

# **2025 Annual Dam and Dike Inspection Report**

**Bottom Ash Pond Complex**

**Former Philo Power Plant  
Franklin Realty Company  
Philo, OH**

**November 2025**

Prepared for: Franklin Realty Company – Former Philo Power Plant

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# 2025 Annual Dam and Dike Inspection Report

## Former Philo Power Plant Bottom Ash Pond Complex

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Dan Murphy, P.E.

APPROVED BY David A. Miller DATE 12.02.2025  
David A. Miller, P.E.  
Director – Ash Management Services



I certify to the best of my knowledge, information and belief the information contained in this report meets the requirements of 40 CFR § 257.83(b).

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## Attachments

- Attachment A –Inspection Location Map
- Attachment B – Inspection Photographs

## 1.0 INTRODUCTION

This report was prepared by AEP Ash Management Services, in part, to fulfill requirements of 40 CFR 257.83 for the legacy CCR surface impoundments inspections and to provide Franklin Realty Company an evaluation of the Bottom Ash Pond Complex at the former Philo Power Plant.

The inspection was performed on November 4, 2025. The inspection party consisted of Mr. Dan Murphy, P.E., Mr. Blake Arthur, P.E., and Mr. Wesley Prince. Weather conditions during the inspection were partly cloudy, and the temperature was near 60°F. There was about 0.9 inches of rainfall recorded over the seven days prior to the inspection, with no rain the day prior to the inspection.

## 2.0 DESCRIPTION OF IMPOUNDMENTS

The Philo Power Plant began commercial operation in October 1924 and was closed by the middle of 1975. The Bottom Ash Pond Complex is separated from the Muskingum River by an earthen berm that has an elevation of approximately 702 feet msl. The Bottom Ash Complex is approximately 9 acres and is located adjacent to the Muskingum River in Muskingum County, Ohio. The Bottom Ash Pond Complex consists of three cells separated by splitter dikes, two Bottom Ash ponds and a Clearwater Pond. While the ponds were in service, the total storage capacity of all three cells of the Bottom Ash Complex is approximately 83,000 CY. While in operation, the water elevation was controlled with an outfall structure for each of the three cells. The outfalls from each of the three cells combined into a single outlet pipe before being discharged to the Muskingum River.

### 3.0 REVIEW OF AVAILABLE INFORMATION (257.83(b)(1)(i))

In addition to the current visual inspection, a review of available information regarding the status and condition of the Bottom Ash Pond Complex, including files available in the operating record, was conducted. Available information consists of design and construction information. Based on the findings of the current visual inspection and the review of the available data, it is concluded that the facility is performing as intended in the design documents and there were no signs of actual or potential structural weakness or adverse conditions.

## 4.0 INSPECTION (257.83(b)(1)(ii))

### 4.1 CHANGES IN GEOMETRY SINCE LAST INSPECTION (257.83(b)(2)(i))

No changes in geometry since last inspection were found.

### 4.2 INSTRUMENTATION (257.83(b)(2)(ii))

There is no instrumentation at the Bottom Ash Pond Complex.

### 4.3 IMPOUNDMENT CHARACTERISTICS (257.83(b)(2)(iii, iv, v))

Table 1 is a summary of the minimum, maximum, and present depth and elevation of the impounded water & CCR since the previous annual inspection; the storage capacity of the impounding structure at the time of the inspection; and the approximate volume of the impounded water and CCR at the time of the inspection.

The information in this table is based on visual observations made during the inspection.

<b>Table 1: Bottom Ash Pond Complex Characteristics</b>	
Approximate <b>Minimum</b> depth (elevation) of impounded water since last annual inspection	None
Approximate <b>Maximum</b> depth (elevation) of impounded water since last annual inspection	None
Approximate <b>Present</b> depth of impounded water at the time of the inspection	No water visible
Approximate <b>Minimum, Maximum, and Present</b> depth (elevation) of CCR since last annual inspection	Ash Depth Varies in Pond from 1 to 14 feet. Unchanged since last inspection.
Storage Capacity of impounding structure at the time of the inspection [crest el]	Approximately 83,000 CY
Approximate volume of impounded water at the time of the inspection	None
Approximate volume of CCR at the time of the inspection	Approximately 14,500 CY

## 4.4 DEFINITIONS OF VISUAL OBSERVATIONS AND DEFICIENCIES

This summary of the visual observations uses terms to describe the general appearance or condition of an observed item, activity or structure. The meaning of these terms is as follows:

Good: A condition or activity that is generally better or slightly better than what is minimally expected or anticipated from a design or maintenance point of view.

