

Fugitive Dust Control Plan for CCR Rule

Valmont Station

Date: January 8, 2019

Revision: 2

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Appendices

A: Facility Site Map

B: Complaint Log

Revision Log

Revision No.	Revision Date	Revised Sections	Notes
0	October 19, 2015	NA	Original Publication
1	April 18, 2017	Section 2 Appendix A	EPA's 'Direct Final Rule', published August 5, 2016 contained an extended deadline of April 18, 2017 for inclusion of inactive CCR impoundments in the Fugitive Dust Plan. The Valmont Station has one inactive impoundment referred to as the EPRI Ash Settling Pond.
2	December 18, 2018	NA	Updates to reflect retirement of coal unit and closure of CCR impoundments

Certification of Report

The report shall be prepared, signed and sealed by a professional engineer.

"I hereby certify that this plan meets the requirements of the Coal Combustion Residual Rule (40 CFR 257.80(b)(7))."

Print name: Sara Lubchenko
 Signature: 
 Date: 1/8/19
 License #: 0044344



1 Introduction

On April 17, 2015 the U.S. Environmental Protection Agency (EPA) published regulations under subtitle D of the Resource Conservation and Recovery Act (RCRA) meant to control the disposal of coal combustion residuals (CCR) generated by coal fired power plants. The rule defines a set of requirements for the management of CCR in landfills and surface impoundments. 40 CFR 257.80(a) specifies that an owner or operator of a CCR landfill, surface impoundment, or lateral expansion of a CCR unit must develop a Fugitive Dust Plan by October 19, 2015 that will effectively mitigate the transport of CCR fugitive dust from the facility. Controlling fugitive dust associated with CCR at Valmont Station (Valmont) is addressed through a fugitive dust control program. Valmont is required to establish a Fugitive Dust Control Plan (Plan) and follow it at all times. This Plan has been specifically designed to outline measures that will minimize airborne dust at the plant under the CCR rule.

Valmont Station was a coal fired electric generating station that ceased operating in 2017. The bottom ash impoundments continued to receive non-CCR waste streams in 2018, after which they were closed by removal of all CCR in October 2018. Bottom ash removed from the impoundments was disposed at the on-site CCR landfill. The landfill has been temporarily closed with an interim soil cap. The landfill is expected to receive additional approved non-CCR waste (coal fines) generated from the plant site from clean-up of the former coal pile area, after which the landfill will undergo final closure in 2021 with installation of a CCR compliant cap. CCR sources are transport to and emplacement of coal fines from the former coal pile area to the CCR landfill, fugitive emissions from paved roads, and fugitive emissions from unpaved roads.

The Plan includes activities such as controlling vehicle speeds, watering of roads and work areas, observing changes in meteorological conditions, and following processes and procedures intended to minimize dust. This Plan is a formal statement of the activities and the methods specifically designed to minimize the creation of airborne dust, meeting all of the applicable requirements of the CCR Rule.

Based on experience and past implementation of the Title V fugitive dust plan, all of the control measures in place have proven to be effective in the prevention or control of airborne fugitive dust. Each measure has been carefully planned and executed based on site-specific operating conditions in order to achieve the intended control. The dust control measures are outlined in the sections below. Watering is the main process used to control fugitive dust from former coal pile area, haul roads, and CCR landfill disposal area. Additional control measures are also in place for these areas and are described in the sections below.

2 Fugitive Dust Control

2.1 Overview

The primary control for fugitive dust is the wetting of exposed CCR at the landfill during placement of non-CCR waste. Exposed CCR can become airborne due to varied weather, specifically during dry and

windy conditions. Watering is also employed on plant haul roads to control the generation of fugitive dust, as needed. Weather conditions are visually observed/monitored by Valmont staff and the contractor and watering needs are adjusted to meet operational criteria and site conditions. The following sections explain the process of controlling dust in these areas by the use of water and other control methods. The attached site map illustrates all of these areas of the facility.

2.2 CCR Dust Control Areas

Generally speaking, the process of keeping the CCR landfill, haul roads, and other areas watered sufficiently is the most appropriate method of dust control since the equipment and materials used are reliable, cost effective, and easily adjusted to site conditions. The following sections specifically identify CCR landfill, transportation routes, and the preferred control measures to reduce dusting.

2.2.1 Plant Roads (40 CFR 257.80(b)(1))

The plant haul roads are a combination of paved and unpaved roads at Valmont. Haul roads have a speed limit of 15 mph to reduce dusting. By limiting speed, the fugitive dust generation is reduced, especially from some of the heavier equipment used at the facility. The unpaved haul roads are watered as needed to eliminate any residual dusting. The use of reduced speed and water application are appropriate methods for dust control because they meet the suggested control options defined in AP-42 Chapter 13.2 .2 Unpaved Roads and they have met the requirements of the Title V fugitive dust plan.

