



CCR FUGITIVE DUST CONTROL PLAN

Sibley Generating Station

33200 East Johnson Road, Sibley, Missouri 64088

April 16, 2021

Table of Contents

1.0	Background	1
1.1	Facility Information	1
1.2	Coal Combustion Residuals	2
1.3	Regulatory Requirements	2
2.0	CCR Fugitive Dust Source & Control Measures	4
2.1	CCR Short-Term Storage and Management Areas	4
2.2	CCR Landfill Units	4
2.3	CCR Surface Impoundment Unit	5
2.4	Facility Roads	5
3.0	Citizen Complaint Log	6
4.0	CCR Fugitive Dust Control Plan Assessment and Amendment	6
5.0	ENGINEERING CERTIFICATION	7
Appendix A		8

Revision History

Revision Number	Revision Date	Section Revised	Summary of Revisions
0	10/19/2015	N/A	Original Format
1	2/18/2021	All	Format & control measures updated to reflect decommissioning. Added new contact information.

1.0 Background

The purpose of this CCR Fugitive Dust Control Plan (Plan) is to identify and describe the Coal Combustion Residuals (CCR) fugitive dust control measures used to effectively minimize the potential for CCR to become airborne at the Sibley Generating Station (Sibley). The following sections provide background information on the facility, CCR, and related regulatory requirements.

1.1 Facility Information

Name of Facility:	Sibley Generating Station (Sibley)
Name of Operator:	Eversource Energy, Inc (Eversource)
Operator Mailing Address:	33200 East Johnson Road, Sibley, MO 64088
Location:	Approximately 4.5 miles north of Buckner, Missouri. East of and adjacent to Sibley, Missouri
Facility Description:	The Sibley Generating Station ceased operations in 2018. Historically, Sibley was a coal-fired electric generating station that contained three coal-fired units. CCR produced at the facility included fly ash and bottom ash as slag. CCR was managed in three CCR units, including the Slag Settling Impoundment, Fly Ash Impoundment, and CCR Landfill. Fly ash was collected and either pneumatically conveyed to a silo or sluiced to the Fly Ash Impoundment. Fly ash was off-loaded from the silo for beneficial use or conditioned and transported via truck to the landfill or placed in the Fly Ash Impoundment for conditioning. The bottom ash (slag) was historically sluiced to the Slag Settling Impoundment and then moved by excavator to a concrete slab where it was loaded into trucks for beneficial use or transported to the landfill for disposal. The landfill is currently being used to dispose of coal remnants and de minimis quantities of CCR from the plant closure and is used to dispose CCR from other Eversource facilities.

1.2 Coal Combustion Residuals

CCR materials are produced at coal-fired power plants when coal is burned to produce electricity. CCR materials are managed by coal-fired power plant sites, including on-site storage, processing (such as dewatering), and final disposal, typically in CCR landfills. Due to plant decommissioning activities, no CCR(s) are generated at the facility. CCRs disposed at the facility are a component of the plant closure process. These CCR(s) include fly ash, bottom ash, and flue gas desulfurization (FGD) materials. General characteristics of these CCR materials are described below.

- **Fly Ash** – Fly ash is captured from exhaust (flue) gases by emissions control equipment such as baghouses. Fly ash is characterized by clay-sized and silt-sized fine grain materials, consisting of silica, calcium, alumina, iron and trace heavy metals. Due to the small particle size and consistency, fly ash can often be mobilized by windy conditions when it is dry. Typically, the facility burns coal which generates fly ash with self-cementing properties in the presence of water. For this reason, a crust generally forms on its surfaces, reducing the potential for dust issues from fly ash storage areas.
- **FGD Materials** – FGD materials such as gypsum are produced by FGD emissions control systems, which are designed and operated to remove sulfur dioxide (SO₂) from exhaust (flue) gases. FGD materials are generally produced as a wet sludge, which is then dewatered and managed as a dry material. Under certain conditions, FGD materials can form a crust on surfaces, reducing potential for dust issues from FGD storage areas.
- **Bottom Ash** – Bottom ash is characterized by sand-sized and gravel-sized materials, which settle by gravity to the bottom of a coal-fired furnace. Due to the heavier, larger-grained material, it is less prone to being mobilized under windy conditions when dry.

