

Date of Inspection: 10/28/2022

Facility: Chesterfield Lower Pond

# **Annual Inspection Report for Existing CCR Surface Impoundment**

Reference: 40 CFR Section 257.83, Inspection Requirements for CCR Surface Impoundments

### **Owner Information**

Name of Dam: Chesterfield Power Station Lower Ash Pond Dam

Owner's Name: Virginia Electric and Power Company d.b.a. Dominion Energy Virginia

State ID #: DCR Inventory # 041031, VPDES # VA0004146

Owner Contact: Kevin Bishoff - Construction Project Manager

Dam Location: Chester, VA

## **Engineer Information**

Donald Mayer 029879 Name and Virginia License Number:

Firm Name: WSP USA Inc.

Firm Address: 2108 W. Laburnum Ave, Suite 200, Richmond, VA 23227

Telephone No.: 804-358-7900

### **Certification Statement**

I certify that the inspection of the above listed CCR surface impoundment was conducted in conformance with the requirements listed in 40 CFR 257.83, and with generally accepted good engineering practices.



Engineer seal, signature and date

As used herein, the word certify shall mean an expression of the Engineer's professional opinion to the best of his or her information, knowledge and belief, and does not constitute a warranty or guarantee by the Engineer



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Was a review performed of available information regarding the status of the CCR unit, including files in the operating record?

Yes No

Was a visual inspection performed (i) to identify signs of stress or malfunction of the CCR unit and appurtenant structures, and (ii) of all hydraulic structures underlying the base or passing through the dike of the CCR unit for structural integrity and safe and reliable operation?

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Identify any changes in the geometry of the impounding structure since the previous annual inspection.

In accordance with the Department of Conservation and Recreation (DCR) permit, effective June 15, 2022 through June 15, 2024, for Inventory Number 041031, a corridor has been constructed along the eastern embankment to support TRD wall installation.

Verify the type, location, and condition of existing instrumentation (e.g. flow meter or staff gauge). Document the maximum recorded readings of each instrument since the previous annual inspection.

Instrumentation		Location	Max. Reading	
	INC-1	SW Embankment near sheet pile wall	0.24	inches
	INC-2	SW Embankment near sheet pile wall	0.31	inches
Inclinometers	INC-3	Western embankment, mid-point	0.10	inches
	INC-5N	Southern Embankment	0.29	inches
	TW-IN-04	Southern Embankment	-	inches
	P-22	Western Embankment	8.10	feet
	P-23	SW Embankment	8.30	feet
	P-28	Southern Embankment	8.70	feet
Piezometers	EXC-OW-01	Southern Embankment	-	feet
	TW-OW-03	Southern Embankment	-	feet
	TW-PZ-03	Southern Embankment	-	feet
	TW-OW-04	Southern Embankment	-	feet
	TW-PZ-04	Southern Embankment	-	feet

#### Notes:

- 1. New LAP Instrumentation was installed in 2021 to support upcoming pond closure activities.
- 2. All instrumentation was observed to be in good condition.
- 3. The maximum reading of the inclinometers was recorded as the maximum displacement of the tilt sensor in any direction (+ or - ) relative to the baseline measurement when the instrument was installed.
- 4. The maximum reading of the piezometers was recorded as the hydraulic head above mean sea level (MSL). The TW-PZ piezometers are recorded as change in pressure from a baseline.
- 5. TW-OW-03 and TW-OW-04 were removed December 10, 2021. TW-IN-04 was removed February 28, 2022. EXC-OW-01, TW-PZ-03, and TW-PZ-04 were removed on March 2, 2022.

<sup>\*</sup>READINGS PROVIDED BY OTHERS



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List the minimum, maximum, and present depth and elevation of impounded water and CCR since the previous annual inspection.

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Minimum Depth (ft)	0.0	Maximum Depth (ft)	2.0	Present Depth (ft)	0.5
Minimum Elev. (Ft)	8.0	Maximum Elev. (ft)	10.0	Present Elev. (ft)	8.5

### CCR level in Pond:

Minimum Depth (ft)	18.0	Maximum Depth (ft)	34.0	Present Depth (ft)	Varies*
Minimum Elev. (Ft)	8.0	Maximum Elev. (ft)	24.0	Present Elev. (ft)	Varies*

\*CCR SURFACE TOPOGRAPHY VARIES BETWEEN MIN AND MAX ELEVATION ACROSS THE HORIZONTAL PROFILE OF THE SURFACE IMPOUNDMENT

Maximum Storage Capacity:	1,779	Ac - Ft

Present volume of the impounded water: Ac - Ft. Present volume of the impounded CCR: 1.404 Ac - Ft. 1.405 Ac - Ft. Present volume, total

Identify any appearances of an actual or potential structural weakness of the CCR unit or existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit and appurtenant structures.

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Identify any changes that may have affected the stability or operation of the impounding structure since the previous annual inspection.

In accordance with the Department of Conservation and Recreation (DCR) permit, effective June 15, 2022 through June 15, 2024, for Inventory Number 041031, a corridor has been constructed along the eastern embankment to support TRD wall installation. At the time of the inspection, a micropile wall was being installed in the southwest corner of the Lower Ash Pond to ensure stability during the planned impoundment excavation.

#### Additional comments

None observed.

The Chesterfield Lower Ash Pond meets the definition of an existing surface impoundment under 40CFR 257.53 of the "Standards for the Disposal of Coal Combustion Residuals (CCR) in Landfills and Surface Impoundments". The Lower Ash Pond no longer receives CCRs and, at the time of my visit, was under a temporary geomembrane cover to minimize stormwater contact and infiltration.