



# CCR FUGITIVE DUST CONTROL PLAN

**Tecumseh Energy Center**  
5530 SE 2<sup>nd</sup> Street, Tecumseh, Kansas

April 16, 2021

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## Revision History

Revision Number	Revision Date	Section Revised	Summary of Revisions
0	10/15/2015	N/A	Initial Issuance
1	2/17/2021	All	Dust plan format updated & updated control measures due to plant 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 Tecumseh Energy Center (TEC). The following sections provide background information on the facility, CCR, and related regulatory requirements.

### 1.1 Facility Information

Name of Facility:	Tecumseh Energy Center (TEC)
Name of Operator:	Evergy Kansas Central, Inc (Evergy)
Operator Mailing Address:	5530 SE 2 <sup>nd</sup> Street, Tecumseh, Kansas 66542
Location:	2 miles north of Highway 70 and resides in Sections 31, Township 11 South, and Range 17 East.
Facility Description:	Evergy, Inc operated the TEC, located in Tecumseh, Kansas until 2018. This facility has undergone decommissioning and no longer has any active coal fired units. The plant formerly consisted of two operational coal-fired electric generating units. Coal Combustion Residuals (CCR) associated with burning coal included bottom ash, economizer ash, and fly ash. CCR were disposed in an on-site active CCR landfill located on TEC property. This CCR landfill is permitted under Kansas Department of Health and Environment (KDHE), Bureau of Waste Management (BWM), Permit No. 322 and is planned for final closure early in 2021.

## 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. CCRs are no longer generated at TEC due to plant decommissioning. Historically, CCRs generated at the facility include fly ash, bottom ash, and economizer ash 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.
- **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.
- **Economizer Ash** - This material is a type of fly ash but is generated and handled separately from fly ash. For the purposes of dust management, this material has characteristics similar to bottom ash.

## 1.3 Regulatory Requirements

This plan has been developed for the Tecumseh Energy Center 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 units 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)). This plan has been developed to meet these requirements and is in addition to any other Occupational Safety and Health Act (OHS) 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 TEC for the purposes of CCR fugitive dust management as follows:

- (1) Temporary Storage Areas
- (2) CCR Impoundments
- (3) CCR Landfill Units
- (4) Facility Roads
- (5) General Housekeeping

The Tecumseh Energy Center has implemented the following dust control measures, which are applicable and appropriate for site conditions in accordance with 40 CFR 257.80(b)(1).

### **2.1 CCR Temporary Storage Areas**

The Tecumseh Energy Center 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 Impoundments**

Eergy has no active CCR surface impoundments at TEC. Closure of this unit was completed on October 9<sup>th</sup>, 2018 per notice provided to the Kansas Department of Health and Environment (KDHE). Due to closure activities, dust control measures that were historically employed at the impoundment have been discontinued.

### **2.3 CCR Landfills**

The CCR Landfill, consisting of three inactive cells, is currently in the final closure process. Due to plant decommissioning, no CCR material is generated at the site and subsequently disposed within the landfill. The only CCR(s) added to the landfill will include coal remnants that are discovered and added as a part of the decommissioning process. All discovered CCR(s) are conditioned before being placed into the landfill.

The following CCR dust control measures are typically implemented at the CCR Landfill during the closure process.

- Haul trucks limit travel speeds to 10 miles per hour (mph) on any active areas.
- Drivers avoid driving on active areas of the landfill and drive in Eergy-directed travel paths to avoid area agitation.

- Abrupt starts and stops within the working face are avoided by drivers transporting through these areas.
- Any discovered CCR(s) will be placed on the ground using minimal drop heights.
- CCRs will not be placed when wind speeds exceed sustained 15 miles per hour (mph)
- If needed, water is used as the primary means of suppressing dust. Dust suppressants are utilized to minimize fugitive dust when determined appropriate. A log is maintained to record water usage.

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.

## **2.4 Facility Roads**

Due to plant decommissioning activities, transport of CCR(s) on facility roads has discontinued. Despite this reduction in CCR activity, the following dust control measures are typically implemented for roads utilized for CCR management at the facility.

- Facility roads are cleaned and maintained, as needed.
- Hauler equipment is serviced to minimize leaking and maintain normal operations.
- Posted speed limits are enforced during transport to limit mobilization.

## **2.5 General Housekeeping**

In addition to the location specific measures, any CCR(s) discovered during the decommissioning process including spilled, and/or deposited CCR material is collected and cleaned in a timely manner.

### 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 TEC or Evergy will be recorded by/forwarded to the designated point(s) of contact for logging and recordkeeping. TEC 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.

Contact Information: Environmental Services Department

Address: Evergy  
818 South Kansas Avenue  
Topeka, Kansas 66601

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

E-mail Address: [EvergyCCR@evergy.com](mailto:EvergyCCR@evergy.com)

Phone Number: 888-471-5275  
Alternate:

### 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 Kansas 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 Tecumseh Energy Center;
- (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**

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**Time & Date of  
Correspondence**

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**Name of Citizen**

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**Phone Number**

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**Mailing address**

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**Email Address**

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**Topic of  
Correspondence**

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

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

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