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# Bottom Ash Pond Post-Closure Plan



**Kansas City  
Board of Public Utilities**

**Nearman Creek Power Station  
Project No. 87813**

**Revision 0  
10/17/2016**

# **Bottom Ash Pond Post-Closure Plan**

prepared for

**Kansas City  
Board of Public Utilities  
Nearman Creek Power Station  
Kansas City, Kansas**

**Project No. 87813**

**Revision 0  
10/17/2016**

prepared by

**Burns & McDonnell Engineering Company, Inc.  
Kansas City, Missouri**

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## INDEX AND CERTIFICATION

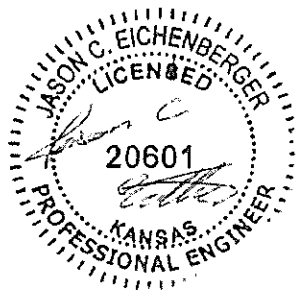
Kansas City  
Board of Public Utilities  
Bottom Ash Pond  
Post-Closure Plan  
Project No. 87813

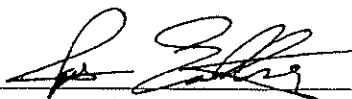
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### Certification

I hereby certify, as a Professional Engineer in the state of Kansas, that the information in this document was assembled under my direct personal charge. This report is not intended or represented to be suitable for reuse by the Kansas City Board of Public Utilities or others without specific verification or adaptation by the Engineer.



  
\_\_\_\_\_  
Jason C. Eichenberger, P.E.  
Kansas License #20601

Date: 10/17/2016

This document has been digitally  
signed and sealed. October 17, 2016

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**LIST OF ABBREVIATIONS**

| <b><u>Abbreviation</u></b> | <b><u>Term/Phrase/Name</u></b>              |
|----------------------------|---|
| BMcD                       | Burns & McDonnell                           |
| CCR                        | Coal Combustion Residual                    |
| CCR Rule                   | Coal Combustion Residual Rule               |
| CFR                        | Code of Federal Regulations                 |
| CY                         | Cubic Yards                                 |
| EPA                        | Environmental Protection Agency             |
| KCBPU                      | Kansas City Board of Public Utilities       |
| KDHE                       | Kansas Department of Health and Environment |
| Nearman Creek              | Nearman Creek Power Station                 |
| RCRA                       | Resource Conservation and Recovery Act      |
| SAP                        | Sampling and Analysis Plan                  |
| U.S.C.                     | United States Code                          |

## 1.0 INTRODUCTION

On April 17, 2015, the Environmental Protection Agency (EPA) issued the final version of the federal Coal Combustion Residual Rule (CCR Rule) to regulate the disposal of coal combustion residual (CCR) materials generated at coal-fired units. The rule is administered as part of the Resource Conservation and Recovery Act (RCRA, 42 United States Code [U.S.C.] §6901 et seq.), using the Subtitle D approach.

The existing CCR surface impoundment at Kansas City Board of Public Utilities' (KCBPU's) Nearman Creek Power Station (Nearman Creek) is subject to the CCR Rule and as such must develop a Post-Closure Plan for the surface impoundment present at Nearman Creek (herein referred to as the Bottom Ash Pond) per 40 Code of Federal Regulations (CFR) §257.104. This document serves as the Post-Closure Plan for the Bottom Ash Pond, at Nearman Creek.

This post-closure plan is in addition to, not in place of, any other applicable site permits, environmental standards, or work safety practices.

## 2.0 PLAN OBJECTIVES

Per §257.104(d)(1), the Post-Closure Plan must contain the following:

- A description of post-closure care maintenance activities (and frequency of these activities) including the following:
  - Maintaining the integrity and effectiveness of the final cover system (if capped in place), including making repairs to the final cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the final cover.
  - Maintaining the groundwater monitoring system and monitoring the groundwater in accordance with the requirements of §257.90 through §257.98.
- The name, address, telephone number, and email address of the person or office to contact about the facility during the post-closure care period.
- A description of the planned uses of the property during the post-closure period.
  - Post-closure use of the property shall not disturb the integrity of the final cover, liner(s), or any other component of the containment system, or the function of the monitoring system unless necessary to comply with §257.104 or if the owner or operator of the CCR unit demonstrates that the disturbance (including any removal of CCR) will not increase the potential threat to human health or the environment.

Per §257.104(d)(4), KCBPU must obtain certification from a qualified professional engineer that the post-closure plan, and subsequent updates to the plan, meet the requirements of §257.104. This sealed document serves as that certification.



