Wheeling Power Company
Mitchell Plant

Coal Combustion Residuals
Fugitive Dust Control Plan

Prepared By:
Wheeling Power Company
Mitchell Plant
8999 Energy Rd.
Moundsville, WV 26041

and

American Electric Power Service Corporation
Environmental Services
1 Riverside Plaza
Columbus, Ohio 43215

Original – September 2015
Revision 3 – September 2022

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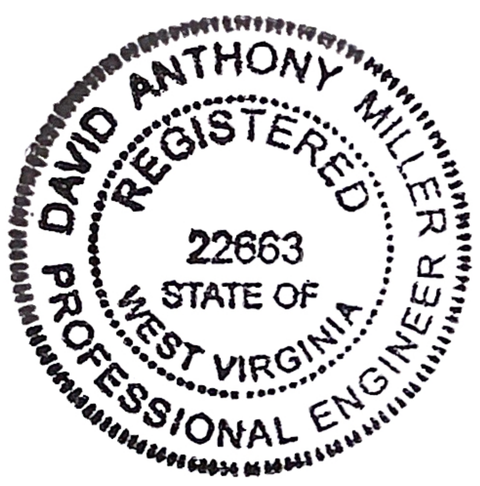
Appendices

Professional Engineer's Certification

By means of this certification, I certify that I have reviewed this CCR Fugitive Dust Control Plan and it meets the requirements of section 40 CFR 257.80(b).



DAVID ANTHONY MILLER

Printed Name of Registered Professional Engineer

David Anthony Miller

Signature

22663 | WEST VIRGINIA | 10.07.22

Registration No. | Registration State | Date

1.0 INTRODUCTION

This CCR Fugitive Dust Control Plan (Plan) has been prepared pursuant to the air criteria of 40 CFR part 257.80 (see Appendix A). The Plan has been prepared in accordance with the air criteria and following good engineering practices to include measures that will effectively minimize CCR from becoming airborne at the facility. The Plan and subsequent amendments will be placed in the operating record. The Plan and subsequent amendments will also be placed on Mitchell Plant's publicly accessible internet website titled "CCR Rule Compliance Data and Information." The plan will be amended whenever there is a change in conditions that would substantially affect the written plan in effect, such as the construction and operation of a new CCR unit. Where appropriate, the Plan incorporates fugitive dust control requirements as contained in the West Virginia DEP air permits issued for the plant.

There is one CCR surface impoundment and one CCR landfill located at Mitchell Plant that are subject to the Plan. The surface impoundment is the bottom ash pond (BAP). The Mitchell Plant Residual Waste Landfill (Landfill) receives gypsum, fly ash (removed from ash silos) and bottom ash (periodically removed from the BAP). The BAP has initiated retrofit activities with a project schedule detailed in a written closure plan. During the project, CCR material is being removed from the BAP complex and the complex is being repurposed as non-CCR wastewater ponds with a new liner according to the written closure plan. The Plan addresses these CCR units and the associated materials handling and roadways.

2.0 FACILITY DESCRIPTION AND CONTACT INFORMATION

2.1 Facility Information

General Information:

Name of Facility: Wheeling Power Company – Mitchell Plant

Street: 8999 Energy Rd.

City: Moundsville State: WV ZIP Code: 26041

County: Marshall

Latitude: 39º 49' 46" N Longitude: 80º 48' 58" W

2.2 Contact Information

Facility Operator:

Name: Wheeling Power Company - Mitchell Plant

Attention: Douglas J. Rosenberger - Plant Manager
Address: 8999 Energy Rd.
City, State, Zip Code: Moundsville, West Virginia 26041

Facility Owner:
Name: Kentucky Power Company/Wheeling Power Company
Attention: Scott A. Weaver – Director, AQS
Address: 1 Riverside Plaza
City, State, Zip Code: Columbus, Ohio 43215

