

CLOSURE PLAN

CFR 257.102(b)

Bottom Ash Pond

Mitchell Power Plant
Marshall County, West Virginia

October 2016
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Prepared for: Wheeling Power Company & Kentucky Power Company

Prepared by: American Electric Power Service Corporation


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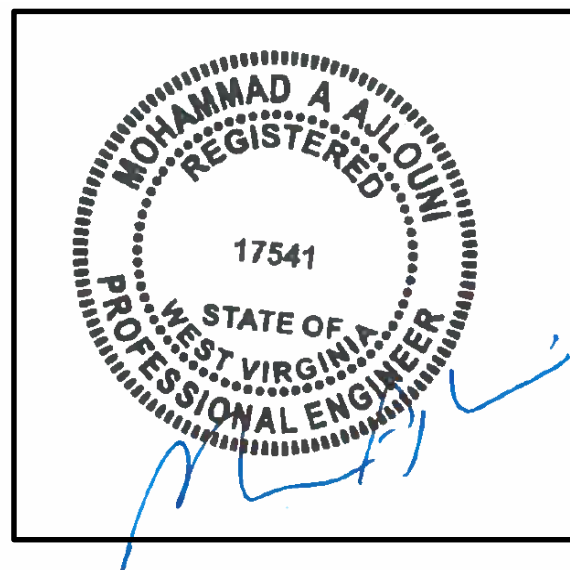
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Closure Plan
CFR 257.102(b)
MITCHELL POWER PLANT
BOTTOM ASH POND

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I certify to the best of my knowledge, information, and belief that the information contained in this closure plan meets the requirements of 40 CFR § 257.102(b)

Table of CONTENTS

| | |
|---|----------|
| 1.0 OBJECTIVE..... | 4 |
| 2.0 DESCRIPTION OF THE CCR UNIT..... | 4 |
| 3.0 DESCRIPTION OF CLOSURE PLAN 257.102(b)(1)(i) | 4 |
| 4.0 CLOSURE BY REMOVAL 257.102 (b)(1)(ii) | 4 |
| 4.1 CLOSURE PERFORMANCE STANDARDS 257.102 (c) | 5 |
| 5.0 ESTIMATE OF MAXIMUM CCR VOLUME 257.102 (b)(1)(iv) | 5 |
| 6.0 ESTIMATE OF LARGEST AREA OF CCR REQUIRING COVER 257.102 (b)(1)(v)..... | 5 |
| 7.0 CLOSURE SCHEDULE 257.102(b)(1)(vi) | 5 |

1.0 OBJECTIVE

This report was prepared by AEP- Geotechnical Engineering Services (GES) section to fulfill requirements of CFR 257.102(b) for Closure Plans of Existing CCR Surface Impoundments.

2.0 DESCRIPTION OF THE CCR UNIT

The Mitchell Bottom Ash Pond Complex is located at the Mitchell Power Plant in Marshall County, West Virginia. The impoundment was constructed in 1977 and is comprised of a Bottom Ash Pond and a Clear Water Pond. The Bottom ash pond is a CCR unit, while the Clear Water Pond is a Non-CCR Unit. The purpose of the Bottom Ash Pond is for the disposal of Bottom Ash produced at the Mitchell Power Plant.

The complex is surrounded by the Mitchell Power Plant on its north side, West Virginia State Route 2 on its east side, the adjacent wallboard facility and ancillary structures on its south side, and the metal cleaning tank, railroad tracks, and the Ohio River on its west side. The Bottom Ash Pond Complex is approximately 12 acres in size and consists of two impounding facilities: the Bottom Ash Pond and the Clear Water Pond. The Bottom Ash Pond comprises the north portion of the complex and the Clear Water Pond comprises the southern portion. The Mitchell Bottom Ash Complex is regulated by the West Virginia Division of Water and Waste Management (WVDWWM) Dam Safety as a Hazard Class "2" Structure.

3.0 DESCRIPTION OF CLOSURE PLAN 257.102(b)(1)(i)

[A narrative description of how the CCR unit will be closed in accordance with this section]

Closure of the Bottom Ash pond will be closed by removal of the CCR material. The Mitchell Plant will convert to dry bottom ash handling systems at both power generating units .

4.0 CLOSURE BY REMOVAL 257.102 (b)(1)(ii)

[If closure of the CCR unit will be accomplished through removal of CCR from the CCR unit, a description of the procedures to remove the CCR and decontaminate the CCR unit in accordance with paragraph (c) of this section.]

