# **FUGITIVE DUST CONTROL PLAN**

# PLEASANTS McELROY'S RUN DISPOSAL IMPOUNDMENT Willow Island, WV

Allegheny Energy Supply Company, LLC A FirstEnergy Company

October 19, 2015

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#### **INTRODUCTION**

Pursuant to the Federal Coal Combustion Residuals (CCR) Rule at 40 CFR §257.80 each CCR unit is required to have an Fugitive Dust Plan that will effectively minimize CCR from becoming airborne from the CCR unit, roads leading to and from the CCR unit, and any other CCR management and material handling activities.

This plan must:

- 1) Identify and describe the CCR fugitive dust control measures that will be used to minimize CCR from becoming airborne at the facility, and explain how these measures are applicable and appropriate for the CCR unit;
- 2) Include procedures to log citizen complaints received by the owner/operator involving fugitive dust events at the CCR unit;
- 3) Include a description of the procedures the owner/operator will follow to periodically assess the effectiveness of the control plan;
- 4) Be prepared as an initial plan for applicable CCR units by October 19, 2015, or by initial receipt of CCR for any unit subject to the regulation after October 19, 2015;
- 5) Include amendments to the plan whenever there is a change in conditions that would substantially affect the written plan in effect; and
- 6) Be certified by a qualified professional engineer, licensed in the state in which the CCR unit resides, that the initial CCR fugitive dust control plan, or any subsequent amendment thereto, meets the seven requirements as listed here per 40 CFR §257.80.

#### CCR UNIT DESCRIPTION

The Pleasants McElroy's Run Disposal Impoundment is an engineered CCR wet-disposal impoundment located near the town of Willow Island, West Virginia, and is owned by Allegheny Energy Supply Company, LLC, a wholly owned subsidiary of FirstEnergy Corp. It is regulated by the West Virginia Department of Environmental Protection (WVDEP) under the West Virginia solid waste management regulations. It receives wet-sluiced flue gas desulfurization (FGD) material from the Pleasants Power Station. The FGD is transported by underground pipeline from the station to the WVDEP permitted impoundment. The FGD sludge is pumped to different areas of the impoundment through a floating pipeline that is periodically moved. As an area is filled the FGD sludge will delta just above the water level, indicating the need to move the discharge pipe. The water in the impoundment and all precipitation contacting the impoundment is discharged to the Ohio River via a permitted outfall under the WVDEP National Pollution Discharge Elimination System (NPDES) regulations.

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#### CCR FUGITIVE DUST CONTROL MEASURES

By its very nature of being a wet disposal impoundment and handling the associated CCR material as a wet sluiced slurry the need for dust control measures to minimize the dispersal of fugitive dust in the operation of the Pleasants McElroy's Run Disposal Impoundments is limited.

#### 1. Impoundment Location and Natural Barriers

The Pleasants McElroy's Run Disposal Impoundment is located in a remote area of West Virginia with limited neighbors. It is located between two tree lined ridges that form a natural barrier that reduces the exposure of the impoundment to wind.

#### 2. Disposal Impoundment Filling Process

The FGD material is piped as a wet slurry to the impoundment and as such produces no fugitive dust.

#### 3. Access Road

The access road to the disposal impoundment is an unpaved, gravel covered or dirt access road that connects to the private dedicated haul road for the Pleasants Landfill (which abuts the downstream slope of the impoundment's embankment). The access road around the impoundment is traversed by light trucks and equipment for access to the slurry line, certain groundwater monitoring wells, and the property line fence.

#### 4. Optional Use of Dust Dispersal Suppression Agents

In the unlikely event that the FGD slurry solids build up well above the impoundment water level it is feasible that those materials could dry out to an extent to create fugitive dust during windy conditions. If the impoundment water level cannot be raised to cover the exposed material, then a dust dispersal suppression agent may be applied. Application can be accomplished via aerial application (helicopter). Such agents can be effective for periods of several weeks to months prior to reapplication. The use of these agents, sometimes referred to by the trademark name "soil sements" is not routine but is available as an option if necessary and approved by the WVDEP.

#### APPLICABILITY AND APPROPRIATENESS OF DUST CONTROL MEASURES

The dust control measures described in this plan are applicable and appropriate as accepted industry best management practices and reasonable engineering controls for industrial impoundment operations. Moreover, these measures, practices, and controls are recognized by the United States Environmental Protection Agency (US EPA) as discussed in the "Compilation"

of Air Pollutant Emission Factors" document (AP-42) detailing fugitive dust emission calculations under uncontrolled and controlled scenarios and for industrial wastewater treatment and storage.<sup>1</sup>

#### PROCEDURE TO LOG CITIZEN COMPLAINTS

The station maintains a fugitive dust complaint log. Any complaint that is phoned into the station is recorded on the appropriate log including date, time, name of party lodging complaint, a description of the complaint, and ambient weather conditions at the time the complaint is made. The appropriate station personnel are then notified to verify the continued occurrence of the complaint and the manner in which the issue is to be resolved. These actions are also recorded in the citizen complaint log. If the complaint involves a claim of damage, a company representative contacts the party lodging the complaint to resolve the citizen's claim. A copy of the log is provided as Attachment A to this plan.

