



Coal Combustion Residuals Impoundment
Retrofit Completion and Liner Completion Certifications

Keystone-Conemaugh Projects, LLC
Conemaugh Generating Station
Ash Filter Pond B and C Reconstruction
West Wheatfield Township, Indiana County, Pennsylvania

GAI Project Number: C190459.03
December 2023



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Professional Engineer's Certification

I, the undersigned Professional Engineer, hereby certify that I am familiar with the technical requirements of 40 Code of Federal Regulations (CFR) Section 257.102. It is my professional opinion, as a Professional Engineer licensed in the Commonwealth of Pennsylvania, that the activities outlined in the Retrofit Plan for Ash Filter Ponds B and C (GAI, 2023) have been completed in accordance with good and accepted construction and engineering practices as exercised by others practicing in the same discipline(s), under similar circumstances, at the same time, and in the same locale. It is my professional opinion that the alternative composite liner has been constructed in accordance with the requirements of 40 CFR Section 257.72.

40 CFR Section 257.102 is from the United States Environmental Protection Agency's "Disposal of Coal Combustion Residuals from Electric Utilities," published in the Federal Register on April 17, 2015, with an effective date of October 19, 2015.

This Professional Engineer's Certification is limited to the information available to GAI at the time this report was prepared. The use of the words "certification" and/or "certify" in this document shall be interpreted and construed as a Statement of Professional Opinion and is not and shall not be interpreted or construed as a guarantee, warranty or legal opinion.

Adam Benjamin Scheller
Printed Name of Professional Engineer

PE082946
Commonwealth of Pennsylvania License Number


Signature of Professional Engineer

12/28/2023
Date



1.0 Introduction

The Conemaugh Generating Station (Station) is a steam electric generating station located along the Conemaugh River in West Wheatfield Township, Pennsylvania (PA). Four ash filter ponds (AFPs) are located at the Station. The AFPs consist of AFPs A, B, C, and D. All of the AFPs were constructed, and are operated, under a PA Department of Environmental Protection (PaDEP) permit. The AFPs function as settling ponds and are part of the Station's ash water recycle system. During Station operations, bottom ash is sluiced from the ash hoppers to the hydrobins. Overflow and drainage from the hydrobins is then discharged to the AFPs, where the coal combustion residual (CCR) material is permitted to settle.

Ash Filter Ponds B and C were retrofitted in accordance with the written Retrofit Plan (GAI, 2023) and 40 Code of Federal Regulations (CFR) §257.102(k)(1). Retrofitting consisted installation of liner systems that meet the requirements specified in Title 40, Part 257, Subpart D, *Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments* (CCR Rule).

Retrofit activities were initiated in April 2023 and was substantially complete on December 18, 2023.

2.0 Retrofit Activities

The retrofit activities first included the removal of CCR including soils and sediments beneath the liner per the requirements of 257.102(k)(1)(i) and as described in the Retrofit Plan (GAI, 2023). The retrofit also included placement and compaction of earthen fill and the installation of a liner system to meet the requirements of the CCR Rule.

The liner system is composed of the following materials, from bottom to top:

- ▶ Subbase [contaminant resistant (enhanced) geocomposite clay liner (EGCL)].
- ▶ Secondary liner [60-mil textured high-density polyethylene (HDPE) geomembrane].
- ▶ Geocomposite drainage net and perforated pipe collection system.
- ▶ Composite primary liner (EGCL and 60-mil textured HDPE geomembrane).
- ▶ 16 ounce per square yard non-woven cushion geotextile.
- ▶ Protective cover consisting of a concrete uniform section mat.

Ash Filter Ponds B and C have been retrofitted in accordance with the Retrofit Plan (GAI, 2023) and §257.102 (k)(1). Construction was substantially complete on December 18, 2023.

3.0 References

GAI Consultants, Inc. (GAI), 2023. *Coal Combustion Residuals Impoundment, Liner Design Certification and Retrofit Plan*, Conemaugh Generating Station, Ash Filter Ponds B, and C, New Florence, Pennsylvania. March 2023.

United States Environmental Protection Agency (EPA), 2015. *40 CFR Parts 257 and 261 Hazardous and Solid Waste Management Disposal System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule*, April 17.