2.2.2 Unit 5 Bottom Ash Ponds (40 CFR 227.80 (b)(1) and (2))

The former bottom ash ponds have been closed by removal of all CCR. The area has been graded and reclaimed.

2.2.3 Fly Ash Silo (40 CFR 227.80 (b)(1) and (2))

Coal fired electric generation at Valmont ceased in 2017, and with it the production of fly ash also ceased. The fly ash storage silo has been emptied of CCR and removed from service, and is no longer a CCR fugitive dust source.

2.2.4 Ash Hauling (40 CFR 227.80 (b)(1) and (2))

All ash has been placed for permanent disposal in the on-site CCR landfill, and no further ash hauling will take place. However, existing roads will be used for future transport of non-CCR waste to the CCR landfill. Waste transport and placement will be conducted by a contractor, who will have a water truck on site during active operations. The water truck will be equipped with appropriate water application devices to ensure water is applied in a manner that is effective at controlling fugitive emissions.

The process of keeping the CCR landfill, haul roads, and other areas watered sufficiently is the most appropriate method of dust control since the equipment and materials used are reliable, cost effective, and easily adjusted to changing site conditions.

2.2.5 CCR Landfill (40 CFR 227.80 (b)(1) and (2))

The landfill is located to the north of the generating units and connected by paved and unpaved roads. Non-CCR waste will be transported by trucks and hauled to the landfill. The waste will be emplaced in the landfill in a moist, conditioned state so that it is not subject to dusting upon placement. Once placed in the active landfill cell, the waste will be wheel rolled by the contractor equipment to meet the landfill compaction specifications. If needed to stabilize the placed waste and exposed CCR at the landfill until covered by soil, the active area may be watered to form a crust on the surface and prevent

dusting. Final cover will be placed according to the landfill solid waste Engineering Design and Operations Plan upon reaching final grades. The Contractor observations will determine the level of stabilization needed to control dusting and that no issues with free liquid or dusting have been noted.

2.2.5.1 Modification of Operations During High Wind Events

If suspected, the contractor can determine if high wind events over 40 mph continuous wind or 55 mph wind gusts are present at the facility by an on-site wind monitoring station at the CCR landfill. The contractor can then modify or halt landfill operations to further reduce the potential for dust generation, if needed.

2.3 Watering Procedure

Watering for fugitive dust control is conducted throughout the year. It is governed primarily by the current and anticipated meteorological and site conditions. The control of the watering program is given to the contractor who estimates the dust generation potential based on current observed conditions and their past experience. Watering is accomplished by using an appropriately equipped water truck.

2.4 Recordkeeping

The Valmont contractor can identify the time spent by its staff on watering. Also, maintenance records are kept on the water truck to assure proper operation.

3 CCR Areas Inspection (40 CFR 257.80(b)(4))

In order to assure that all measures outlined in this Plan are in place, being followed and working effectively, they will be assessed in the weekly inspection that is done as part of the CCR Rule operating criteria. The weekly inspection will include verification that all fugitive dust control measures, as outlined in the plan, are being followed effectively. Documentation of weekly inspections will be through the company's environmental management software system. If there is anything to address, a maintenance work order will be initiated and tracked through the company's work management system.

4 Fugitive Dust Complaint Log (40 CFR 257.80(b)(3))

Fugitive dust complaints received from citizens via the dedicated email account (PSCoCCRInquiries@xcelenergy.com) published on our CCR Rule Compliance Data and Information public website will be reviewed and investigated. Any citizen complaints of fugitive dust appearing to originate from the plant will be investigated immediately. A log will be kept to record all occurrences of confirmed fugitive dust from the CCR landfill. If the fugitive dust is found to have originated from the CCR landfill, follow-up and corrective actions will be taken as needed. The template for this log is included as an attachment to this Plan.

5 Plan Updates (40 CFR 257.80(b)(6))

This Fugitive Dust Control Plan will be assessed annually unless a need is identified during the weekly inspection or upon analysis of a citizen complaint. As part of the assessment, all processes and procedures will be reviewed for their effectiveness and efficiency at minimizing or eliminating the generation of fugitive dust. The plan will be updated if any new dust control measures are implemented at Valmont or new CCR unit is constructed. Lastly, the facility map will be updated with any changes to CCR management areas.

Appendix A – Facility Site Map



Appendix B – Complaint Log

