



**CCR POST-CLOSURE PLAN**  
**Montrose CCR Landfill**  
**Montrose Generating Station**

**400 Southwest Hwy P**  
**Clinton, Missouri**

**Kansas City Power & Light Company**

October 13, 2016

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**MONTROSE GENERATING STATION  
 CCR LANDFILL  
 CCR POST-CLOSURE PLAN  
 REVISION HISTORY**

<b>Revision Number</b>	<b>Revision Date</b>	<b>Section Revised</b>	<b>Summary of Revisions</b>

Revisions are accomplished in accordance with Section 5.

## SECTION 1

### BACKGROUND

The purpose of this CCR Post-Closure Plan (Plan) is to identify and describe the Coal Combustion Residuals Rule (CCR Rule) post-closure measures needed to care for the CCR landfill facility at the Montrose Generating Station (Montrose) in accordance with the CCR Rule. The following sections provide background information on the facility and related regulatory requirements.

#### **1.1 Facility Information**

Name of Facility: Montrose Generating Station

Name of CCR Unit: CCR Landfill

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

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

Location: Approximately ten miles southwest of Clinton, Missouri.

Facility Description: The Montrose Generating Station has three coal-fired units that produce fly ash, economizer ash, and bottom ash. CCR is either shipped off-site for beneficial use or transported to the landfill for disposal. Related landfill facilities include a groundwater monitoring system, storm water and leachate management systems, and haul/access roads.

#### **1.2 Regulatory Requirements**

This plan has been developed for the Montrose Generating Station CCR Landfill in accordance with 40 CFR 257.104 (d). The CCR Rule requires preparation of a Post-Closure Plan for all existing CCR landfills and surface impoundments in operation as of October 19, 2015 that plan to close by leaving the CCR in place.

The owner or operator of a CCR unit must prepare a written post-closure plan that includes, at a minimum, the information specified in 40 CFR 257.104 (d)(1)(i) through (iii). These items and the section of this plan that is responsive to each as follows:

- (i) A description of the monitoring and maintenance activities required in 40 CFR 257.104 (b) for the CCR unit, and the frequency at which these activities will be performed (Section 2);
- (ii) The name, address, telephone number, and email address of the person or office to contact about the facility during the post-closure care period (Section 3); and
- (iii) A description of the planned uses of the property during the post-closure period (Section 4).

The CCR Rule requires owners or operators of CCR units prepare an initial written CCR Post Closure Plan no later than October 17, 2016 (40 CFR 257.104 (d)(2)).

Selected definitions from the CCR Rule are provided below.

**Closed** means placement of CCR in a CCR unit has ceased, and the owner or operator has completed closure of the CCR unit in accordance with § 257.102 and has initiated post-closure care in accordance with § 257.104

**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 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 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.

**Qualified Person** means a person or persons trained to recognize specific appearances of structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or safety of the CCR unit by visual observation and, if applicable, to monitor instrumentation.

## SECTION 2

### MONITORING AND MAINTENANCE

Post-closure care will be accomplished for a period of 30 years in accordance with 40 CFR 257.104 (c). Post-Closure activities under the CCR Rule fall into the general categories of environmental monitoring and maintenance.

#### **2.1 Environmental Monitoring**

Environmental monitoring will continue into the post-closure period. Groundwater monitoring will be conducted as required by the CCR Rule. Detection monitoring for groundwater will be accomplished semi-annually in accordance with the CCR Rule.

Monitoring in the form of landfill inspections by a Qualified Person for structural weakness and other conditions that are or could disrupt the operation or safety of the landfill will be completed at least every seven days. Inspections will be recorded on appropriate forms and repairs to the final cover will be made as necessary to correct the effects of settlement, subsidence, erosion, or other events, and to prevent run-on and run-off from eroding or otherwise damaging the final cover. Annual inspections of the landfill will be accomplished by a Qualified Professional Engineer as required by the CCR Rule.

#### **2.2 Maintenance**

Post-closure maintenance care conducted during the 30-year post-closure period will be performed as needed, and will include the following activities:

- Maintain the integrity and effectiveness of the final cover system, including mowing, making repairs to the cover and vegetation as necessary to correct the effects of settlement, subsidence, and erosion.
- Maintain surface water drainage facilities to prevent run-on and run-off from damaging the final cover.
- Maintain and operate the leachate collection system.
- Maintain and operate the groundwater monitoring system.

## SECTION 3

### CONTACT INFORMATION

The post-closure contact office for the landfill will be:

Environmental Manager's Office  
Kansas City Power & Light Company  
PO Box 418679  
Kansas City, MO 64141-9679

E-mail: [EnvResponder@kcpl.com](mailto:EnvResponder@kcpl.com)

Phone: (816) 556-2200



## **SECTION 4**

### **POST-CLOSURE USE**

The landfill site will be closed as an open space. Post-closure use of the landfill property will not disturb the integrity of the final cover, liners, containment systems, or the functioning of the monitoring systems, unless necessary to comply with the CCR Rule. Any other disturbance, such as removal of CCR for beneficial use, is allowed if the owner or operator of the CCR unit demonstrates that disturbance of the final cover, liner, or other component of the containment system, will not increase the potential threat to human health or the environment. The demonstration must be certified by a qualified professional engineer, and a notification will be provided to the Missouri Department of Natural Resources, Solid Waste Management Program, that the demonstration has been placed in the operating record and on the KCP&L publicly accessible Internet site.

## **SECTION 5**

### **AMENDMENT OF CCR POST-CLOSURE PLAN**

The owner or operator may amend the initial or any subsequent written post-closure plan developed pursuant to 40 CFR 257.104 (d) (1) of this section at any time.

The Plan must be amended whenever:

- There is a change in the operation of the CCR unit that would substantially affect the written post-closure plan in effect; or
- After post-closure activities have commenced, unanticipated events necessitate a revision of the written post-closure plan.

The written post-closure plan must be amended at least 60 days prior to a planned change in the operation of the facility or CCR unit, or no later than 60 days after an unanticipated event requires the need to revise an existing written post-closure plan. If a written post-closure plan is revised after post-closure activities have commenced for a CCR unit, the current post-closure plan must be amended no later than 30 days following the triggering event.

A written certification from a qualified professional engineer that the initial and any amendment of the written post-closure plan meets the requirements of § 257.104 (d) must be obtained.

Plan changes will be documented using the Revision History which prefaces this Plan. Substantial changes to this plan will be certified by a Qualified Professional Engineer.

## SECTION 6

### ENGINEERING CERTIFICATION

Pursuant to 40 CFR 257.104 (d) (4) and by means of this certification, I attest that:

- (i) I am a Qualified Professional Engineer licensed in the State of Missouri;
- (ii) I am familiar with the requirements of the CCR Rule (40 CFR 257);
- (iii) I, or my agent, have visited and examined the Montrose Generating Station landfill;
- (iv) the Post-Closure Plan has been prepared in accordance with good engineering practice, including consideration of applicable industry standards, and with the requirements of the CCR Rule;
- (v) this CCR Post-Closure Plan meets the requirements of 40 CFR 257.104 (d); and
- (vi) the pages certified herein include Pages i, ii, 1 through 7; altogether a total of 9 pages in a protected Adobe™ document.

Walter J. Martin, P.E.

Printed Name of Qualified Professional Engineer  
1200 Main St, Kansas City, MO 64105, 816-556-2200

P.E. SEAL, STATE OF MISSOURI