Plant Contact:
Name: Matt Palmer – Plant Environmental Coordinator – Mitchell Plant
Address: 8999 Energy Rd.
City, State, Zip Code: Moundsville, West Virginia 26041
Telephone number: 304-843- 6048
Email address: gmpalmer@aep.com

2.3 Activities at the Facility

The Mitchell Plant is located along the Ohio River near Moundsville, West Virginia, and consists of a two electric generating units, each nominally rated at 800 megawatts. Kentucky Power Company co-owns the facility with Wheeling Power Company. Wheeling Power Company operates the facility. Coal is combusted and its energy is converted to electricity at the Mitchell Plant, powering thousands of homes, businesses, schools, and industrial facilities.

The generating units are equipped with limestone spray tower flue gas desulfurization (FGD) technology and an electrostatic precipitator. The FGD produces synthetic gypsum as a by-product of the reaction of the sulfur compounds in the flue gas and the FGD liquor. The gypsum slurry is dewatered, and transported to either a nearby wallboard facility by conveyor or to the landfill by conveyor/truck. The Landfill is located on plant property approximately 2 miles east of the FGD systems.

Fly ash is produced during the combustion of coal in the steam generator and has a density that allows the ash to be carried along in the flue gas stream. The electrostatic precipitator collects fly ash from the flue gas and deposits it into

collection hoppers. The fly ash handling system removes fly ash from the hoppers using a vacuum system. The ash is drawn from the hoppers and blown through a piping system to a silo for temporary storage prior to being loaded into trucks and transported to the Landfill or sold for beneficial uses.

The fly ash silos are equipped with an ash conditioning and a truck load-out system. The conditioning system adds water to the ash to minimize fugitive dust emissions during loading, transport, unloading and placement of the ash in the landfill. Dry fly ash may also be loaded into enclosed trucks for beneficial use.

Bottom ash, also produced by combusting coal in the Mitchell Plant units, is collected in the bottom of the steam generator and is wet sluiced to the BAP during unit operations. Periodically, bottom ash is reclaimed from the BAP. The reclaimed bottom ash is loaded into trucks and transported to the Landfill for storage and use as a construction material. Bottom ash that is not used for construction purposes will be placed within the Landfill. As the BAP retrofit activities proceed, the wet sluiced bottom ash system is being transitioned to one that relies on fully submerged, under-hopper drag conveyors to transfer ash from the steam generator ash hoppers. The bottom ash is then transferred to a partially submerged dewatering conveyor. The dewatered ash is transferred into partially enclosed temporary storage bunkers, where it is reclaimed and loaded into trucks for transport to the Landfill for storage and use as a construction material. During the transition period, a portion of the plant bottom ash pond system will remain in service until the new dry bottom ash handling system can be completed. After completion of the dry bottom ash handling system is complete, CCR material will be removed from the remaining BAP and it will be repurposed as a non-CCR wastewater pond with a new liner according to the written closure plan.

2.4 General Site Map

A USGS site location map for the Plant and Landfill is included as Figure 1-1 in Appendix B. The map shows the property boundaries, surrounding topography and receiving waters.

3.0 FUGITIVE DUST CONTROL SELECTION

3.1 Paved and Unpaved Roadways

3.1.1 Overview

Trucks and conveyors are used to transport CCR to the Landfill from the plant site. Fly ash is hauled by trucks from the plant over plant paved roadways to the Landfill. The trucks travel approximately 8.0 round trip miles over paved roadways to the disposal area, followed by a much shorter unpaved roadway that varies with the location of the active fill area. Similarly, bottom ash trucks travel approximately 8.5 round trip miles over paved plant roadways to the Landfill.

The dewatered gypsum that is not sent to the nearby wallboard facility is transported by conveyor to a temporary load-out pile near the generating units. Gypsum is hauled from the conveyor load-out pile over plant paved roadways to the Landfill. Trucks hauling gypsum travel approximately 8.5 round trip miles over paved roadways to the disposal area, followed by a much shorter unpaved roadway that varies with the location of the active fill area.

