

# **POST-CLOSURE PLAN**

# **POST-CLOSURE PLAN**

**Bremo Power Station CCR Surface Impoundment: North Ash Pond** 



Submitted To: Bremo Power Station

1038 Bremo Bluff Road Bremo Bluff, VA 23022

Submitted By: Golder Associates Inc.

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# 1.0 CERTIFICATION

This Post-Closure Plan for the Bremo Power Station's North Ash Pond was prepared by Golder Associates Inc. (Golder). The document and Certification/Statement of Professional Opinion are based on and limited to information that Golder has relied on from Dominion and others, but not independently verified, as well as work products produced by Golder.

On the basis of and subject to the foregoing, it is my professional opinion as a Professional Engineer licensed in the Commonwealth of Virginia that this document 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 document was prepared consistent with the requirements in §257.104 of the United States Environmental Protection Agency's "Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments," published in the Federal Register on April 17, 2015, with an effective date of October 19, 2015 (40 CFR §257.104).

The use of the word "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.

James R. DiFrancesco, P.E.	Principal and Practice Leader
Print Name	Title





### 2.0 INTRODUCTION

This Post-Closure Plan was prepared for the Bremo Power Station's (Station) existing Coal Combustion Residuals (CCR) surface impoundment known as the North Ash Pond (NAP). This Post-Closure Plan was prepared in accordance with 40 CFR Part §257, Subpart D and is consistent with the requirements of 40 CFR §257.104 for post-closure care of CCR surface impoundments.

The Station, owned and operated by Virginia Electric and Power Company d/b/a Dominion Virginia Power (Dominion), is located in Fluvanna County, Virginia at 1038 Bremo Road, east of Route 15 (James Madison Highway) and north of the James River. The Station includes an existing CCR surface impoundment, the NAP, as defined by the Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule (40 CFR Part §257; the CCR rule).

The NAP is being closed as a CCR surface impoundment under the CCR rule provisions at 40 CFR §257. The NAP will be closed in place by constructing an engineered final cover system over the CCR surface pursuant to 40 CFR §257.102(d), as described in the Closure Plan.

### 3.0 POST-CLOSURE PLAN

# 3.1 Facility Contact Information

The post-closure contact for this facility will be:

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

# 3.2 Monitoring and Maintenance Activities

Inspections of the final cover system will occur periodically in order to verify the proper function of the final cover system, stormwater structures, etc. Inspections will be completed by competent personnel, and will be recorded and kept at the Station. The following cover system and impoundment components will be monitored and maintained:

- Security measures such as fences, gates, locks, and other measures that control site and facility access
- Stormwater control system for signs of erosion, sedimentation, and condition
- Toe drain collection system
- Cover system for signs of erosion and for evidence of settlement or subsidence
- Condition and/or presence of vegetation (for distressed or dying vegetation, or woody vegetation with the potential to penetrate the low permeability barrier)



### Condition of the groundwater monitoring wells

### 3.2.1 Final Cover

Maintenance activities will be required for the final cover system to remain functional. The vegetative cover will be mowed a minimum of once per year or as necessary to deter the growth of woody vegetation, deter habitation by vectors, and to allow inspection and access to the cap features and related structures (e.g., groundwater monitoring wells and stormwater channels). Any deep-rooted or woody vegetation that may have established itself on the cover soil will be removed. The vegetative cover will be amended and fertilized as needed to maintain healthy vegetation. Areas without a healthy stand of vegetation will be reseeded and re-mulched as needed to re-establish vegetation as soon as practicably possible. Animal burrows and areas observed to have damage caused by erosion will be filled in with appropriate soil and seeded. Depressions in the cover that pond water or otherwise impair the function of the final cover will be filled and/or regraded. Areas subject to regrading will be revegetated.

### 3.2.2 Toe Drain Collection System

Inspection of the accessible portions of the toe drain collection system, including embankment slopes, toe drains, and pipe outfalls, will be completed on a monthly basis.

### 3.2.3 Groundwater Monitoring System

Groundwater monitoring will be conducted semi-annually in accordance with 40 CFR §257.90 through §257.98. The groundwater monitoring wells and associated equipment will be operated and maintained so that they perform to the design specifications throughout the life of the monitoring program.

# 3.3 Property Use

Following closure operations, the NAP will be closed and vegetation will be planted and maintained. Dominion will maintain control of, and limit access to, the CCR impoundment. Post-closure use of the property is anticipated to be maintained as a managed turf area and is not expected to disturb the integrity of the final cover system, or other components of the closed CCR impoundment, unless necessary to meet the requirements for post-closure care or make repairs. In the event the post-closure use is changed, Dominion will amend this Post-Closure Plan to reflect such change.

# 4.0 POST-CLOSURE CARE PERIOD

In accordance with 40 CFR §257.104(c), Dominion will conduct post-closure care for 30 years. If, at the end of the 30-year post-closure care period, groundwater at the CCR impoundment is being monitored under the assessment monitoring program in accordance with 40 CFR §257.95, Dominion must continue to conduct post-closure care until the NAP returns to detection monitoring in accordance with 40 CFR §257.94.



# 5.0 NOTIFICATION OF COMPLETION

No later than 60 days following the completion of the post-closure care period, Dominion will prepare a notification verifying that post-closure care has been completed. The notification will include a certification by a qualified professional engineer verifying that post-closure care has been completed in accordance with this Post-Closure Plan and the requirements of 40 CFR §257.104. This notification will also be posted to Dominion's publicly available internet site.

# 6.0 POST-CLOSURE COST ESTIMATE

The estimated cost for 30-year post-closure care of the NAP is \$4,525,953.



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