# Former Milesburg Ash Disposal Basin
# Coal Combustion Residual Annual Report

## Former Milesburg Power Station
## Centre County, Pennsylvania

GAI Project Number: C150917.62

February 2025

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## Certification/Statement of Professional Opinion

The Annual Inspection of the former Milesburg Ash Disposal Basin was performed by GAI Consultants, Inc. (GAI) on Friday, January 24, 2025. The Inspection was based on certain information identified in Section 3.0 that GAI has relied on but not independently verified and the visual observations made by GAI personnel at the Site during specific site visits. Therefore, this Certification/Statement of Professional Opinion is limited to the information available to GAI at the time the Inspection was performed. On the basis of and subject to the foregoing it is my professional opinion as a Professional Engineer licensed in the Commonwealth of Pennsylvania that the Inspection has been performed in accordance with good and accepted engineering practices as exercised by other engineers practicing in the same discipline(s), under similar circumstances and at the time and in the same locale. It is my professional opinion that the Annual Inspection Report was prepared consistent with the requirements 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 and amended on May 8, 2024 with an effective date of November 8, 2024.

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 to be interpreted or construed as a guarantee, warranty or legal opinion.

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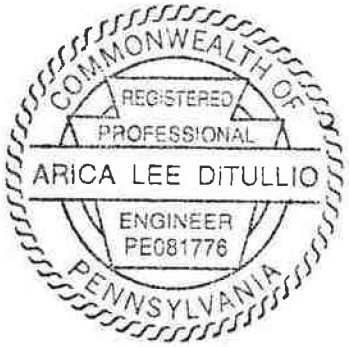

# 1.0 Purpose

Pursuant to the Federal Coal Combustion Residuals (CCR) Rule at 40 CFR 257.83 and 257.100(f)(3)(iv), each CCR unit (including a legacy CCR surface impoundment) is to have an annual inspection and report prepared by a qualified professional engineer. The inspection is to include:

- A review of available information regarding the status and condition of the CCR unit, including, but not limited to, files in the operating record;
- A visual inspection of the CCR unit to identify signs of distress or malfunction of the CCR unit and appurtenant structures; and
- A visual inspection of any hydraulic structures underlying the base of the CCR unit or passing through the dike of the CCR unit for structural integrity and continued safe and reliable operation.

The Inspection Report is to include:

- Any changes in geometry of the impounding structure since the previous annual inspection;
- The location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection;
- The approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection;
- The storage capacity of the impounding structure at the time of the inspection;
- The approximate volume of the impounded water and CCR at the time of the inspection;
- Any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit and appurtenant structures; and
- Any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection.

This report fulfills the requirements for the initial annual inspection of a legacy CCR surface impoundment as outlined at Section 257.100(f)(3)(iv) of the CCR Rule.

# 2.0 Introduction

The former Milesburg Ash Disposal Basin (Ash Disposal Basin) is a legacy CCR surface impoundment located approximately 0.25 miles west of the former Milesburg Power Station (Station), an inactive electric utility located in the borough of Milesburg in Centre County, Pennsylvania (PA).

Based on review of available historic documentation and the surrounding topography, the former Ash Disposal Basin is a side-hill impoundment. Historic documentation and current topography indicate the former Ash Disposal Basin was approximately 20 acres during Station operation. In June 2024 the former Ash Disposal Basin was observed to contain localized areas of ponded water and dense vegetation. The former Ash Disposal Basin is bounded by Bald Eagle Creek to the north and forested areas to the west, south, and east. Karst topography exists in the general vicinity of the former Ash Disposal Basin. A utility right-of-way borders the former Ash Disposal Basin to the south and east.

Based on a Site Investigation Report completed in June 1980, the former Ash Disposal Basin was used to receive fly ash and bottom ash when it was operational. Available Station records reviewed do not contain record of an identification number assigned to the former Ash Disposal Basin by the state.

# 3.0 Information Review

Section 257.83(b)(1)(i) of the CCR Rule states that an inspection includes "a review of available information regarding the status and condition of the CCR unit, including, but not limited to, files available in the operating record (e.g., CCR unit design and construction information required by §257.73(c)(1) and §257.74(c)(1), previous periodic structural stability assessments required under §257.73(d) and §257.74(d), the results of inspections by a qualified person, and results of previous annual inspections)".

GAI reviewed the following available information prior to performing the inspection:

- 7-day inspection reports from inspections conducted since the former Ash Disposal Basin became subject to the rule on November 8, 2024;
- Historic aerial photographs; and
- Available drawings, reports, and other historical documentation.

Specific historical documents reviewed are listed in the References section. Conversations were held with personnel before and during the Inspection to discuss the current state of the former Ash Disposal Basin and the typical process for the inspectors' weekly reports.

