



# **ANNUAL CCR FUGITIVE DUST CONTROL REPORT**

## **Montrose Generating Station**

**400 Southwest Hwy P  
Clinton, Missouri**

December 19, 2017

## TABLE OF CONTENTS

SECTION 1 BACKGROUND .....	1
1.1 Facility Information .....	1
1.2 Coal Combustion Residuals.....	1
1.3 Regulatory Requirements .....	2
SECTION 2 CCR FUGITIVE DUST CONTROLS .....	4
2.1 CCR Short-Term Storage and Management Areas .....	4
2.2 CCR Landfill .....	4
2.3 Facility Roads .....	5
SECTION 3 CITIZEN COMPLAINTS .....	6
SECTION 4 SUMMARY OF CORRECTIVE MEASURES .....	7

## 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 Montrose Generating Station (Montrose). The following sections provide background information on the facility, CCR, and related regulatory requirements.

#### **1.1 Facility Information**

Name of Facility: Montrose Generating Station

Name of Operator: Kansas City Power & Light Company (KCP&L)

Operator Mailing Address: 400 Southwest Hwy. P, Clinton, MO 64735

Location: Approximately ten miles southwest of Clinton, Missouri.

Facility Description The Montrose Generating Station has two coal-fired units that produce fly ash and bottom ash. CCRs are managed in three CCR units, including the North Ash Impoundment, the South Ash 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 tanker truck to the landfill. Bottom ash is sluiced to dewatering bins where it is loaded into trucks for beneficial use or transported to the landfill for storage or disposal.

#### **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 Montrose 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 Montrose 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 Montrose Generating Station implemented dust control measures and actions as follows.

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

- CCR dust from fly ash was minimized by use of an enclosed pneumatic transport system and silos for staging. The silos were equipped with bin vent filters to minimize dust generation.
- Fly ash designated for landfilling was loaded from the silo into enclosed tankers using a telescoping chute to reduce the potential for mobilization of CCR dust. The loading chute had over-suction to prevent fugitive dust emissions during unloading.
- During high wind conditions, loading and management operations were modified, reduced or halted.
- Bottom ash was managed wet by sluicing to dewatering bins, then was loaded into trucks for hauling to the landfill or beneficial use.
- Spilled CCR was wetted as necessary and removed using loaders and vacuum systems 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 that was excavated from surface

impoundments was handled and hauled with sufficient moisture to prevent dusting so did not require water be added.

### **2.3 CCR Landfill**

- CCR was conditioned before being placed into the landfill.
- Pneumatic tanker trucks deliver the fly ash to the landfill where it is conditioned during unloading using a pneumatic ash/water mixing process.
- 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 non-freezing weather, when required by operating and weather conditions, roads at the facility were sprayed multiple times per day using 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 Montrose 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 Montrose 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.