The applicable and adequate fugitive dust control measures were primarily selected in accordance with the measures contained in West Virginia DEP Title V Air Permit for the landfill roads and plant roads. The roadways are also subject to a requirement to minimize visible emission as contained in the air permits.

3.1.2 Landfill and Plant Roadways

The primary appropriate and applicable fugitive dust control measures for roadways are watering, sweeping, and speed controls. Water trucks are used as needed based upon the Title V Permit inspection requirements and other observations to minimize or eliminate fugitive dust generated by CCR truck traffic. The Title V Permit requires, as a minimum, an inspection of all fugitive dust control systems weekly from May 1 through September 30 and

monthly from October 1 through April 30 to ensure that they are operated as necessary and maintained in good working order. Chemical suppressants or stabilizers are also used a minimum of three times per year on unpaved roadways depending on specific site conditions. A street sweeper/vacuum truck may be used to clean paved roadways. Posted speed limits are 30 mph for paved and unpaved roads. Earth or other materials that may be deposited onto paved roadways from trucks will be promptly removed to minimize fugitive emissions. Implementation of control measures will not be necessary for roadways that are covered with snow and/or ice or if sufficient precipitation occurs to minimize or eliminate fugitive dust. Implementation of any control measures may be suspended if unsafe or hazardous driving conditions would be created by its use.

3.2 Landfill

3.2.1 Overview

The landfill receives FGD material (gypsum), fly ash and bottom ash from the Mitchell Plant. All materials contain moisture (conditioned) but water or chemical suppressants may be added at the landfill as necessary to minimize fugitive dust emissions. The landfill activities are subject to the West Virginia Title V Air Permit. This permit specifies the applicable and appropriate fugitive dust control measures for the site to minimize fugitive emissions. The permit also includes visible particulate emissions requirements as well as monitoring, recordkeeping and reporting requirements. [Note: “conditioned” CCR means the material has sufficient moisture content to prevent wind dispersal but will not result in free liquids]

3.2.2 Unloading and Placement

Gypsum and fly ash are unloaded from trucks in the active fill area of an open landfill cell, where a bulldozer or similar equipment will spread and compact the materials. A roller may also be used for compaction. Bottom ash is unloaded from trucks into a storage pile for use in construction or disposal within the landfill. The fugitive dust control measures for truck unloading includes maintaining moisture in the material and taking precautionary measures (minimize drop height). The measures for spreading and compacting include maintaining vehicle speed and watering materials, if necessary.

3.2.3 Wind Erosion

Generally, landfill disposal areas can be classified as closed or open. Closed areas have received final cover and vegetation has been established. Open areas contain both the active fill area and areas that have been compacted but not yet received final cover. The open area fugitive dust control measures include: precautionary measures such as minimizing the amount of open area and pile height; compacting material as it is unloaded; watering; and application of chemical suppressants. The bottom ash storage pile fugitive dust emissions are minimized by watering, application of chemical suppressants and pile height control.

3.3 Bottom Ash

Bottom ash is produced by the operating unit and is wet sluiced to the BAP. The ash is periodically reclaimed and then loaded onto trucks for transport to the landfill. As the BAP retrofit activities proceed, the wet sluiced bottom ash system is being transitioned to one that relies on fully submerged, under-hopper drag conveyors to transfer ash from the steam generator ash hoppers. The bottom ash is then transferred to a partially submerged dewatering conveyor. The dewatered ash is transferred into partially enclosed temporary storage bunkers. The dewatered bottom ash (from either the BAP or the new dewatering conveyor system) typically remains wet, depending on the amount of moisture remaining in the ash and seasonal conditions, there may be fugitive emissions from the reclaim pile or truck loading activities. A review of potential control measures concluded that the applicable and appropriate options consist of watering, chemical suppressant application, and minimizing drop height. Fugitive dust emissions from the temporary storage bunkers utilized as part of the new bottom ash dewatering system are minimized by the partial enclosure design of the bunkers. Water or chemical dust suppressant is applied to the BAP dewatering pile to minimize fugitive emissions as needed. Water spray is applied as needed to the material handling activities and the drop from the loader into the trucks is minimized to further minimize fugitive emissions. Enclosures, compaction and daily cover, at the landfill, are not applicable given the size of the area and characteristics of the material.

