# Post-Closure Care Plan

### **POST-CLOSURE CARE PLAN**

**Yorktown Power Station Ash Landfill – Permit #457** 



**Submitted To:** Dominion – Yorktown Power Station

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### **Attachment**

1. Inspection Checklist

### 1.0 PLAN CERTIFICATION

I certify that the information contained within this Post-Closure Care Plan was prepared by me or under my direct supervision, and meets the requirements of Section §257.104 of the Federal Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals (CCR) from Electric Utilities; Final Rule (40 CFR 257; the CCR rule) and the Virginia Solid Waste Management Regulations.

Daniel McGrath	Senior Consultant	
Print Name	Title	
Daniel M'Srath	10/7/16	
Signature	Date	



### 2.0 PURPOSE

This Post-Closure Care Plan (Plan) is for the Yorktown Power Station Ash Landfill Facility (landfill) at the Yorktown Power Station (Station), York County, Virginia. This Facility is a captive industrial landfill and at closure will contain approximately 1,740,000 cubic yards of Coal Combustion Residuals (CCRs).

### 2.1 Post-Closure Period

The required post-closure care period for this landfill is 30 years in conformance with the Federal Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities; Final Rule (the CCR Final Rule); 40 CFR 257.

### 2.2 Post-Closure Contact

The post-closure contact for this Facility will be:

Paula A. Hamel
Director, Generation Environmental Services
5000 Dominion Boulevard
Glen Allen, VA 23060
804-273-3024
paula.a.hamel@dom.com

### 3.0 INSPECTION, MONITORING, AND MAINTENANCE PLAN

### 3.1 Security Control Devices

The perimeter of the landfill and access points into the landfill will be inspected at least once per calendar month to verify the proper functioning of gates, fencing, and other perimeter security measures. If repairs are found to be needed, the maintenance request will be routed through the Station's environmental representative.

### 3.2 Final Cover Integrity

The final cover of the landfill will be inspected at least once per calendar month or after severe storms to assess the condition of the cover and identify maintenance needs. Inspection items will include:

- Erosion damage to cover, stormwater channels, or stormwater basins;
- Settlement, subsidence, or displacement of the final cover;
- Evidence of animal intrusion or burrowing;
- Bare or dead vegetative cover;
- Woody vegetation growing on final cover areas; and,
- Evidence of seeps or saturated areas.

The landfill shall be mowed at least once per growing season or more as necessary to facilitate growth of grasses on the cover, enable inspection, and preclude the establishment of woody vegetation. Application of fertilizer and/or reseeding shall take place as needed to maintain a healthy stand of vegetative cover.

### 3.3 Run-on and Run-off Controls

As part of the monthly or post-storm inspection, the stormwater run-off control system shall be inspected. Stormwater conveyances shall be observed for erosion damage, accumulated sediment, unusual settlement, and excessive or insufficient vegetative growth. Culverts shall be checked for blockage due to accumulated debris or sediment. Drop inlets shall be checked for debris accumulation.

Small amounts of sediment or debris shall be removed from areas if possible. Areas requiring repairs or debris removal that are beyond the inspector's capacity shall be identified to the Station's environmental representative for correction.

### 3.4 Repair of Erosion Damaged Areas

Areas of the cover system that have been eroded will be backfilled. The areas will be seeded, then mulched or protected with erosion control matting to deter new erosion. Other areas that have been eroded will be graded to allow positive drainage, seeded, and mulched or protected with erosion control matting to deter new erosion.

### 3.5 Leachate Collection System

The leachate collection system shall be inspected as part of the monthly site inspection. Pump run-time meters shall be observed for change since the last inspection to identify nonworking or overworking pumps. Areas around the pump station and underground tank shall be inspected for leaks. Identified maintenance needs shall be directed to the Station's environmental representative.

The perimeter of the landfill will be inspected for the presence of leachate seeps. If a leachate seep is identified, the Station shall be notified to repair the seep and complete the following actions:

- Take immediate action to safely contain and properly manage the leachate at the source of the seep and,
- As feasible, to minimize, control, or eliminate the seep.

Following the immediate response to the seep, an evaluation shall be made to consider if further remedial action is required.

### 3.6 Groundwater Monitoring System

Groundwater monitoring throughout the post-closure period shall be performed semi-annually and comply with requirements outlined in 40 CFR 257.90-98 and in the Facility's *Groundwater Monitoring Plan*. Identified maintenance needs shall be coordinated through the Station's environmental representative as needed.

### 3.7 Landfill Gas Monitoring System

CCRs by their nature are non-putrescible, and do not decompose or produce landfill gas. Gas migration and odor is not anticipated to be a concern post-closure. Therefore, no post-closure landfill gas monitoring is proposed for this Facility.

### 3.8 Inspection

Inspections will be performed by a Dominion employee or independent licensed engineer or other qualified person. The Closure Inspection Checklist, or equivalent, provided in Attachment 1 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.

### 4.0 POST-CLOSURE USES

Post-closure use shall be in accordance with the provisions of the Virginia Solid Waste Management Regulations and the Final CCR Rule. Access to the site will be restricted. Post-closure activities will be designed and conducted so as to not disturb the integrity of the final cover, the components of any containment system, or the function of the Facility's monitoring systems.

### 5.0 POST-CLOSURE COST ESTIMATE

The estimated cost for post-closure care of the 48-acre landfill is \$6,280,000.

### 6.0 POST-CLOSURE CARE TERMINATION

At the end of the 30-year post-closure care period, Dominion will submit a request to terminate post-closure care in accordance with the Virginia Solid Waste Management Regulations and the Final CCR Rule.

### 6.1 Notification

Within 60 days of completion of post-closure care, a certification statement, signed by a licensed professional engineer, will be placed posted on a publicly accessible internet site, placed in the facility's operating record, and submitted to the DEQ in accordance with the Final CCR Rule.

# Attachment 1 Inspection Checklist

## Attachment 1 Post-Closure Inspection Checklist Yorktown Ash Landfill Facility – Permit #457

Item	Inspection Items	Frequency of Inspection		
Facility Area	Gate and Fence	Monthly		
	Erosion of closure cover	Monthly or after severe storms		
	Settlement & Subsidence	Monthly		
	Deterioration of vegetative cover	Monthly or after severe storms		
	Trash, litter	Monthly		
	Stormwater control system	Monthly or after severe storms		
Leachate Collection System	Leachate levels, pump operation hours / flows, manholes	Monthly		
Groundwater Monitoring System	See Groundwater Monitoring Plan	See Groundwater Monitoring Plan		