Post-Closure Plan

Existing CCR Impoundment 40 CFR 257.104(d)

Asbury Power Plant

2133 Uphill Road Asbury, Missouri 64832

October 17, 2016

Prepared For:

The Empire District Electric Company 602 S. Joplin Avenue Joplin, Missouri 64801









TABLE OF CONTENTS

1.0 INTRODUCTION	1
2.0 PLAN CERTIFICATION 257.102(B)(4)	1
3.0 MONITORING AND MAINTENANCE 3.1 Final Cover Maintenance 3.2 Groundwater Monitoring System	2 2 2
4.0 POST-CLOSURE CONTACT	2
5.0 POST-CLOSURE PROPERTY USE	3
6.0 NOTIFICATION	3
7.0 POST-CLOSURE PLAN AMENDMENT	3
8.0 CERTIFICATION	4
9.0 COMPLETION OF POST-CLOSURE	4

ATTACHMENTS:

Figures



1.0 INTRODUCTION

257.104(d) Written post-closure plan—(1) Content of the plan. The owner or operator of a CCR unit must prepare a written post-closure plan that includes, at a minimum, the information specified in paragraphs (d)(1)(i) through (iii) of this section.

40 CFR 257.104(d) of the CCR Rule requires the development of written Post-Closure Plan. The CCR rule requires the owner or operator of the CCR unit to conduct post-closure care for 30 years. The Empire District Electric Company's Asbury Power Plant has one CCR Impoundment. The site occupies the north half of Section 17, Township 30 North, and Range 33 West on the Asbury 7.5-Minute Quadrangle Map as seen in **Figure 1.**

2.0 PLAN CERTIFICATION 257.102(B)(4)

The undersigned Professional Engineer (P.E.) is familiar with the requirements of 40 CFR Part 257. The attached CCR Post-Closure Plan for the existing CCR Impoundment at the Asbury Power Plant has been prepared in accordance with the requirements of 257.104(d), Initial Written Post-Closure Plan.

Name:	Lindsey R. Henry, P.E.
Signature:	
Date:	October 17, 2016

Registration Number: E-21592

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State: Missouri

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3.0 MONITORING AND MAINTENANCE

257.104(d)(i) A description of the monitoring and maintenance activities required in paragraph (b) of this section for the CCR unit, and the frequency at which these activities will be performed.

The CCR Impoundment that serves the Asbury Power Plant is approximately 116.5 acres. The CCR Impoundment is subdivided into three (3) operational Ponds, identified as the Lower Pond, Upper Pond, and South Pond (**Figure 2**). The Lower Pond, Upper Pond, and South Pond are separated by interior earthen berms and can be hydraulically separated from one another for operational purposes. At this time it is anticipated that the Upper and South Ponds will be clean closed. This area encompasses approximately 36.5 acres. The Lower Pond area is approximately 80 acres and will be closed by leaving the CCR in place.

This Post-Closure Plan is for the Lower Pond area, the 80-acre portion of the CCR Impoundment. Empire anticipates the clean closure of the remaining 36.4 acres if the CCR Impoundment. 257.104(a)(3) states that post-closure care is not required for the clean-closed area. Post-Closure care maintenance requirements for the Lower Pond area will be addressed below.

3.1 Final Cover Maintenance

The final cover system will be maintained and repairs completed to maintain the integrity and effectiveness of the final cover system. The final cover system will be mowed semi-annually. As part of this activity the final cover system should be inspected to determine if any settlement, subsidence, and erosion has occurred. If necessary additional fill material should be placed and reseeding to establish vegetation.

3.2 Groundwater Monitoring System

The Groundwater Monitoring System will be properly maintained and monitored. If any well or the entire system is no longer in use it should be properly abandoned. Groundwater should be monitored in accordance with EPA or MDNR requirements.

4.0 POST-CLOSURE CONTACT

257.104(d)(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.

The Post-Closure Contact is below:

Director of Energy Supply Services
The Empire District Company
602 S Joplin Avenue
PO Box 127
Joplin, MO 64802
(417)625-5100
environmental.ccr@empiredistrict.com



5.0 POST-CLOSURE PROPERTY USE

257.104(d)(iii) 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 systems unless necessary to comply with the requirements in this subpart. Any other disturbance 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, including any removal of CCR, will not increase the potential threat to human health or the environment. The demonstration must be certified by a qualified professional engineer, and notification shall be provided to the State Director that the demonstration has been placed in the operating record and on the owners or operator's publicly accessible Internet site.

It is currently planned to clean close the Upper Ponds and South Pond. No Post-Closure care is required of these ponds. It is planned to utilize these clean-closed ponds as stormwater control basins.

The Lower Pond will have the CCR closed in place and will require post-closure care as outlined in this plan. At this time this area will be maintained as an open vegetated area.

6.0 NOTIFICATION

257.104(d)(2) Deadline to prepare the initial written post-closure plan—(i) Existing CCR landfills and existing CCR surface impoundments. No later than October 17, 2016, the owner or operator of the CCR unit must prepare an initial written post-closure plan consistent with the requirements specified in paragraph (d)(1) of this section.

257.104(d)(2)(iii) The owner or operator has completed the written post-closure plan when the plan, including the certification required by paragraph (d)(4) of this section, has been placed in the facility's operating record as required by § 257.105(i)(4).

Empire will post the written Post-Closure Plan to their website by October 17, 2016. In addition, the State Director will be notified of the completion of this plan and subsequent placement on the website.

7.0 POST-CLOSURE PLAN AMENDMENT

257.104(d)(3) Amendment of a written post-closure plan. (i) The owner or operator may amend the initial or any subsequent written post-closure plan developed pursuant to paragraph (d)(1) of this section at any time.

257.104(d)(3)(ii) The owner or operator must amend the written closure plan whenever: (A) There is a change in the operation of the CCR unit that would substantially affect the written post-closure plan in effect; or

(B) After post-closure activities have commenced, unanticipated events necessitate a revision of the written post-closure plan.



257.104(d)(3)(iii) The owner or operator must amend the written post-closure plan 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 owner or operator must amend the written post-closure plan no later than 30 days following the triggering event.

The Post-Closure Plan will be changed should there be a change of the operation of the CCR unit that would have a substantial impact to the current Post-Closure Plan. These amendments will be completed as required by 257.104(d)(3)(iii).

8.0 CERTIFICATION

257.104(d)(4) The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the initial and any amendment of the written post-closure plan meets the requirements of this section.

This Post-Closure Plan has been certified in Section 2.0 of this report. Any amendments to the original Post-Closure Plan will also be certified by a qualified professional engineer.

9.0 COMPLETION OF POST-CLOSURE

257.104(e) Notification of completion of post-closure care period. No later than 60 days following the completion of the post-closure care period, the owner or operator of the CCR unit must prepare a notification verifying that post-closure care has been completed. The notification must include the certification by a qualified professional engineer verifying that post-closure care has been completed in accordance with the closure plan specified in paragraph (d) of this section and the requirements of this section. The owner or operator has completed the notification when it has been placed in the facility's operating record as required by 257.105(i)(13).

257.104(f) The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in 257.105(i), the notification requirements specified in 257.106(i), and the Internet requirements specified in 257.107(i).

Empire will prepare a Notification of Completion of the Post-Closure Care Period in accordance with the requirements of 257.104(e). Empire will post the completion of the Post-Closure Care Period to their website as required by 257.107(i). In addition, the State Director will be notified of the completion of this plan and subsequent placement on the website.



FIGURES



Asbury Power PlantPost-Closure Plan - Existing CCR Impoundment Site Location Map