Closure by removal of CCR will include removal of all CCR from the CCR unit. The removal of all CCR from the CCR unit and 12-inches of the bottom soils will be accomplished by excavation of the material, then hauling and placing of the material in the Mitchell Landfill. The PVC liner material in the pond will be removed and taken to an off-site landfill. Following removal of the final quantities of CCR, the bottom ash pond location will be repurposed and converted to a new Wastewater pond, all non-CCR wastewater currently discharged to the Bottom Ash Pond will discharge to the new Wastewater pond. The conversion to the new Wastewater Pond configuration will occur in a phased approach. Water from the new Wastewater Pond will flow to the existing Clear Water Pond prior to discharge through Outfall 001.

4.1 CLOSURE PERFORMANCE STANDARDS 257.102 (c)

[An owner or operator may elect to close a CCR unit by removing and decontaminating all areas affected by releases from the CCR unit. CCR removal and decontamination of the CCR unit are complete when constituent concentrations throughout the CCR unit and any areas affected by releases from the CCR unit have been removed and groundwater monitoring concentrations do not exceed the groundwater protection standard established pursuant to §257.95(h) for constituents listed in appendix IV to this part.]

Closure of the CCR unit will be completed when all CCR in the unit and any areas affected by releases from the CCR unit have been removed and groundwater monitoring demonstrates that all concentrations of the assessment monitoring constituents listed in appendix IV to part 257 do not exceed either statistically equivalent background levels or MCLs for two consecutive sampling events using the statistical procedures in § 257.93(g).

5.0 ESTIMATE OF MAXIMUM CCR VOLUME 257.102 (b)(1)(iv)

[An estimate of the maximum inventory of CCR ever on-site over the active life of the CCR unit.]

The estimated maximum CCR volume ever on-site is 580,800 Cubic Yards.

6.0 ESTIMATE OF LARGEST AREA OF CCR REQUIRING COVER 257.102 (b)(1)(v)

[An estimate of the largest area of CCR unit ever requiring a final cover

This pond will be closed by removal of CCR materials as such this section is not applicable.

7.0 CLOSURE SCHEDULE 257.102(b)(1)(vi)

[A schedule for completing all activities necessary to satisfy the closure criteria in the section, including an estimate of the year in which all closure activities for the CCR unit will be completed. The schedule should provide sufficient information to describe the sequential steps that will be taken to close the CCR unit, including identification of major milestones such as coordinating with and obtaining necessary approvals and permits from other agencies, the dewatering and stabilization phases of the CCR surface impoundment closure, or installation of the final cover system, and the estimated timeframes to complete each step or phase of the CCR unit closure.

Closure of the Bottom Ash Pond will be a phased approach as generally outlined below allowing one half to continue to receive CCR material and wastewaters until the dry bottom ash handling systems are operational and one half of the new lined wastewater pond is available for non-CCR wastestreams. The table is a summary of major activities and milestone dates to complete the closure project.

| | |
|---|-------------------|
| Engineer and design pond closure | Q3 2020 – Q2 2021 |
| Submit and obtain approval of State/Local Permits | Q4 2020 – Q2 2022 |
| Bid and award first construction contract | Q2 2021 – Q3 2021 |
| Install sheet piling to establish isolation of west portion of pond | Q2 2021 – Q4 2021 |

| | |
|--|-------------------|
| Remove CCR material from east portion (to create capacity while prior to closing out west portion) | Q4 2021 – Q1 2022 |
| Install temporary chemical treatment system and sand filters in east portion | Q2 2022 – Q2 2022 |
| Remove CCR material from west portion | Q2 2022 – Q4 2022 |
| Subgrade prep for liner / compact fill to Construct north to south dike of new pond | Q3 2022 – Q1 2023 |
| Construct wastewater liner in west portion | Q2 2023 – Q2 2023 |
| Tank based chemical treatment system installation | Q3 2022 – Q4 2023 |
| Dewater and remove sheet piling/CCR material from east portion | Q3 2023 – Q2 2024 |
| Construct wastewater liner in east portion | Q3 2024 – Q4 2024 |
| Ground Water Sampling * | Q4 2024 – Q4 2025 |

** Groundwater sampling will be conducted per 40 CFR 257.102(c) to complete the closure process in accordance with the milestone schedule above, with at least one of the required samples occurring after certification that all CCR material has been removed.*