# Former Mad River Ash Pond
# Coal Combustion Residual Annual Report

## Former Mad River Power Station
## Clark County, Ohio

GAI Project Number: C150917.61

February 2025

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## Certification/Statement of Professional Opinion

The Annual Inspection of the former Mad River Ash Pond was performed by GAI Consultants, Inc. (GAI) on Thursday, January 30, 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 State of Ohio 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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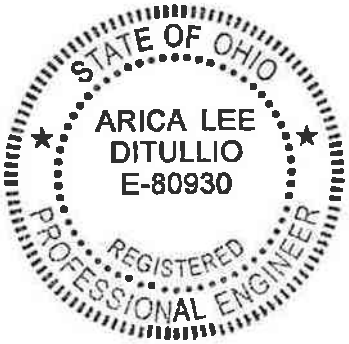

# 1.0 Purpose

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 Mad River Ash Pond (Ash Pond) is a legacy CCR surface impoundment located approximately 0.15 miles southeast of the former Mad River Power Station (Station), an inactive electric utility located in the city of Springfield in Clark County, Ohio (OH).

It is not possible to determine what type of impoundment the former Ash Pond was from a review of available historic documentation and surrounding topography. Following shutdown of the facility, the former Ash Pond was graded and partially re-vegetated. Portions of the former Ash Pond's embankments are still in place. It is not possible to determine the size or extent of formerly impounded areas of the former Ash Pond through a review of historic documentation. In June 2024, a large portion of the former Ash Pond was observed to be thickly vegetated. The former Ash Pond is bounded by a railroad track to the north, Mad River to the west, an automotive salvage yard and City of Springfield Wastewater Treatment Plant to the south, and both industrial and vacant land to the east. Karst topography is present in the vicinity of the former Ash Pond.

Available Station records reviewed do not contain record of an identification number assigned to the former Ash Pond 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 Pond 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 Pond and the typical process for the inspectors' weekly reports.

Additionally, an informal file review request was submitted to the OH Environmental Protection Agency (OHEPA) 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 OHEPA.

# 4.0 Visual Inspection

## 4.1 General Information

The inspection was performed on Thursday, January 30, 2025 by Derek Medved and Taylor Boring of GAI. They were accompanied by Ohio Edison representatives Jeff Kapolka, Elbert Rohrbough, and Zachary Milanak. The weather conditions were mostly cloudy, with temperatures ranging from 40 to 45 degrees Fahrenheit.

## 4.2 Inspection Strategy and Route

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

The inspection started at the northwest corner of the former Ash Pond and proceeded along the west side embankment. Upon reaching the southwestern corner of the former Ash Pond, the inspection followed the southern edge, then the eastern and northern embankment, and returning to the northwest corner of the former Ash Pond. The inspection observed the berms of the former Ash Pond, an abandoned sluice line, a potential monitoring well, top of the embankment, and the outside toe of the berms.

## 4.3 Facility Conditions

The crests and outside faces of the embankments were examined, and no cracking or slumping was observed. No visual signs of slope instability were observed other than all-terrain vehicle (ATV) trails eroding the top and faces of the embankments The crest alignment followed the alignment per available historic documentation with no visual indication of lateral or vertical movement. There was no standing pool observed within the former Ash Pond during the inspection. The entirety of the embankment and former Ash Pond area is covered in saplings to fully mature trees with some underbrush. Review of historic aerial imagery indicates that some of the trees may have been present during use of the impoundment.

A potential groundwater monitoring well or piezometer was observed in the southwest corner of the former impoundment. A locked casing was observed. A groundwater seep with orange staining was

observed in the bank of the Mad River, just outside of the former Ash Pond embankment and west of the well casing. It is unknown whether the seep and potential monitoring well are related. No historical information was found on either the potential monitoring well or the seepage.

## 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 Pond were observed. ATV trails remain present within the unit, on top of the berms and on the faces of the berm embankments. ATV trails up and over the berms continue to rut and erode the berms in multiple locations.

