NOTICE OF INTENT

NOTICE OF INTENT TO CLOSE INACTIVE CCR SURFACE IMPOUNDMENT

Chesapeake Energy Center

Dominion

Submitted To: Chesapeake Energy Center
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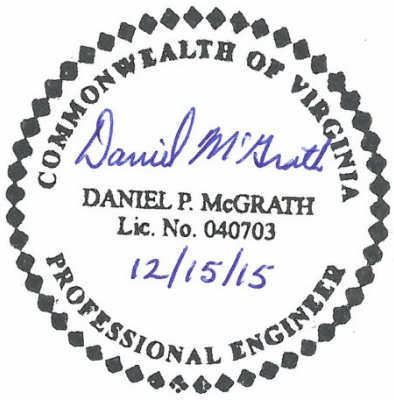

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Golder Associates

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1.0 INTRODUCTION

The Chesapeake Energy Center (CEC) is located in Chesapeake, Virginia at 2701 Vepco Street. The Station contains one Inactive Coal Combustion Residuals (CCR) Surface Impoundment, known as the Bottom Ash Pond, as defined by the Federal Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities; Final Rule (40 CFR 257; the CCR rule). Dominion intends to initiate closure of this inactive surface impoundment under the requirements of §257.100(b) of the CCR rule. This Notice of Intent to Close Inactive Surface Impoundments (NOI) has been prepared pursuant to §257.100(c)(1) of the CCR rule.

The Bottom Ash Pond will achieve closure in accordance with §257.100(b)(1) through (4) of the CCR rule by leaving CCR in place, removing free liquids, and installing an engineered final cover system, which will be completed by April 17, 2018.

2.0 SITE DESCRIPTION

The Chesapeake Energy Center, owned by Virginia Electric and Power Company d/b/a Dominion Virginia Power (Dominion), is located in the City of Chesapeake at 2701 Vepco Street, north of the confluence of Deep Creek and the Southern Branch of the Elizabeth River. The Station is closed and last burned coal for the generation of electricity in late 2014. CCR from past operations is stored in the Bottom Ash Pond. An inactive ash landfill is also located on site and will be closed under Virginia's Solid Waste Management Regulations.

3.0 SURFACE IMPOUNDMENT CLOSURE

The Bottom Ash Pond will be closed as an inactive CCR surface impoundment pursuant to the CCR rule [§257.100(b)].

The Bottom Ash Pond will be closed in place with a final cover system [40 C.F.R. §257.100(b)(1) through (4)]. Closure will involve preparing a suitable subgrade to support the final cover system. After completing the subgrade, the final cover system and drainage structures will be constructed and disturbed areas will be seeded and mulched.

Specific aspects of the inactive surface impoundment closure are described in the following sections.

3.1 Stabilization

Free liquids will be removed from the Bottom Ash Pond prior to installing the engineered final cover system [40 C.F.R. §257.100(b)(2)(i)]. The CCR material will be re-graded and compacted prior to placing the final cover system to promote drainage and prevent the future impounding of water after closure [40 C.F.R. §257.100(b)(2)(ii)].

3.2 Final Cover

The final cover system for the Bottom Ash Pond is designed in accordance with the CCR rule [40 C.F.R. §257.100(b)(3)(ii)], including the use of a geomembrane liner to minimize the infiltration of liquids into the CCR. The final cover system is designed to prevent the future impoundment of water, and include measures to prevent sloughing, minimize erosion, and prevent excessive hydraulic head [40 C.F.R. §257.100(b)(1)(i) through (iii)].

The final cover system is designed to minimize the need for maintenance after closure [40 C.F.R. §257.100(b)(1)(iv)]. The engineered final cover system design consists of the following minimum components, listed from top to bottom, and described below.

- 6-inch vegetative support layer
- 18-inch protective cover layer
- 250-mil geocomposite drainage layer
- 40-mil geomembrane liner
- Liner subgrade

3.2.1 Liner Subgrade

Stabilization of CCR in the Bottom Ash Pond will commence with decanting and dewatering of the upper layers of CCR [40 C.F.R. §257.100(b)(2)(i)]. After dewatering, the subgrade will be graded and compacted to create a suitable liner base [40 C.F.R. §257.100(b)(2)(ii)].

The liner subgrade consists of the top 6 inches of material underlying the geomembrane liner, and will contain no particles with particle size > ½ inch. The liner subgrade will consist of the dewatered and compacted CCR. No deleterious material will be allowed in the liner subgrade.

Liner subgrade fill will be placed in lifts no greater than 9 inches (compacted depth), and will be wetted or dried as necessary to reach acceptable moisture content. The subgrade fill will be compacted to at least 95% of its maximum dry density, and smooth-rolled for additional compaction.

