

Summary of Liner Construction for Neal North Energy Center CCR Impoundments 1, 2, and 3A



MidAmerican Energy Company

Coal Combustion Residual Rule Compliance

Rev. 0
4/11/2018

Summary of Liner Construction for Neal North Energy Center CCR Impoundments 1, 2, and 3A

Prepared for

**MidAmerican Energy Company
Coal Combustion Residual Rule Compliance
Sergeant Bluff, Iowa**

4/11/2018

Prepared by

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

INDEX

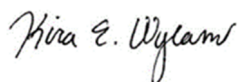
**MidAmerican Energy Company
Summary of Liner Construction
for Neal North Energy Center
CCR Impoundments 1, 2, and 3A**

Report Index

<u>Chapter Number</u>	<u>Chapter Title</u>	<u>Number of Pages</u>
1.0	Introduction	1
2.0	Liner Construction	1

Certification

I hereby certify, as a Professional Engineer in the State of Iowa, that the information in this document was assembled under my direct supervisory control. This report is not intended or represented to be suitable for reuse by the MidAmerican Energy Company or others without specific verification or adaptation by the Engineer.



Kira Wylam, P.E. (IA #23129)

Date: 4/11/2018

Kira Wylam
License Number 23129

My license renewal date is December 31, 2018

Pages or sheets covered by this seal: As noted above

1.0 INTRODUCTION

On April 17, 2015, the Environmental Protection Agency issued the final version of the federal Coal Combustion Residual (CCR) Rule to regulate the disposal of 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 §6901 et seq.], using the Subtitle D approach.

In June 2016, a United States Court of Appeals granted a settlement between the utility industry and environmental groups that removed the effects of the “early closure” provisions for inactive surface impoundments under the EPA’s CCR Rule. As such, MidAmerican Energy Company is subject to the CCR Rule and must document the liner construction for existing surface impoundments per 40 Code of Federal Regulations §257.71. This document provides the liner construction documentation for the existing Neal North Energy Center Impoundments 1, 2 and 3A.

An existing surface impoundment is classified as lined if the liner was constructed with any of the following:

- A liner consisting of a minimum of two feet of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} centimeters per second.
- A composite liner that meets the requirements of §257.70(b).
- An alternative composite liner that meets the requirements of §257.70(c).

2.0 LINER CONSTRUCTION

Impoundments 1, 2 and 3A were designed in 1970 by Ebasco Services Incorporated. Construction drawings indicate that Impoundments 1, 2 and 3A were not built with a formal liner system. Documents are not available to verify the existence of a liner system that meets the requirements set forth in the CCR Rule under §257.71. Therefore, Impoundments 1, 2 and 3A at the Neal North Energy Center are being classified as unlined CCR surface impoundments pursuant to §257.71(a)(3)(i).



CREATE AMAZING.

Burns & McDonnell World Headquarters
9400 Ward Parkway
Kansas City, MO 64114
O 816-333-9400
F 816-333-3690
www.burnsmcd.com