Date of Inspection: 11/6/2023
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

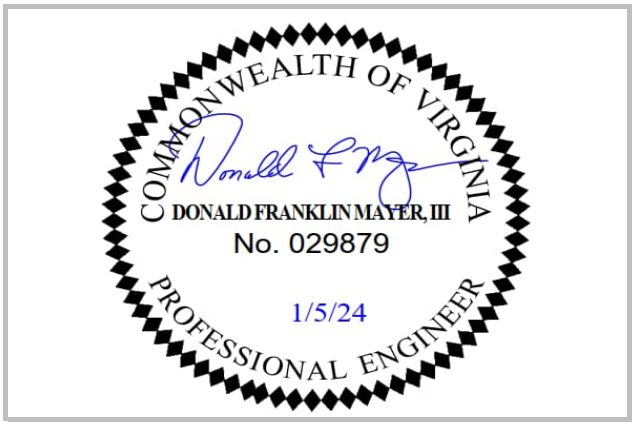
| | |
|---|---|
| Name of Dam: | Chesterfield Power Station Lower Ash Pond Dam |
| Owner's Name: | Virginia Electric and Power Company d.b.a. Dominion Energy Virginia |
| State ID #: | DCR Inventory # 041031, VPDES # VA0004146 |
| Owner Contact: | Kevin Bishoff - Construction Project Manager |
| Dam Location: | Chester, VA |

## Engineer Information

| | |
|---|---|
| Name and Virginia License Number: | Donald Mayer 029879 |
| Firm Name: | WSP USA Inc. |
| Firm Address: | 1100 Boulders Parkway, Suite 503, Richmond, VA 23225 |
| 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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| | Yes | No |
|---|---|---|
| Was a review performed of available information regarding the status of the CCR unit, including files in the operating record? | X | |
| 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? | X | |

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, TRD wall installation has been completed and a sheet pile wall is being installed on the southwest side of the LAP. In accordance with the CCR Rule and the LAP Closure Plan prepared in accordance with 40 CFR 257.102, CCR material is being actively removed from the LAP and sent to the FFCP Landfill. Construction activities are supported by sump/pumping systems and the temporary geomembrane cover is being removed selectively only from active excavation areas to minimize stormwater contact and infiltration.

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 | |
|---|---|---|---|---|
| Inclinometers | INC-1 | SW Embankment near sheet pile wall | 0.49 | inches |
| | INC-2 | SW Embankment near sheet pile wall | -4.02 | inches |
| | INC-3 | Western embankment, mid-point | -1.31 | inches |
| | INC-5N | Southern Embankment | -0.41 | inches |
| | TW-IN-04 | Southern Embankment | - | inches |
| Piezometers | P-22 | Western Embankment | 11.80 | feet |
| | P-23 | SW Embankment | 10.57 | feet |
| | P-28 | Southern Embankment | 9.90 | feet |
| | 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. INC-1 and INC-2 were decommissioned and INC-3 was converted to manual instrument on March 23, 2023.

*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.

Water level in pond:

| | | | | | |
|---|---|---|---|---|---|
| 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: | 1 | Ac - Ft. |
| Present volume of the impounded CCR: | 1,395 | Ac - Ft. |
| Present volume, total | 1,396 | Ac - Ft. |

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.

None observed.

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 TRD wall has been installed and a sheet pile wall is currently being installed along the southwest side of the basin. CCR material is being actively removed from the LAP and sent to the FFCP Landfill. Construction activities are supported by sump/pumping systems and the geomembrane cover is only being removed from areas that are being actively excavated.

Additional comments

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 the inspection, the west side of the basin was under a temporary geomembrane cover to minimize stormwater contact and infiltration. Active removal of the CCR was in progress in the eastern side of the basin, with the material sent to the FFCP Landfill.