Additionally, an informal file review request was submitted to the PA Department of Environmental Protection (PADEP) to obtain any additional historic documentation for the site for review. As of the date of posting, no additional historic documentation for the site has been provided by PADEP.

# 4.0 Visual Inspection

## 4.1 General Information

The inspection was performed on Friday, January 24, 2025 by James Shields, P.E. and Taylor Boring of GAI. They were accompanied by West Penn Power representatives Jeff Kapolka, Elbert Rohrbough, Jay Newbaker, and Zachary Milanak. The weather conditions were cold and sunny, with temperatures ranging from 20 to 30 degrees Fahrenheit.

## 4.2 Inspection Strategy and Route

The GAI team inspected the former Ash Disposal Basin and its facilities by making visual observations and recording site conditions.

The inspection started at the northeast corner of the former Ash Disposal Basin and followed along the north embankment to the discharge riser, which serves as the primary spillway, then proceeded along west side embankment to the uphill side of the unit. Upon reaching the south western corner of the former Ash Disposal Basin, the inspection followed the uphill side of the unit, which is the southern edge, returning to the northeast corner of the former Ash Disposal Basin. The inspection observed the slopes, a monitoring well, the basin discharge riser and discharge location, and the top of the embankment.

## 4.3 Facility Conditions

The north and west crests of the embankment and the slope to Bald Eagle Creek were examined, and no cracking or slumping was observed. No visual signs of slope instability were observed. The crest alignment followed the designed alignment per available historic documentation with no visual indication of lateral or vertical movement. There was no standing pool observed within the former Ash Disposal Basin during the inspection. The June 1980 Site Investigation Report recommended that the existing riser structure within the former Ash Disposal Basin be lowered to allow stormwater out of the area; it appears that this change was made some time after 1980, although it is unclear whether the riser structure still functions. The entirety of the embankment and former Ash Disposal Basin area is covered in saplings to fully mature trees with low levels of underbrush; the tree species present indicate

a transition from young to mature forest. The southern edge of the former Ash Disposal Basin is adjacent to the hillside, and the unit appears to accept some stormwater run-off from the hillside into the former Ash Disposal Basin.

## 4.4 Geometry

Pursuant to §257.83(b)(2)(i), "any changes in the geometry of the impounding structure since the previous annual inspection" are reported.

Based on visual inspection and a review of the available historic documentation, no changes to the geometry of the former Ash Disposal Basin were observed.

## 4.5 Instrumentation

Pursuant to §257.83(b)(2)(ii), "the location and type of existing instrumentation and the maximum recorded readings of each instrument since the previous annual inspection" are reported.

There is no instrumentation currently used to monitor the former Ash Disposal Basin. A review of available historic documentation (Drawing 400-516) indicates the presence of three monitoring points labeled as MP-1, MP-2 and MP-3. No other survey monuments, piezometers, or other monitoring instrumentation still in-place were identified in the historical documentation.

During the annual inspection, MP-2, which appears to be a monitoring well or piezometer, was observed at the base of the embankment between the embankment and Bald Eagle Creek. The inspection visually identified the discharge pipe of the former Ash Disposal Basin riser which appears to be the location of MP-3 per historical Drawing 400-516. The inspection did not locate the MP-1 monitoring location which is located on the hillside above the former Ash Disposal Basin per historical Drawing 400-516.

No readings, data, or engineering details from these monitoring points have been discovered to date through a review of historic documentation for the site.

## 4.6 Depth and Elevation of Impounded Water and CCR

Pursuant to CFR §257.83(b)(2)(iii), "the approximate minimum, maximum, and present depth and elevation of the impounded water and CCR since the previous annual inspection" are reported.

Presently, the former Ash Disposal Basin is not operational, and no monitoring instrumentation exists to record the depth and elevation of impounded water and CCR. Impounded surface water within the former Ash Disposal Basin is minimal and occurs only as a result of stormwater. There was no standing water observed within the former Ash Disposal Basin at the time of the inspection. The elevation of impounded CCR within the former Ash Disposal Basin varies from an estimated 710.0 to 725.0 feet (average estimated as 717.5 feet) based on a review of existing topography. The minimum, maximum, and average depths of impounded CCR is estimated as 10 feet, 25 feet, and 17.5 feet, respectively, based on a review of existing topography and comparison to historic Drawing GA-59538.

## 4.7 Storage Capacity

Pursuant to CFR §257.83(b)(2)(iv), "the storage capacity of the impounding structure at the time of the inspection" is reported.

The approximate storage capacity of the former Ash Disposal Basin 210,000 cubic yards. This value is an estimate based on existing topographic features of the site.

