

# **Notification of Closure**

## Bottom Ash Landfill - Stanton Station

Submitted to:

## **Great River Energy**

2875 Third Street SW Underwood, North Dakota 58576

### Submitted by:

# **Golder Associates Inc.** 7245 W Alaska Drive, Suite 200, Lakewood, Colorado, USA 80226 +1 303 980-0540 1775717 August 31, 2020

August 31, 2020 1775717

# **Table of Contents**

1.0	INTRODUCTION	.1
2.0	CLOSURE PLAN AND FINAL COVER SYSTEM	.1
3.0	CLOSURE CONSTRUCTION AND QUALITY ASSURANCE	.1
4.0	CERTIFICATION	. 2



i

August 31, 2020 1775717

#### 1.0 INTRODUCTION

The purpose of this document is to comply with the notification and certification requirements for coal combustion residual (CCR) facility closure in accordance with the federal CCR rule, 40 CFR Part 257. 40 CFR Part 257.102(h) of the EPA CCR Rule requires that a notification of closure be placed in the facility's operating record after completion of closure of the CCR unit. This notification must include a certification by a qualified professional engineer that closure of the facility was completed in accordance with the closure plan as required by 40 CFR Part 257.102(f)(3).

This document serves as a notification of completion of closure for the Bottom Ash Landfill at Great River Energy's Stanton Station located near Stanton, North Dakota. The Bottom Ash Landfill received CCR and non-CCR waste streams until June 24, 2020. Final closure of the Bottom Ash Landfill was completed at the end of July 2020.

#### 2.0 CLOSURE PLAN AND FINAL COVER SYSTEM

The Bottom Ash Landfill was closed with CCRs left in place in accordance with the requirements of 40 CFR Part 257.102(d) and as described in the closure and post-closure plan dated September 5, 2019. The final cover system at the Bottom Ash Landfill at Stanton Station meets the prescriptive final cover system requirements and consists of the following components (from bottom to top):

- A minimum 18-inch infiltration layer with a hydraulic conductivity no greater than 1x10<sup>-5</sup> cm/sec; and
- A minimum 6-inch topsoil erosion layer that is capable of sustaining native plant growth.

## 3.0 CLOSURE CONSTRUCTION AND QUALITY ASSURANCE

Prior to placement of the final cover system, waste in the Bottom Ash Landfill was compacted to a firm and unyielding surface and re-graded to slopes between 3% and 15% to direct stormwater off and away from the closed and covered landfill and to reduce erosion. After re-grading of waste materials, the infiltration layer and topsoil layer were constructed in accordance with the construction drawings and specifications.

Construction quality assurance (CQA) activities were performed at the Bottom Ash Landfill to confirm closure met the requirements of 40 CFR Part 257.102(d) of the CCR Rule as well as those of the closure and post-closure plan. CQA activities monitored throughout construction included:

- Survey to confirm cover thickness requirements:
  - Confirmation that the infiltration layer met the design thickness of 18 inches (minimum).
  - Confirmation that the topsoil layer (i.e., "erosion layer") met the design thickness of 6 inches (minimum).
- Earthworks Testing to confirm compliance with design requirements:
  - Laboratory index testing.
  - In-situ moisture and density testing.
  - Hydraulic conductivity testing of the infiltration layer to confirm a hydraulic conductivity of that layer no greater than 1x10<sup>-5</sup> cm/sec.

A CQA report documenting the final cover construction will be included in the operating record.



August 31, 2020 1775717

## 4.0 CERTIFICATION

The undersigned attest to the completeness and accuracy of this notification of closure (per 40 CFR Part 257.102(h) and certification that closure was completed in accordance with the closure and post-closure plan (per 40 CFR Part 257.102(f)(3)).

Golder Associates Inc.

Craig Schuettpelz, PE Senior Engineer

Todd Stong, PE
Associate and Senior Consultant



Golder and the G logo are trademarks of Golder Associates Corporation

 $https://golderassociates.sharepoint.com/sites/1775717/deliverables/letters/closure certifications/1775717\_balclosurecert\_31aug20.docx$ 



golder.com