## 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 Pond. A review of available historic documentation did not indicate monitoring locations. No other survey monuments, piezometers, or other monitoring instrumentation still in-place were identified in the historical documentation.

During the annual inspection, a potential monitoring well or piezometer was observed inside the former Ash Pond at the southwestern corner. The inspection visually identified the casing exposed approximately 18 inches above the ground. The casing had a lid and a padlock. No information is known about this potential monitoring point at the time of this writing.

No readings, data, or engineering details from the observed potential monitoring well or any other 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 Pond 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 Pond is minimal and occurs only as a result of stormwater in puddles and tire ruts formed from ATV trails throughout the unit and on top of the berms. There were some minor frozen puddles and ruts observed on the trails. No other impounded standing water was observed within the former Ash Pond at the time of the inspection. The elevation of impounded CCR within the former Ash Disposal Basin varies from an estimated 892.0 to 905.0 feet (average estimated as 898.5 feet) based on a review of existing topography. The minimum, maximum, and average depths of impounded CCR is estimated as 1 foot, 7 feet, and 4 feet, respectively, based on a review of existing topography and comparison to an assumed topographic surface prior to construction of the former Ash Pond. Note that no historic documents with topographical information prior to the installation of the former Ash Pond have been identified during a review of available files.

## 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 Pond is 422,000 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 Pond at the time of the inspection is estimated as 236,000 cubic yards. This estimate was developed based on a review of existing topography and comparison to an assumed topographic surface prior to construction of the former Ash Pond.

### 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 Pond 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 Pond 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 Pond. The former Ash Pond is not currently operational.

## 5.0 Conclusions and Recommendations

During the January 30, 2025 visual inspection of the former Ash Pond, 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.

The following are GAI's recommendations to be completed when weather permits or during normal maintenance activities:

1. Remove large vegetation present on the embankment.
2. Continue to monitor the site for evidence of trespassing and install additional notices to dissuade entry.
3. Implement barriers to prevent ATV traffic from entering the site.
4. Address areas where ATV trails have caused significant rutting and erosion.
5. Investigate the observed orange seepage near Mad River.

# 6.0 References

Ohio Edison Company, *Federal CCR Rule 7-Day Inspection Form*, November 2024 through January 2025.

Resource Management International, Inc., *Preliminary Site Assessment – Ohio Edison Mad River Generating Facility Site,* January 11, 1993.

Ohio Edison Company, *Drawing S12P-0017-0002-0103 (Mad River Property Plan),* September 24, 1952.

Ohio Edison Company, *Drawing 12:017 (Mad River Property Plan),* December 14, 1992.

Ohio Edison Company, *Drawing S12N-0017-0002-0103 (Mad River Property Plan)*, May 5, 1993.

# APPENDIX A
## Annual Inspection Checklist

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

| | | | |
|---|---|---|---|
| Project Name | CCR Legacy Rule Initial Annual Inspection and Report - Former Mad River Power Station | Impoundment Name | Former Mad River Ash Pond |
| Project No. | C150917.61 | Date | 1/30/2025 |
| Inspector Name | Derek Medved, Taylor Boring | Weather Conditions | Mostly Cloudy |
| Time | 10:00 am - 12:30 pm | Temperature | 40 - 45°F |

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

**Comments:**
Available historic documentation was reviewed prior to 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 | None observed. | | |
| Any changes in geometry? | yes | **no** | No change observed based on comparison to available historic documentation. | | |
| Any surface erosion detected? (257.73) | **yes** | no | ATV trails and tire ruts throughout impoundment, on and over embankment, with erosion. | | |
| Approximate depth and elevations of impounded water and CCR? | min: 1 foot deep (El. 892.0 ft.) | | max: 7 feet deep (El. 905.0 ft.) | average: 4 feet deep (El. 898.5 ft) | |
| Impoundment storage capacity (current)? | 422,000 cu. yds | | | | |
| Approximate volume of impounded water and CCR? | 236,000 cu. yds. | | | | |
| Location of instrumentation and max. reading? | No instrumentation present. | | | | |