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Post-Closure Care Plan Upper (East) Pond CCR Closure

Virginia Electric and Power Company
Chesterfield Power Station
Chesterfield County, Virginia

GAI Project Number: C150035.00

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Dominion™

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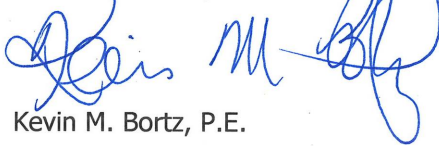
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Certification/Statement of Professional Opinion

The Coal Combustion Residuals CCR Unit Post-Closure Plan (Plan) for the Chesterfield Power Station Upper (East) Pond 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 Commonwealth of 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 § 257.104(d) 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 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.



Kevin M. Bortz, P.E.

Assistant Engineering Manager

Date 10/13/2016



Acronyms

CCB	Coal Combustion Byproducts
CCR	Coal Combustion Residuals
CCR Closure Plan	Upper (East) Pond CCR Closure Plan
CCR Rule	"Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments" 40 CFR 257 Subpart D (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
UEP	Upper (East) 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

1.0 Introduction

This Post-Closure Care Plan has been developed for the Upper (East) Pond (UEP), located at the Chesterfield Power Station (Station), in Chesterfield County, Virginia. The Station and UEP are owned by the Virginia Electric and Power Company d/b/a Dominion Virginia Power (Dominion). The UEP was constructed by Dominion in 1984 as a component of the Station's wastewater treatment system, serving as a settling pond for wastewater containing coal combustion byproducts (CCB), which include coal combustion residuals (CCR). Discharge from the UEP is regulated under the Virginia Department of Environmental Quality (VDEQ) Virginia Pollutant Discharge Elimination System Permit No. VA0004146 (VPDES Permit).

In January 2016, the Station submitted an application to VDEQ for Solid Waste Permit Number 619. Closure of the UEP will therefore be completed under the Virginia Solid Waste Management Program, and will comply with the United States Environmental Protection Agency's (EPA's) "Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments" (CCR Rule), which was published in the Federal Register on April 17, 2015 (with an effective date of October 19, 2015) (40 CFR 257 Subpart D) and incorporated into the Virginia Waste Management Regulations on January 27, 2016 (*see* 9 VAC 20-81-800 *et seq.*) and Virginia's Solid Waste Management Regulations (VSWMR).

This Post-Closure Care Plan meets the requirements of Section 257.104(d) of the CCR Rule and the Virginia Waste Management Regulations. The information provided in this report follows the format guidelines for Solid Waste Disposal Facilities as described in Submission Instruction No. 6, provided by the VDEQ in 2012.

2.0 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 UEP will be 30 years. Post-closure care will commence after VDEQ's approval of the final closure of the UEP.

2.2 Post-Closure Contact

Ms. Paula A. Hamel with Dominion is designated as the contact person during the post-closure period. The contact information is as follows:

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 -

3.0 Inspections, Monitoring and Maintenance

3.1 Inspections

Inspections will be performed by a Dominion employee or independent registered engineer or other qualified person. 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 Station's *Groundwater Monitoring Plan*. Monitoring will not be required for landfill gas generation, as there are no putrescible wastes placed within the UEP. 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. Application of fertilizer, selective herbicides, rodent control measures, etc., will be implemented as necessary;
- 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 this facility.

3.4 Training

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

4.0 Post-Closure Uses

The closed UEP will be covered with vegetation, with the exception of durable surfaces such as concrete drainage channels and road surfaces. The eastern portion of the site may be utilized as an overflow public parking area for Henricus Historical Park; regular inspections of the parking area will be performed to monitor the safeguards in place that protect the final cover system from damage.

The UEP will be completely enclosed with security fencing, with locking gates and signs. Access will be limited to authorized personnel. The overflow public parking area on the eastern side of the UEP will be enclosed with security fence and barriers.

5.0 Post-Closure Cost Estimate

As required by VDEQ's "Closure and Post-Closure Care Plans for Solid Waste Disposal and Management Facilities" (Section III.E), a Post-Closure Care Cost Estimate is being developed for the UEP using Worksheet CEW-02. The Post-Closure Care Cost Estimate will be provided at a later date when costs are finalized.

6.0 Post-Closure Termination

The post-closure care period will occur for 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; this notification will be posted on Dominion's publicly accessible internet site.