1.3 Regulatory Requirements

This plan has been developed for the Sibley Generating Station in accordance with 40 CFR 257.80(b). The CCR Rule requires preparation of a CCR Fugitive Dust Control Plan for facilities including CCR Landfills, CCR Surface Impoundments, and any lateral expansion of a CCR unit. Selected definitions from the CCR Rule are provided below.

- **CCR (coal combustion residuals)** means fly ash, bottom ash, boiler slag, and flue gas desulfurization materials generated from burning coal for the purpose of generating electricity by electric utilities and independent power producers.
- **CCR fugitive dust** means solid airborne particulate matter that contains or is derived from CCR, emitted from any source other than a stack or chimney.
- **CCR landfill** means an area of land or an excavation that receives CCR and which is not a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground or surface coal mine, or a cave. For purposes of this subpart, a CCR landfill also includes sand and gravel pits and quarries that receive CCR, CCR piles, and any practice that does not meet the definition of a beneficial use of CCR.

- **CCR surface impoundment** means a natural topographic depression, manmade excavation, or diked area, which is designed to hold an accumulation of CCR and liquids, and the unit treats, stores, or disposes of CCR.
- **CCR unit** means any CCR landfill, CCR surface impoundment, or lateral expansion of a CCR unit, or a combination of more than one of these units, based on the context of the paragraph(s) in which it is used. This term includes both new and existing units, unless otherwise specified.
- **Qualified professional engineer** means an individual who is licensed by a state as a Professional Engineer to practice one or more disciplines of engineering and who is qualified by education, technical knowledge and experience to make the specific technical certifications required under this subpart. Professional engineers making these certifications must be currently licensed in the state where the CCR unit(s) is located.

The CCR Rule requires owners or operators of these CCR facilities to adopt and document “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” (40 CFR 257.80). Owners/Operators of existing, active CCR unit were required to prepare a CCR Fugitive Dust Control Plan “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” (40 CFR 257.80 (b)(5)). Owners of inactive CCR surface impoundments must prepare a CCR Fugitive Dust Control Plan no later than April 18, 2017 (40 CFR 257.100 (e)(4)(i)). This plan has been developed to meet these requirements and is in addition to any other Occupational Safety and Health Act (OHSA) standards applicable to this facility.

2.0 CCR Fugitive Dust Source & Control Measures

Potential CCR fugitive dust sources at the site generally include, loading, unloading, transportation in trucks or on conveyors, stockpiles, vehicle traffic, and landfill placement. These general sources are categorized for Sibley for the purposes of CCR fugitive dust management as follows:

- (1) CCR short-term storage and management areas;
- (2) CCR Landfill Units;
- (3) CCR Surface Impoundment Unit; and
- (4) Facility Roads

The Sibley Generating Station has implemented these dust control measures, which are applicable and appropriate for site conditions in accordance with 40 CFR 257.80(b)(1).

Contact Information: Environmental Services Department

Address: Evergy
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Topeka, Kansas 66601

Alternate:
PO Box 418679
Kansas City, MO 64141-9679

E-mail Address: EvergyCCR@evergy.com

Phone Number: 888-471-5275
Alternate:

2.1 CCR Short-Term Storage and Management Areas

The Sibley Generating Station no longer has any active temporary storage areas. All permanent and temporary structures associated with processing/management of CCR(s) have been removed as a part of the plant decommissioning process. Due to decommissioning activities, dust control measures that were historically employed at short-term storage and management areas have been discontinued.

2.2 CCR Landfill Units

Due to plant decommissioning activities, CCR(s) are no longer generated at the Site. Any discovered or off-site CCR are conditioned before or during placement into the landfill. Water will be added, as needed, to the CCR materials to reduce wind dispersal and improve compaction during CCR placement in landfill units.

The following additional dust control measures may also be implemented at the landfill.