### 3.0 EXISTING CONDITIONS

Nearman Creek is operated by KCBPU, and is located in Kansas City, Kansas. The Nearman Creek Bottom Ash Pond is located to the northeast of the power plant. The facility is located in Wyandotte County. The Bottom Ash Pond has been in operation since 1980 and is used for the disposal of CCR material from Nearman Creek.

The Bottom Ash Pond design documents were prepared by Lutz, Daily & Brain of Shawnee Mission, Kansas, in 1979. Available design documents documenting impoundment maintenance and improvements were reviewed by Burns & McDonnell Engineering Company, Inc. (BMcD) to gain an understanding of the Bottom Ash Pond design. A Closure Plan was prepared by BMcD per §257.102(b)(1) of the Federal CCR Rule. The Bottom Ash Pond will be closed as described in the Closure Plan, which is available on KCBPU's CCR website.

## 4.0 POST-CLOSURE PLAN

Post-closure maintenance shall be as described in §257.104(b) of the CCR Rule. The Nearman Creek Bottom Ash Pond is an existing CCR surface impoundment not subject to the design criteria under §257.70 and is therefore exempt from the leachate collection and removal system criteria under §257.104(b)(2).

### 4.1 Groundwater Monitoring

KCBPU will conduct semi-annual sampling of the Bottom Ash Pond groundwater monitoring network per §257.90 through §257.98 of the CCR Rule, for the entire 30 years of post-closure care if the unit is capped in place. Should any of the sampling activities cause KCBPU to enter into or remain in an Assessment Monitoring Program (§257.95) at the end of the 30-year post-closure care period, per §257.104(c)(2) of the CCR Rule KCBPU must continue monitoring the groundwater until KCBPU is able to return to the Detection Monitoring Program (§257.94). Sampling for compliance with the CCR Rule will be performed according to a Sampling and Analysis Plan (SAP) for groundwater monitoring at the Bottom Ash Pond.

### 4.2 Site Inspections

Site inspections will be performed annually during the post-closure care period to confirm that the integrity and effectiveness of the final cover system is maintained per Section §257.104(b)(1). Maintenance of the final cover will include making repairs to the final cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the final cover. During the site inspections, KCBPU will also inspect groundwater monitoring wells to confirm that they are structurally intact and appear to be in good working condition.

### 4.3 Post-Closure Contact

Per §257.104 (d)(ii), KCBPU has designated a contact person for the Bottom Ash Pond post-closure care period. The individual's contact information is as noted below in Table 4-1:

**Table 4-1: Post-Closure Contact Person**

|                    |   |
|--------------------|---|
| <b>Name</b>        | Ingrid Setzler  |
| <b>Affiliation</b> | Kansas City Board of Public Utilities   |
| <b>Address</b>     | Ingrid Setzler<br>Director of Environmental Services<br>c/o Kansas City Board of Public Utilities<br>300 North 65th Street<br>Kansas City, KS 66102 |
| <b>Phone No.</b>   | 913-573-9806  |
| <b>Email</b>       | isetzler@bpu.com  |

#### 4.4 Property Use

The Bottom Ash Pond will be maintained as grassland during the post-closure care period. The Bottom Ash Pond is within a secured power plant facility and will not be accessed by the public.

#### 4.5 Completion of Post-Closure Care

No later than 60 days following the completion of the post-closure care period, KCBPU will prepare a notification verifying that post-closure care has been completed and will place the notification in the facility's CCR Operating Record. The notification must include the certification by a qualified professional engineer in the State of Kansas, that post-closure care has been completed in accordance with the written Closure Plan in effect and the requirements of §257.104.

**6.0 RECORD OF REVISIONS AND UPDATES**

| <b>Revision Number</b> | <b>Date</b> | <b>Revisions Made</b>     | <b>By Whom</b>    |
|------------------------|-------------|---------------------------|-------------------|
| 0                      | 10/17/2016  | Initial Post-Closure Plan | Burns & McDonnell |
|                        |             |                           |                   |
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## 5.0 REVISIONS AND AMENDMENTS

The KCBPU Bottom Ash Pond Post-Closure Plan will be placed in the CCR Operating Record by October 17, 2016. The plan must be amended whenever there is a change in operation of the CCR unit that affects the current or planned post-closure activities. The Post-Closure Plan will be amended 60 days prior to a planned change in operation, or within 60 days following an unplanned change in operation. If a written Post-Closure Plan is revised after post-closure activities have commenced, it will be amended no later than 30 days following the triggering event. The Post-Closure Plan and any amendments will be certified by a qualified professional engineer in the State of Kansas for meeting the requirements of §257.104 of the CCR Rule. All amendments and revisions will be placed on KCBPU's CCR publicly accessible internet site within a reasonable amount of time following placement in the facility's CCR Operating Record. A record of revisions and updates made to this document is included in Section 6.0.



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