## 4.8 Volume of Impounded Water and CCR

Pursuant to CFR §257.83(b)(2)(v), "the approximate volume of the impounded water and CCR at the time of the inspection" is reported.

The approximate volume of the impounded CCR and water in the former Ash Disposal Basin at the time of the inspection is estimated as 120,000 cubic yards. This volume is estimated based on the

information contained in the June 1980 Site Investigation Report. Per the June 1980 Site Investigation Report, the former Ash Disposal Basin was not used for ash disposal after 1974, although it was used to store and manage water from the Station until closure.

### 4.9 Structural Appearance

Pursuant to CFR §257.83(b)(2)(vi), "any appearances of an actual or potential structural weakness of the CCR unit, in addition to any existing conditions that are disrupting or have the potential to disrupt the operation and safety of the CCR unit and appurtenant structures" are reported.

Based on visual inspection, the former Ash Disposal Basin appeared to have no structural weaknesses, no existing conditions that are disrupting or that have the potential to disrupt the safety of the CCR unit at the time of inspection. The former Ash Disposal Basin is not currently operational.

### 4.10 Unit Performance

Pursuant to CFR §257.83(b)(2)(vii), "any other change(s) which may have affected the stability or operation of the impounding structure since the previous annual inspection" are reported.

Based on a visual inspection, there did not appear to be any other changes that would affect the stability of the former Ash Disposal Basin. The former Ash Disposal Basin is not currently operational.

## 5.0 Conclusions and Recommendations

During the January 24, 2025 visual inspection of the former Ash Disposal Basin, GAI did not identify any signs of distress or malfunction that would affect its structural condition. No releases of CCR were observed during the initial annual inspection. It is recommended that large vegetation present on the embankment be removed.

# 6.0 References

West Penn Power Company, *Federal CCR Rule 7-Day Inspection Form*, November 2024 through January 2025.

GAI Consultants, Inc, Milesburg Ash Disposal Area Site Investigation, June 1980.

West Penn Power Company, *Milesburg Power Station Demolition*, September 21, 1999.

West Penn Power Company, *Drawing GA-59538 (Ash Disposal Pond Height Additions Proposed Schemes)*, April 20, 1970.

West Penn Power Company, *Drawing GA-59537 (Ash Disposal Basin – Discharge Pipe and Cut-Off Collar)*, July 1, 1970.

West Penn Power Company, *Drawing 400-516 (Milesburg Power Station Topographical Plan of Ash Disposal Area),* August 24, 1971.

# APPENDIX A
## Annual Inspection Checklist



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transforming ideas into reality®

**Legacy CCR Surface Impoundment**
**Annual Inspection Checklist**

| | | | |
|---|---|---|---|
| Project Name | CCR Legacy Rule Initial Annual Inspection and Report - Former Milesburg Power Station | Impoundment Name | Former Ash Disposal Basin |
| Project No. | C150917.62 | Date | 1/24/2025 |
| Inspector Name | James Shields, Taylor Boring | Weather Conditions | Mostly Sunny |
| Time | 10:00 am - 12:00 pm | Temperature | 20 - 30° F |

| **Review of Available Information (Preamble and 257.83(b)(i))** | **Reviewed** | |
|---|---|---|
| Files in operating record | yes | reviewed prior to inspection |
| Design and construction drawings | yes | reviewed prior to inspection |
| Previous inspection forms | yes | reviewed prior to inspection |
| Previous structural assessments | N/A | reviewed prior to inspection |
| Signage | yes | reviewed prior to inspection |
| Status and condition of impoundment | yes | reviewed prior to inspection |

**Comments:**
Available historic documentation was reviewed prior to the inspection. The available historic documentation did not include any previous structural assessments.

| **Visual Inspections (Preamble and 257.83)** | | | **Comments** | | |
|---|---|---|---|---|---|
| Weakness or malfunction of CCR or appurtenant structure? | yes | **no** | | | |
| Hydraulic structures under base or dike of CCR unit safe and reliable? | **yes** | no | Riser structure appears to have been lowered sometime after 1980; unclear whether riser structure still functions. | | |
| Any changes in geometry? | yes | **no** | No changes observed based on comparison to available historic documentation. | | |
| Any surface erosion detected? (257.73) | yes | **no** | | | |
| Approximate depth and elevations of impounded water and CCR? | min: 10 feet deep (El. 710.0 ft.) | | max: 25 feet deep (El. 725.0 ft.) | average: 17.5 feet deep (El. 717.5 ft.) | |
| Impoundment storage capacity (current)? | approximately 210,000 cu. yds | | | | |
| Approximate volume of impounded water and CCR? | approximately 120,000 cu. yds. | | | | |
| Location of instrumentation and max. reading? | No instrumentation present. | | | | |