- During loading and unloading activities, drop height is reduced, as needed, to reduce potential for dust mobilization
- During high wind conditions, unloading operations may be reduced or halted.

After final elevations are achieved, the final cap and cover, including vegetation, will be installed and maintained to reduce the potential for CCR becoming exposed to the atmosphere.

2.3 CCR Surface Impoundment Unit

Energy has no active CCR surface impoundments at Sibley. All surface impoundments at the facility are planned for closure by removal in 2021. During excavation, the CCR(s) are stored in an encapsulated matrix or in a mixture with high water content, which would not be expected to cause dusting. If unencapsulated dredged/excavated CCR becomes dry, additional dust control measures such as adding water will be applied as necessary during loading and subsequent transportation for disposal or beneficial reuse.

2.4 Facility Roads

Due to decommissioning activities, road traffic at the facility is greatly reduced. Despite the reduction in traffic, the following dust control measures are typically implemented for roads in active use for CCR management activities at the facility.

- Reduced vehicle speed limits are enforced to reduce dust mobilization.
- During high wind conditions, operations and related traffic may be reduced or halted.
- Prior to transportation, if needed, CCR may be covered using tarps to reduce the potential for CCR becoming airborne during truck transport. If tarps are not practical or dusting is observed, water may be added to CCR prior to transportation.
- During non-freezing weather, unpaved roads at the Facility are sprayed multiple times per day using water trucks.
- Paved roads at the facility will be cleaned by a sweeper/vacuum truck and, during periods of high traffic and/or dry weather, may also be sprayed by water trucks.

3.0 Citizen Complaint Log

A specific requirement of the CCR Fugitive Dust Control regulations (40 CFR 257.80(b)(3)) requires owners and operators of all CCR units to develop and implement formal procedures within the Plan for logging citizen complaints involving CCR fugitive dust events.

Complaints received by Sibley or Evergy will be recorded by/forwarded to the designated point(s) of contact for logging and recordkeeping. Sibley will maintain records of concerns about CCR fugitive dust from the facility in accordance with 40 CFR 257.80(b)(3) using the CCR Fugitive Dust Complaint Record provided in Appendix A.

4.0 CCR Fugitive Dust Control Plan Assessment and Amendment

Evergy assesses the effectiveness of CCR Fugitive Dust Control Plans, annually, in accordance with 40 CFR 257.80(b). If practical and more effective prevention and control technology has been field-proven at the time of the review and will significantly improve dust controls, this CCR Fugitive Dust Control Plan will be amended to reflect the changes. Amended plans are certified by a qualified Professional Engineer as required by 40 CFR 257.80(b)(7). All plan changes are documented using the Revision History which prefaces this Plan.

Based on the assessment, Evergy may choose to amend this Plan if measures are deemed ineffective or if changes have been made to the areas being managed, the dust control measures, and/or other operating practices are required to continue compliance with the regulatory standards. Amendments to the current Plan will be completed in accordance with §257.80(b)(6) of the Final CCR Rule.

The state of Missouri will be notified in accordance with 40 CFR 257.106(g) when this Plan has been amended and placed in the facility operating record and on the Evergy CCR internet site.

5.0 ENGINEERING CERTIFICATION

Pursuant to 40 CFR 257.80 and by means of this certification, I attest that:

- (i) I am familiar with the requirements of the CCR Rule (40 CFR 257);
- (ii) I, or my agent, have visited and examined the Sibley Generating Station;
- (iii) the CCR Fugitive Dust Control Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of the CCR Rule;
- (iv) the CCR Fugitive Dust Control Plan meets the requirements of 40 CFR 257.80(b); and



Walter J. Martin, P.E.

Printed Name of Qualified Professional Engineer

Appendix A

CCR FUGITIVE DUST COMPLAINT RECORD

Site Name

**Time & Date of
Correspondence**

Name of Citizen

Phone Number

Mailing address

Email Address

**Topic of
Correspondence**

**Describe Observed
Event (include
date/time; wind &
conditions, other
info)**

**Required Corrective
Actions or Follow-
Up, If Applicable**