3.4 Dry Fly Ash Handling

The Mitchell Plant units use dry a fly ash handling system. Fly ash is pneumatically transported from the electrostatic precipitator hoppers to silos to be loaded onto trucks. Fly ash is transferred from the silos via a truck load-out system where it is conditioned with water and loaded into trucks for disposal at the landfill or beneficial use. The dry fly ash systems are subject to the Title V operating permit for the facility. The permit specifies the applicable and appropriate fugitive dust control measures for the site to minimize or eliminate fugitive emissions. The control measures include: full enclosures, bin vent filters and water spray curtains.

3.5 Gypsum Transfer and Stockpile

Mitchell Plant gypsum is dewatered and transferred by conveyors to the offsite wallboard facility. The dewatered gypsum that is not sent to the nearby wallboard facility is transported by conveyor to a temporary load-out pile near the generating units where it is loaded onto trucks for disposal at the landfill or transport to an offsite facility. These activities are subject to the Title V operating permit for the facility. The permit application specifies the applicable and appropriate fugitive dust control measures for the site to minimize or eliminate fugitive emissions. The control measures include: moisture content of the gypsum; and enclosed or partially enclosed conveyors and transfers. The gypsum is loaded into trucks and dust is controlled due to the moisture of the material and by minimizing the drop height.

4.0 PLAN ASSESSMENT

The Plan will be periodically assessed to verify its effectiveness, and if necessary, amended in accordance with Section 7.0 below. The Landfill, BAP, and associated paved and unpaved roadways are inspected on a frequency consistent with the previously mentioned Title V permit requirements. The purpose of the inspections is to determine if the control measures for each CCR unit as described above are being implemented as necessary to minimize or eliminate fugitive emissions. Records of inspections and the control measures implemented as a result of the inspections will be maintained. The Plant Environmental Coordinator will review the inspection records annually to assess the effectiveness of the Plan and determine if additional or modified measures are warranted. No inspection is necessary if the surface is covered with snow and/or ice or if precipitation has occurred that is sufficient to minimize or eliminate fugitive emissions. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

5.0 CITIZEN COMPLAINT LOG

5.1 Plant Contacts

Generally, complaints made to the plant are by telephone and received by the Plant Environmental Coordinator (Plan Contact). In the case of holiday, weekends, or other times when the Environmental and Lab Supervisor may not be onsite, the plant guard house or plant general phone number may receive complaint information by telephone that is provided to the Environmental and Lab Supervisor at the earliest convenience. Complaints may also be made to the West Virginia DEP who in turn will contact the Environmental and Lab Supervisor.

5.2 Follow-up

All complaints will be entered into a log by the Environmental and Lab Supervisor with details noted such as the nature of the complaint, date, time, and other relevant details. All complaints will be followed up which may include: checking plant operations at the time of the event, reviewing inspection records, discussing with other plant personnel, reviewing weather data, collecting samples and contacting the person making the complaint to obtain additional information.

5.3 Corrective Action and Documentation

Corrective actions will be taken as needed and documented. If it is determined that the Plan needs to be amended as a result of the corrective actions, it will be amended in accordance with the Plan. If possible, the Environmental and Lab Supervisor will follow-up with the complainant and/or West Virginia DEP to explain the findings of the complaint investigation, corrective actions or sampling results. Citizen complaints will be recorded in the annual Report.

6.0 ANNUAL REPORT

The Annual CCR Fugitive Dust Control Report (Annual Report) will be prepared which includes the following components: description of actions taken to control CCR fugitive dust; a record of all citizen complaints; and a summary of any corrective measures taken. The initial Annual Report will be completed no later than 14 months after placing the initial CCR fugitive dust control plan in the facility's operating record. The deadline for completing subsequent reports is one year after the date of completing the previous report. The Annual Report will be deemed complete when the plan has been placed in the facility's operating record as described in Section 8.0.