3.2.2 Geomembrane Liner

The primary barrier component of the final cover system (infiltration layer) is the geomembrane liner [§257.100(b)(3)(ii); §257.100(b)(3)(i)(A)]. The geomembrane liner will consist of 40-mil, dual-textured, High Density Polyethylene (HDPE) geomembrane, or equivalent, with a maximum hydraulic conductivity of $1x10^{-12}$ centimeter per second (cm/s).

The geomembrane liner will be placed directly on the prepared CCR subgrade, and will generally be placed parallel to the slope. The liner will be secured over the CCR subgrade with a perimeter anchor trench, and will be seamed using heat-fusion and extrusion welding techniques.

3.2.3 Drainage Layer

A minimum 8-oz/yd^3, 250-mil geocomposite drainage layer, or equivalent, will be placed on top of the 40-mil geomembrane liner to prevent excessive hydraulic head on the liner [§257.100(b)(3)(ii); §257.100(b)(3)(i)(B)]. The geonet portions of each geocomposite panel will be attached to one another by approved fasteners spaced at a maximum of 5-foot intervals along downslope overlaps and 2-foot intervals on cross-slope overlaps. The upper geotextile layers of adjacent geocomposite panels will be either heat-fused or sewn to adjacent panels.

3.2.4 Cap Drainage

The geocomposite is sufficient to maintain final cover soil drainage on the relatively short length slopes of the Bottom Ash Pond.

3.2.5 Protective Cover Layer

An 18-inch protective cover soil layer (erosion layer) will be placed over the geocomposite drainage layer [40 C.F.R, §257.100(b)(3)(ii); §257.100(b)(3)(i)(B)]. The protective cover soil will consist of soil with an average maximum particle size of 2 inches. No deleterious material will be allowed in the protective cover layer.

The protective cover layer will be placed in lifts no greater than 9 inches (compacted depth), and will be wetted or dried as necessary to reach acceptable moisture content. The protective cover layer will be compacted to at least 90% of its maximum dry density.

3.2.6 Vegetative Support Layer

A 6-inch vegetative support layer will be placed over the protective cover layer to promote grass growth and reduce erosion [40 C.F.R. §257.100(b)(3)(ii); §257.100(b)(3)(ii)(B); §257.100(b)(3)(i)(C)]. The vegetative soil layer will consist of soil with an average maximum particle size of 1 inch that is capable of supporting vegetation. Organic material may contribute up to 1.5% of the vegetative support layer (by weight). The vegetative support layer will be seeded, fertilized, and mulched to prevent erosion. Temporary and permanent soil stabilization matting will be used on side slopes to reduce the effects of erosion during final cover stabilization.

3.2.7 Final Grades

The final grades for the Bottom Ash Pond have been developed to control stormwater and erosion, as well as to reduce hydraulic head on the geomembrane liner [§257.100(b)(1)(i)].

4.0 CLOSURE SCHEDULE

Construction activities related to the closure of the surface impoundments will be completed by April 17, 2018 in accordance with 40 CFR §257.100(b).

No CCR have been received in the Bottom Ash Pond after October 19, 2015. Closure of the Pond is expected to begin in 2016 and conclude by April 17, 2018.

Table 1: Tentative Closure Construction Time Table

Surface Impoundment	End CCR Active Period	Begin Decanting	Begin Closure Activities	End Closure Activities
Bottom Ash Pond	October 2015	June 2016	July 2016	April 17, 2018

5.0 CERTIFICATIONS

The following Professional Engineer's certifications are provided in accordance with §257.100(b)(4) and (6).

I, the undersigned Virginia Professional Engineer, hereby certify that I am familiar with the technical requirements of 40 CFR §257.100. I also certify that it is my professional opinion that, to the best of my knowledge, information, and belief, the final cover system for the Bottom Ash Pond at the Chesapeake Energy Center has been designed in accordance with current good and accepted engineering practice(s) and standard(s) appropriate to the nature of the project and the technical requirements of 40 CFR §257.100(b)(3)(i) or (ii).

In addition, I do hereby certify that it is my professional opinion that, to the best of my present knowledge, information, and belief, the closure activities associated with the Bottom Ash Pond at the Chesapeake Energy Center as described in this NOI are technically feasible to be completed by no later than April 17, 2018.

For purposes of this document, "certify" and "certification" shall be interpreted and construed to be a "statement of professional opinion." The certification is understood and intended to be an expression of my professional opinion as a Virginia Licensed Professional Engineer, based upon knowledge, information, and belief. The statement(s) of professional opinion are not and shall not be interpreted or construed to be a guarantee or a warranty of the closure activities.

Daniel McGrath, P. E.	040702
Printed Name of Professional Engineer	Commonwealth of Virginia License Number
Daniel McGrath	12/15/15
Signature of Professional Engineer	Date

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