

# 2023 ANNUAL CCR FUGITIVE DUST CONTROL REPORT

La Cygne Generating Station

25166 East 2200 Road, La Cygne, Kansas 66040

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# **Revision History**

Revision Number	Revision Date	Section Revised	Summary of Revisions
0	12/01/2023	N/A	Original Version

#### 1.0 Background

The purpose of this Annual CCR Fugitive Dust Control Report is to describe the Coal Combustion Residuals (CCR) fugitive dust control actions taken over the past year to control CCR fugitive dust; provide a record of all citizen complaints received; and to provide a summary of corrective measures taken at the La Cygne Generating Station (La Cygne). The following sections provide background information on the facility, CCR, and related regulatory requirements.

#### 1.1 Facility Information

Name of Facility: La Cygne Generating Station (La Cygne)

Name of Operator: Evergy Metro, Inc (Evergy)

Operator Mailing Address: 25166 East 2200 Road, La Cygne, KS 66040

Location: Approximately seven miles northwest of La Cygne, Kansas.

Facility Description: The La Cygne Generating Station is a coal-fired electric generating

station that contains two coal-fired units that produce fly ash, bottom ash, and gypsum. CCRs have been, historically, managed in two CCR impoundments and one CCR Landfill. Both the Lower AQC Impoundment and Upper AQC impoundment are in the process of final closure. Fly ash is collected and pneumatically conveyed to silos where it is off-loaded for beneficial use or transported via truck to the landfill. Unit 1 bottom ash (slag) is handled though a submerged flight conveyor to paved stack-out areas where it is loaded into trucks for beneficial use or transported to the landfill for storage or disposal. Unit 2 bottom ash was sluiced to the Bottom Ash Impoundment until the end of June 2017 (when all bottom ash sluicing ceased) where it was dredged, dewatered, loaded into trucks then transported to the landfill for storage or disposal. Gypsum from both units is conveyed via conveyor and radial stacker to a concrete-contained stack-out area where it is

loaded into trucks and transported to the landfill.

#### 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.

#### 1.3 Regulatory Requirements

This report has been developed for the La Cygne Generating Station in accordance with 40 CFR 257.80 (c). The CCR rule requires preparation of an Annual CCR Fugitive Dust Control Report for facilities including CCR landfills, CCR surface impoundments, and any lateral expansion of a CCR unit. Selective 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.

The CCR Rule requires that owners or operators of CCR facilities develop and adopt "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). Evergy prepared and placed a CCR Fugitive Dust Control Plan for this facility into the facility operating record on October 19, 2015. An updated plan was placed in the facility operating record on April 16, 2021. The CCR Rule requires owners or operators to "prepare an annual CCR fugitive dust control report that includes a description of the actions taken by the owner or operator to control CCR fugitive dust, a record of all citizen complaints, and a summary of any corrective measures taken." In accordance with the same section of the CCR Rule, this report has been developed and placed within the CCR operating record on December 10, 2023.

#### 2.0 CCR Fugitive Dust Controls

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 La Cygne 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 Units; and
- (4) Facility Roads

Between December 1, 2022 and December 1, 2023, the La Cygne Generating Station implemented dust control measures and actions as follows.

#### 2.1 CCR Short-Term Storage and Management Areas

- During short-term storage, a partial enclosure was maintained to provide a wind break around the CCR gypsum and slag stack-out staging areas. Gypsum was pre-conditioned, and the gypsum conveyor was covered.
- CCR dust from fly ash was minimized by use of an enclosed pneumatic transport system and silos for staging.
- Fly ash designated for landfilling was conditioned prior to loading into trucks and/or at the landfill.
- During loading and unloading activities, drop height was reduced as needed to reduce the potential for mobilization of CCR dust.
- During high wind conditions, loading and management operations were modified, reduced, or halted.
- Bottom ash was managed wet prior to storage.
- A street sweeper was used to clean spilled CCR to prevent dusting.
- Water spray was applied as necessary to CCR prior to and/or during staging.

#### 2.2 CCR Landfill Units

- CCR was conditioned before being placed into the landfill. Water was added, as needed, to the CCR materials to reduce wind dispersal and improve compaction during CCR placement in the landfill. This also includes CCRs being excavated/relocated/regraded from other units undergoing closure.
- Water spray was applied to the exposed CCR, including on the working face, as needed.
- During high wind conditions, unloading operations at the working face were reduced or halted.

#### 2.3 CCR Surface Impoundment Unit

- In CCR surface impoundments (SI), CCR was stored as a slurry mixture with high water content and did not cause dusting.

- When CCR was dredged or removed from a CCR Surface Impoundment, additional dust control measures (such as adding water or dust suppressants) were applied, as necessary, during loading and subsequent transportation for disposal or beneficial reuse.
- Additional measures enacted, as deemed appropriate, included: reduced drop height; wind barriers, enclosures, and tarps; compaction of CCR; and modified/reduced/halted CCR operations during high winds.

### 2.4 Facility Roads

- Reduced vehicle speed limits were enforced to reduce dust mobilization.
- During high wind conditions, operations and related traffic was reduced or halted.
- During non-freezing weather, when required by operating and weather conditions, unpaved roads at the facility were sprayed multiple times per day using water trucks.
- Paved roads at the facility were cleaned by a sweeper/vacuum truck and, during periods of high traffic and/or dry weather, when required by operating and weather conditions, were sprayed by water trucks.

# 3.0 Citizen Complaints

Evergy has implemented a plan for logging of citizen CCR dust complaints in accordance with 40 CFR 257.80(b)(3). No complaints were received by La Cygne or Evergy between December 1, 2022 and December 1, 2023.

# **4.0 Summary of Corrective Measures**

The Evergy Environmental Services Department performed an annual review for logged complaints and of the CCR dust control measures in place for La Cygne Generating Station. Evergy found the measures in place were effective, and no changes or corrective measures were necessary during the period of December 1, 2022 to December 1, 2023.