

Coal Combustion Residuals Unit 2023 Periodic Hazard Potential Classification Assessment Report

Richmond Power & Light
Whitewater Valley Station
Surface Impoundment
Wayne County, Indiana

GAI Project Number: C151119.25

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Table of Contents

1.0 Introduction2

2.0 Purpose2

3.0 Hazard Classification.....2

4.0 Basis for Classification2

5.0 References.....3

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Certification/Statement of Professional Opinion

The Coal Combustion Residuals 2023 Periodic Hazard Potential Classification Assessment (Assessment) for the Whitewater Valley Power Station (Station) Surface Impoundment was prepared by GAI Consultants, Inc. (GAI). The Assessment may contain findings and determinations that are based on certain information that, other than for information GAI originally prepared, GAI has relied on but not independently verified. This Certification/Statement of Professional Opinion is therefore limited to the information available to GAI at the time the Assessment was written. On the basis of and subject to the foregoing, it is my professional opinion as a Professional Engineer licensed in the State of Indiana that the Assessment has been prepared in accordance with good and accepted engineering practices as exercised by other engineers 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 Assessment was prepared consistent with the requirements of § 257.73(a)(2) of the United States Environmental Protection Agency's "Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments," published in the Federal Register on April 17, 2015 with an effective date of October 19, 2015 (40 CFR 257 Subpart D), and meeting the provisions of the "Extension of Compliance Deadlines for Certain Inactive Surface Impoundments: Response to Partial Vacatur," effective October 4, 2016.

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.

GAI Consultants, Inc.



Charles F. Straley, P.E.
Senior Engineering Manager

Date Apr 13, 2023



Acronyms

Assessment	CCR 2023 Periodic Hazard Potential Classification Assessment Report
CCR	Coal Combustion Residuals
CCR Rule	"Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments" 40 CFR 257 Subpart D (2015)
CFR	Code of Federal Regulations
EPA	United States Environmental Protection Agency
GAI	GAI Consultants, Inc.
Impoundment	Surface Impoundment
IN	Indiana
RP&L	Richmond Power & Light
Station	Whitewater Valley Station

1.0 Introduction

The Whitewater Valley Station (Station) is owned by Richmond Power and Light (RP&L) and is located in Richmond, Indiana (IN). The station includes a Surface Impoundment (Impoundment), which is used for the long term storage of Coal Combustion Residuals (CCR).

The Impoundment is located on RP&L property at the Whitewater Valley Station in Wayne County, Indiana (coordinates 39° 48' 12.9" North and 84° 53' 54.8" West). The Impoundment is located in the northwestern corner of the property.

The Impoundment is currently inactive and is regulated as an existing CCR Surface Impoundment under the United States Environmental Protection Agency's (EPA's) "Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments" [40 CFR 257 Subpart D] published in the Federal Register on April 17, 2015 with an effective date of October 19, 2015 (CCR Rule), and meeting the provisions of the "Extension of Compliance Deadlines for Certain Inactive Surface Impoundments: Response to Partial Vacatur," effective October 4, 2016.

2.0 Purpose

This 2023 periodic 5-year Hazard Potential Classification Assessment (Assessment) is prepared pursuant to the requirements in Section 257.73(a)(2) of the CCR Rule. In accordance with 40 CFR § 257.73(f), this assessment must be completed every five years.

3.0 Hazard Classification

According to § 257.53 of the CCR Rule, hazard classifications are:

- Low hazard, which means that "failure or mis-operation results in no probable loss of human life and low economic and/or environmental losses. Losses are principally limited to the surface impoundment owner's property."
- Significant hazard, where "failure or mis-operation results in no probable loss of human life, but can cause economic loss, environmental damage, disruption of lifeline facilities, or impact other concerns."
- High hazard, where "failure or mis-operation will probably cause loss of human life."

The 2023 periodic hazard classification of the Impoundment, pursuant to the CCR rule, is assigned as a "significant hazard potential CCR surface impoundment" [40 CFR § 257.73(a)(2)].

4.0 Basis for Classification

The references listed in Section 5.0 of this Assessment were used as the basis to make this periodic "significant hazard" classification. The following items are noted:

1. The Impoundment is located adjacent to and upgradient of properties owned by others.
2. Available mapping indicates that inundation resulting from a failure or mis-operation of the Impoundment could potentially impact the adjacent properties owned by others.

In GAI's opinion, there is a potential for environmental damage and economic loss due to release of CCR material through a breach. A breach flowing into the adjacent properties is not expected to cause a loss of human life, but may cause economic loss and environmental damages. These criteria correspond to a Significant Hazard Potential designation per the CCR Rule [40 CFR § 257.53]. The Impoundment is being classified as a significant hazard potential classification in this Assessment.

5.0 References

Beals-Moore and Associates, Inc. 2016. *Survey, Whitewater Valley Power Station.*

Google Maps. 2023. *Whitewater Valley Power Station.* Retrieved on April 3, 2023.

United States Geological Survey. 2013. *Richmond, Indiana Quadrant.*

GAI Consultants. 2018. *Hazard Potential Classification Assessment Report.* April 2018.