



**ANNUAL CCR FUGITIVE DUST
CONTROL REPORT**

La Cygne Generating Station

25166 East 2200th Rd

La Cygne, Kansas

December 19, 2017

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SECTION 1

BACKGROUND

The purpose of this Annual CCR Fugitive Dust Control Report (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
Name of Operator:	Kansas City Power & Light Company (KCP&L)
Operator Mailing Address:	25166 East 2200 th Rd., La Cygne, KS 66040.
Location:	Approximately seven miles east of La Cygne, Kansas.
Facility Description	The La Cygne Generating Station has two coal-fired units that produce fly ash, bottom ash and gypsum. CCRs are managed in three CCR impoundments including the Bottom Ash Impoundment, Upper AQC Impoundment and Lower AQC Impoundment and one CCR Landfill. 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 through 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 is sluiced to the Bottom Ash Impoundment where it is 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. Selected definitions from the CCR Rule are provided as follows.

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 required owners or operators of CCR facilities to 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). KCP&L prepared and placed a CCR Fugitive Dust Control Plan for this facility into the facility operating record on October 19, 2015. 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.” The first annual report was developed and placed into the facility operating record on December 19, 2016, in accordance with 40 CFR 257.80 (c). In accordance with the same section of the CCR Rule, this report has been developed and placed into the CCR Operating Record no later than one year later, i.e. December 19, 2017

SECTION 2

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 surface impoundment units;
- (3) CCR landfill units; and
- (4) Facility roads.

Between October 20, 2016 and October 19, 2017, 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 was 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 Surface Impoundment Units

In CCR surface impoundments (SI), CCR was stored as a slurry mixture with high water content and did not cause dusting. CCR dredged/removed from or added to a CCR SI: 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 if the CCR became dry. Additional measures included, as deemed appropriate: reduced drop height; wind barriers, enclosures, and tarps; compaction of CCR; and modified/reduced/halted CCR operations during high winds.

2.3 CCR Landfill

- 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.
- 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.

2.4 Facility Roads

- Reduced vehicle speed limits were enforced to reduce dust mobilization. During high wind conditions, operations and related traffic were reduced or halted.
- 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.

SECTION 3

CITIZEN COMPLAINTS

KCP&L 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 KCP&L between October 20, 2016 and October 19, 2017.

SECTION 4

SUMMARY OF CORRECTIVE MEASURES

The KCP&L Environmental Services Department performed an annual review for logged complaints and of the CCR dust control measures in place for the La Cygne facility. KCP&L found the measures in place were effective, and no changes or corrective measures were necessary during the period October 20, 2016 through October 19, 2017.