7.0 PLAN AMENDMENTS

This Plan is a "living" document and will be amended, as necessary, whenever there is a change in condition that would substantially affect the written plan in effect. The Plan will be amended in the case of construction and operation of a new CCR unit. Amendments made to the Plan will be documented in Appendix C. The amended Plan will be placed into the facility's operating record as described in Section 8.0.

8.0 RECORDKEEPING, NOTIFICATION and INTERNET REQUIREMENTS

8.1 Recordkeeping

The Plan and files of all related information will be maintained in a written operating record at the facility for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, record or study. Files may be maintained on a computer or an electronic storage system accessible by a computer. One recordkeeping system may be used for the BAP and Landfill if the system identifies each file by the name of each unit (i.e. BAP or Landfill). The Plan (and any subsequent amendment of the plan) and the Annual Report will be kept in the facility's operating record as they become available. Only the most recent Plan must be maintained in the record. [§ 257.105]

8.2 Notification

West Virginia DEP will be notified within 30 days of placing the Plan (or any subsequent amended Plan) or the Annual Report into the operating record and on the publicly available internet site. This notification will be made before the close of business on the day the notification is required to be completed. "Before the close of business day" means the notification must be postmarked or sent by e-mail. If the notification deadline falls on a weekend or federal holiday, the notification is automatically extended to the next business day. [§ 257.106]

8.3 Internet Site Requirements

The most recent Plan and annual Report will be placed on the facility's CCR website titled "CCR Rule Compliance Data and Information" within 30 days of placing them in the operating record. [§ 257.107]

Appendix A

Air Criteria of 40 CFR Part 257.80

and 40 CFR Part 257.100

Operating Criteria
§ 257.80 Air criteria.
(a) The owner or operator of a CCR landfill, CCR surface impoundment, or any lateral expansion of a CCR unit must adopt measures that will effectively minimize CCR from becoming airborne at the facility, including CCR fugitive dust originating from CCR units, roads, and other CCR management and material handling activities.

(b) *CCR fugitive dust control plan.*
The owner or operator of the CCR unit must prepare and operate in accordance with a CCR fugitive dust control plan as specified in paragraphs (b)(1) through (7) of this section. This requirement applies in addition to, not in place of, any applicable standards under the Occupational Safety and Health Act.

(1) The CCR fugitive dust control plan must identify and describe the CCR fugitive dust control measures the owner or operator will use to minimize CCR from becoming airborne at the facility. The owner or operator must select, and include in the CCR fugitive dust control plan, the CCR fugitive dust control measures that are most appropriate for site conditions, along with an explanation of how the measures selected are applicable and appropriate for site conditions. Examples of control measures that may be appropriate include: Locating CCR inside an enclosure or partial enclosure; operating a water spray or fogging system; reducing fall distances at material drop points; using wind barriers, compaction, or vegetative covers; establishing and enforcing reduced vehicle speed limits; paving and sweeping roads; covering trucks transporting CCR; reducing or halting operations during high wind events; or applying a daily cover.

(2) If the owner or operator operates a CCR landfill or any lateral expansion of a CCR landfill, the CCR fugitive dust control plan must include procedures to emplace CCR as conditioned CCR. Conditioned CCR means wetting CCR with water to a moisture content that will prevent wind dispersal, but will not result in free liquids. In lieu of water, CCR conditioning may be accomplished with an appropriate chemical dust suppression agent.

(3) The CCR fugitive dust control plan must include procedures to log citizen complaints received by the owner or operator involving CCR fugitive dust events at the facility.

(4) The CCR fugitive dust control plan must include a description of the procedures the owner or operator will follow to periodically assess the effectiveness of the control plan.

(5) The owner or operator of a CCR unit must prepare an initial CCR fugitive dust control plan for the facility no later than October 19, 2015, or by initial receipt of CCR in any CCR unit at the facility if the owner or operator becomes subject to this subpart after October 19, 2015. The owner or operator has completed the initial CCR fugitive dust control plan when the plan has been placed in the facility's operating record as required by § 257.105(g)(1).

(6) *Amendment of the plan.* The owner or operator of a CCR unit subject to the requirements of this section may amend the written CCR fugitive dust control plan at any time provided the revised plan is placed in the facility's operating record as required by § 257.105(g)(1). The owner or operator must amend the written plan whenever there is a change in conditions that would substantially affect the written plan in effect, such as the construction and operation of a new CCR unit.

(7) The owner or operator must obtain a certification from a qualified professional engineer that the initial CCR fugitive dust control plan, or any subsequent amendment of it, meets the requirements of this section.

(c) *Annual CCR fugitive dust control report.* The owner or operator of a CCR unit must prepare an annual CCR fugitive dust control report that includes a description of the actions taken by the owner or

operator to control CCR fugitive dust, a record of all citizen complaints, and a summary of any corrective measures taken. The initial annual report must be completed no later than 14 months after placing the initial CCR fugitive dust control plan in the facility's operating record. The deadline for completing a subsequent report is one year after the date of completing the previous report. For purposes of this paragraph (c), the owner or operator has completed the annual CCR fugitive dust control report when the plan has been placed in the facility's operating record as required by § 257.105(g)(2).

(d) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(g), the notification requirements specified in § 257.106(g), and the internet requirements specified in § 257.107(g).

CCR Extension Rule Language:

§ 257.100 Inactive CCR surface impoundments.

(e) Timeframes for certain inactive CCR surface impoundments

(4) Operating criteria. The owner or operator of the inactive CCR surface impoundment must:

(i) No later than April 18, 2017, prepare the initial CCR fugitive dust control plan as set forth in § 257.80(b).

(ii) No later than April 17, 2018, prepare the initial inflow design flood control system plan as set forth in § 257.82(c).

(iii) No later than April 18, 2017, initiate the inspections by a qualified person as set forth by § 257.83(a).

(iv) No later than July 19, 2017, complete the initial annual inspection by a qualified professional engineer as set forth by § 257.83(b).

Appendix B

Site Map for Plant and Landfill

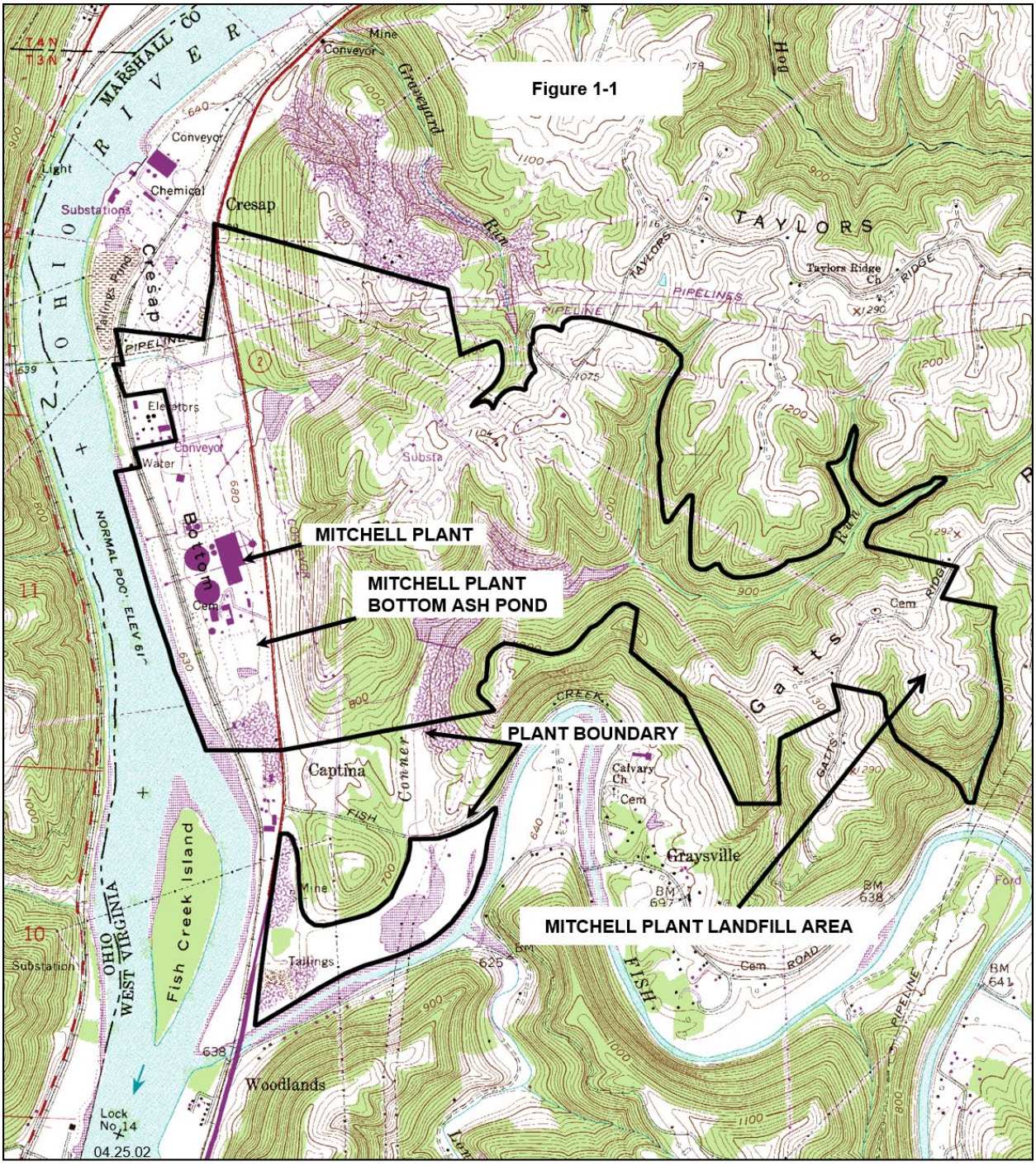


Figure 1-1
MITCHELL PLANT
MITCHELL PLANT
BOTTOM ASH POND
PLANT BOUNDARY
MITCHELL PLANT LANDFILL AREA
MARSHALL CO
OHIO RIVER
Cresap
Mine
Conveyor
Light
Chemical
Substations
Greenyard Run
Hog
TAYLORS
Taylors Ridge Ch
PIPELINE
Elevators
Water
Bottom
Cem
NORMAL POOL ELEV 617
Substa
Run
Gatts
RIDGE
CREEK
Captina
Conner
FISH
Calvary Ch
Graysville
BM 697
BM 638
Ford
Fish Creek Island
OHIO
WEST VIRGINIA
Substation
Tailings
BM 625
ROAD
BM 641
Woodlands
Lock No. 14
04.25.02
N
Powhatan Point, W.VA. - OH
Quadrangle
USGS Topographic Map
0
½
1mi
Plant Latitude 39° 49' 45"
Plant Longitude 80° 48' 59"
Wheeling Power Company
Mitchell Plant
Facility Boundary
Air Quality Services
AEP

Appendix C

Plan Amendments

Record of Plan Revisions		
Revision Number	Date	Revision Description
0	9/21/2015	Initial Plan
1	10/10/2018	Update Plant Manager; Update owners name, contact name, Add more detailed description of fly ash handling and gypsum handling, editorial changes
2	9/2019	Editorial Change – Include Original Plan Date on Front Page
3	9/2022	Editorial changes - including an update to the facility operator and details related to the transition of the wet sluiced bottom ash system to a new dry bottom ash dewatering system.