#### PROCEDURE TO ASSESS CONTROL PLAN EFFECTIVENESS

The Pleasants McElroy's Run Disposal Impoundment is a permitted facility under the applicable regulations of West Virginia. As such there are existing permit conditions that require the documentation of activities and practices to minimize the creation of fugitive dust. This documentation is required to be provided to the WVDEP upon their request, and during inspections. Finally, an annual emissions inventory, including fugitive dust emissions associated with the impoundment operation is submitted to the WVDEP. This documentation and citizen complaint log will be reviewed to evaluate the effectiveness of the measures taken and practices put in place to minimize the dispersal of fugitive dust.

#### DATE OF INITIAL PLAN

Since the Pleasants McElroy's Run Disposal Impoundment is an existing CCR impoundment (per 40 CFR §257.53) that is receiving CCRs both before and after October 19, 2015, the initial CCR fugitive dust control plan must be prepared and placed in the operating record by October 19, 2015. The CCR fugitive dust control plan will be placed on the facility's CCR website within 30 days of placing the information in the operating record. The facility will also notify the State Director within 30 days of when the plan is placed in the operating record.

<sup>&</sup>lt;sup>1</sup> AP-42 was first published in 1968 by the U.S. Public Health Service, and was then revised and reissued by the U.S. EPA in 1972. It is currently available as the 1995 Fifth Edition. Wastewater collection, treatment and storage is addressed in Chapter 4 and fugitive dust is specifically addressed in Chapter 13.

#### PLAN AMENDMENTS PROCEDURE

The plan will be amended in response to limitations identified during the annual plan review, or if operational or facility changes warrant an update. When changes are made, the title page of the amended plan shall include a notation identifying the date of the initial plan as well as the date of all subsequent revisions. The amendments made to the plan will be identified in an amendment table, attached hereto as Attachment B, identifying the date of the amendment, the reason for the amendment and the sections of the plan amended.

#### QUALIFIED PROFESSIONAL ENGINEER CERTIFICATION

Pursuant to 40 CFR §257.80(b)(7) the initial fugitive dust control plan and any subsequent amendment of it will be certified by a qualified professional engineer (PE). A copy of the certification is attached hereto as Attachment C.

#### ANNUAL CCR FUGITIVE DUST CONTROL REPORT

The annual fugitive dust control report will include a description of the actions taken by the facility to control CCR fugitive dust and a record of all citizen complaints logged in the previous twelve months along with corrective measures taken, if any. The initial CCR fugitive dust control report will be completed no later than 14 months after the initial CCR fugitive dust control plan has been placed in the operating record. Subsequent reports will be completed and placed in the operating record within one year of completing the previous year's report.

#### **RECORDKEEPING REQUIREMENTS**

As required by the CCR Rule, the CCR fugitive dust control plan and annual CCR fugitive dust control report will be placed in the facility's operating record. As the CCR fugitive dust control report is amended, the most recent version of the plan will be maintained in the facility's operating record. Both the most recent version of the CCR fugitive dust control plan and the annual CCR fugitive dust control report will be placed on the facility's CCR website within 30 days of placing the information into the operating record.

### **ATTACHMENT A**

### CITIZEN COMPLAINT LOG

Pleasants McElroy's Run Disposal Impoundment Fugitive Dust Control Plan Citizen Complaint Log

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Call No.	Date (mm/dd/yyyy)	Caller's Name	Description of Complaint	Time	Weather Conditions	Action Taken

## **ATTACHMENT B**

### PLAN AMENDMENTS SUMMARY TABLE

#### Pleasants McElroy's Run Disposal Impoundment Fugitive Dust Control Plan Plan Amendments Summary Table

NOTE: All amendments to plan must be indicated on the title page with a Revision number and corresponding date

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Rev No.	Date (mm/dd/yyyy)	Section Title Amended	Reason for Amendment	Amendment Description	Initials

## **ATTACHMENT C**

### QUALIFIED PROFESSIONAL ENGINEER CERTIFICATION

Professional Engineer Certification - As required by the U.S. EPA CCR Rule 40 CFR Parts 257 and 261

#### §257.80 - Air Criteria

CCR Fugitive Dust Control Plan

CCR Unit: Pleasants McElroy's Run Disposal Impoundment

#### **Certification:**

I, Adam W. Hoalcraft, a registered professional engineer in the
state of
requirements of 40 CFR §257.80(b)(1) through §257.80(b)(7), as applicable. This certification is based on
my review of the Pleasants McElroy's Run Disposal Impoundment Fugitive Dust Control Plan and
operational information and/or data provided (but not independently verified for accuracy) by
FirstEnergy about the CCR Unit listed above.

Adam W. Houlcraft

20503

PE License Number:

Printed Name:

State:  $\underline{WV}$ 

Signature:

Date:

Seal:



Stamp: