

FUGITIVE DUST CONTROL PLAN

**W. H. SAMMIS POWER STATION NORTH AND
SOUTH COAL COMBUSTION RESIDUALS
IMPOUNDMENTS
Stratton, OH**

**FirstEnergy Generation, 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 six requirements for CCR impoundments as listed here per 40 CFR §257.80.

CCR UNIT DESCRIPTION

The W. H. Sammis Power Station Coal Combustion Residuals (CCR) North and South Impoundments are wastewater treatment impoundments that receive CCRs via direct sluicing. They are located at the W. H. Sammis Power Station along Ohio State Route 7 near the town of Stratton, Ohio, and are owned by FirstEnergy Generation, LLC, a wholly owned subsidiary of FirstEnergy Corp. These impoundments have been and still are regulated by the Ohio Environmental Protection Agency (OEPA) under the National Pollutant Discharge Elimination System (NPDES) since their construction circa 1960. The CCRs entering the impoundments are fly ash and bottom ash (both exempt waste under the Ohio Solid Waste Regulations) from various station processes designed to remove the combustion residues from the boilers. The water in the impoundments and all precipitation contacting the impoundments is discharged to the Ohio River via an OEPA permitted NPDES outfall.

CCR FUGITIVE DUST CONTROL MEASURES

By their very nature of being impoundments and handling the associated CCR wastes as a wet sluiced slurry the need for dust control measures to minimize the dispersal of fugitive dust in the operation of the W. H. Sammis North and South CCR Impoundments is limited.

1. Impoundment Location

The W. H. Sammis North and South CCR Impoundments are located on the eastern side of a 187 acre coal burning electric generating power station along Ohio State Route 7 in an area along the Ohio River with a limited number of immediate residential neighbors.

2. Disposal Impoundment Filling and Dredging Process

The CCRs entering the North and South impoundments are sluiced via various pipe lines into the impoundments where, by design, the solids settle out prior to the supernatant discharging under NPDES permit to the Ohio River. Once one of the impoundments is full (60 to 70 percent of solids storage capacity), it is taken out of service and flow is diverted to the other impoundment. After water is drained from the full impoundment, the solids are removed via a front end loader and placed in trucks that haul the material to a third-party fly ash/bottom ash disposal facility. Prior to excavation of the CCRs from the impoundment the pond is allowed to drain so there is no free flowing liquids when physical removal and the loading of trucks begins. Having been submerged in water in the impoundment, the CCRs to be excavated still generally contain sufficient levels of water to keep them from dusting while being loaded into trucks. However, the highest probability of fugitive dust emissions would be during impoundment cleanout activities. If fugitive dust emissions are observed during impoundment cleaning operations all such cleaning activities will cease and the material re-wetted. Other actions such as use of alternative dust suppressants, as described in the following section, may also be performed.

3. Optional Use of Dust Dispersal Suppression Agents

If an impoundment is taken out of service for removal of the accumulated solids during a time of the year when weather conditions (excessive heat or wind) can dry the material to the point where it can become airborne, a dust dispersal suppression agent may be applied at the discretion of the station. This agent is sprayed on the exposed surface to form a uniform crust that is resistant to wind dispersal. Such agents can be effective for periods of several weeks to months prior to reapplication. The use of these agents, sometimes generally referred to by the trademark name "soil cements," is not routine but is available as an option if necessary and approved by the OEPA.

4. Hauling of CCRs from Impoundments

Once loaded onto trucks, the trucks use a retractable tarp to cover the load while in transit.

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 for wastewater treatment impoundments.¹

PROCEDURE TO LOG CITIZEN COMPLAINTS

The station maintains a fugitive dust complaint log. Any complaint that is phoned into the station is recorded in the 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 North and South Impoundments are permitted wastewater treatment units under the applicable regulations of Ohio. As such there are existing Title V permit conditions which include daily inspections of CCR conveyance equipment and require the documentation of activities and practices to minimize the creation of fugitive dust. Since the impoundments are located within the station proper there are numerous station personnel that observe the impoundments during the course of normal station operations. Abnormal conditions or the observance of fugitive emissions during routine operation or cleaning of the impoundments would be brought to the attention of station engineering and environmental staff, for further investigation and resolution. These Title V permit inspections and reports, and the citizen complaint log will be

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. Waste water treatment is specifically addressed in Chapter 4 (4.3), Wastewater Collection, Treatment, and Storage.

reviewed annually 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 North and South Impoundments are existing CCR impoundments (per 40 CFR §257.53) that are 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.

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 to the plan. 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

ATTACHMENT B

PLAN AMENDMENTS SUMMARY TABLE

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: W. H. Sammis North and South CCR Impoundments

Certification:

I, Carrie Hale Pendleton, a registered professional engineer in the state of ohio certify that this Fugitive Dust Control Plan fulfills the minimum requirements of 40 CFR §257.80(b)(1) through §257.80(b)(7), as applicable. This certification is based on my review of the W. H. Sammis Power Station North and South CCR Impoundments 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.

Printed Name: Carrie Hale Pendleton

PE License Number: E-77587 State: ohio

Signature: C.H. Pendleton

Date: 10.16.2015

Seal: C.H. Pendleton