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**Fair/Satisfactory:** A condition or activity that generally meets what is minimally expected or anticipated from a design or maintenance point of view.

**Poor:** A condition or activity that is generally below what is minimally expected or anticipated from a design or maintenance point of view.

**Minor:** A reference to an observed item (e.g., erosion, seepage, vegetation, etc.) where the current maintenance condition is below what is normal or desired, but which is not currently causing concern from a structure safety or stability point of view.

**Significant:** A reference to an observed item (e.g. erosion, seepage, vegetation, etc.) where the current maintenance program has neglected to improve the condition. Usually conditions that have been identified in the previous inspections, but have not been corrected.

**Excessive:** A reference to an observed item (e.g., erosion, seepage, vegetation, etc.) where the current maintenance condition is above or worse than what it is normal or desired, or which may have affected the ability of the observer to properly evaluate the structure or particular area of interest or which may be a concern from a structure's safety or stability point of view.

This document also uses the definition of a “deficiency” as referenced in the CCR rule section §257.83(b)(5) Inspection Requirements for CCR Surface Impoundments. This definition has been assembled using the CCR rule preamble as well as guidance from MSHA, “Qualifications for Impoundment Inspection” CI-31, 2004. These guidance documents further elaborate on the definition of deficiency. Items not identified as a deficiency are considered routine maintenance activities or items to be monitored.

A “deficiency” is some evidence that a dam has developed a condition that could impact the structural integrity of the dam. There are four general categories of deficiencies. These four categories are described below:

1. Uncontrolled Seepage

Uncontrolled seepage is seepage that is not behaving as the design engineer has intended. An example of uncontrolled seepage is seepage that comes through or around the embankment and is not collected and safely carried off by a drain. Seepage that is collected by a drain can still be uncontrolled if it is not safely transported. Seepage that is not clear and is turbid would also be considered as uncontrolled. Seepage that is unable to be measured and/or observe it is considered uncontrolled seepage. [Wet or soft areas are not considered as uncontrolled seepage but can lead to this type of deficiency. These areas should be monitored more frequently.]

2. Displacement of the Embankment

Displacement of the embankment is a large scale movement of part of the dam. Common signs of displacement are cracks, scarps, settlement, bulges, depressions, sinkholes and slides.

3. Blockage of Water Control Appurtenances

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Blockage of water Control Appurtenances is the restriction of flow at spillways, decant or pipe spillways, or drains.

4. Erosion

Erosion is the gradual movement of surface material by water, wind or ice. Erosion is considered a deficiency when it is more than a minor routine maintenance item.

#### 4.5 VISUAL INSPECTION (257.83(b)(2)(i))

A visual inspection of the Bottom Ash Pond Complex was conducted to identify signs of distress or malfunction of the impoundment and appurtenant structures which includes its hydraulic structures. Specific items inspected included structural elements of the dam such as upstream and downstream slopes, crest, and toe; as well as appurtenances such as the outlet/spillway structure. Photographs taken during the inspection are provided in Attachment B - Photolog.

The following summarizes the visual inspection of the Bottom Ash Pond Complex:

1. The upstream and downstream slopes of the Bottom Ash Pond Complex are in fair condition. All the slopes need vegetation established to stabilize them from erosion.
2. The crest of the dam is in fair condition and is used as an access road. There were no signs of cracks, rutting or low areas.
3. The spillway structures are in fair condition the outlet pipe appears to be open and functional in the outslope.
4. 4 water wells were uncovered in or near the dike, shown in the attached location map as 1-4. 3 wells have associated open vaults. These vaults should be properly filled and closed.

#### 4.6 CHANGES THAT EFFECT STABILITY OR OPERATION (257.83(b)(2)(vii))

There were no changes to the Bottom Ash Pond recently that would affect the stability of the impounding structure.

## 5.0 SUMMARY OF FINDINGS

### 5.1 GENERAL OBSERVATIONS

The Philo Bottom Ash Pond Complex is generally in fair condition. The Bottom Ash Pond Complex appears to be functioning as intended with no signs of structural weakness.

### 5.2 MAINTENANCE ITEMS

- 1) Vegetation should be established on areas with bare ash.
- 2) The 3 vaults should be properly filled and abandoned.

### 5.3 ITEMS TO MONITOR/INVESTIGATE

The following items were identified during the visual inspection as items to be monitored or investigated:

- 1) Monitor seed and mulch to ensure adequate coverage is established.

### 5.4 DEFICIENCIES (257.83(b)(2)(vi))

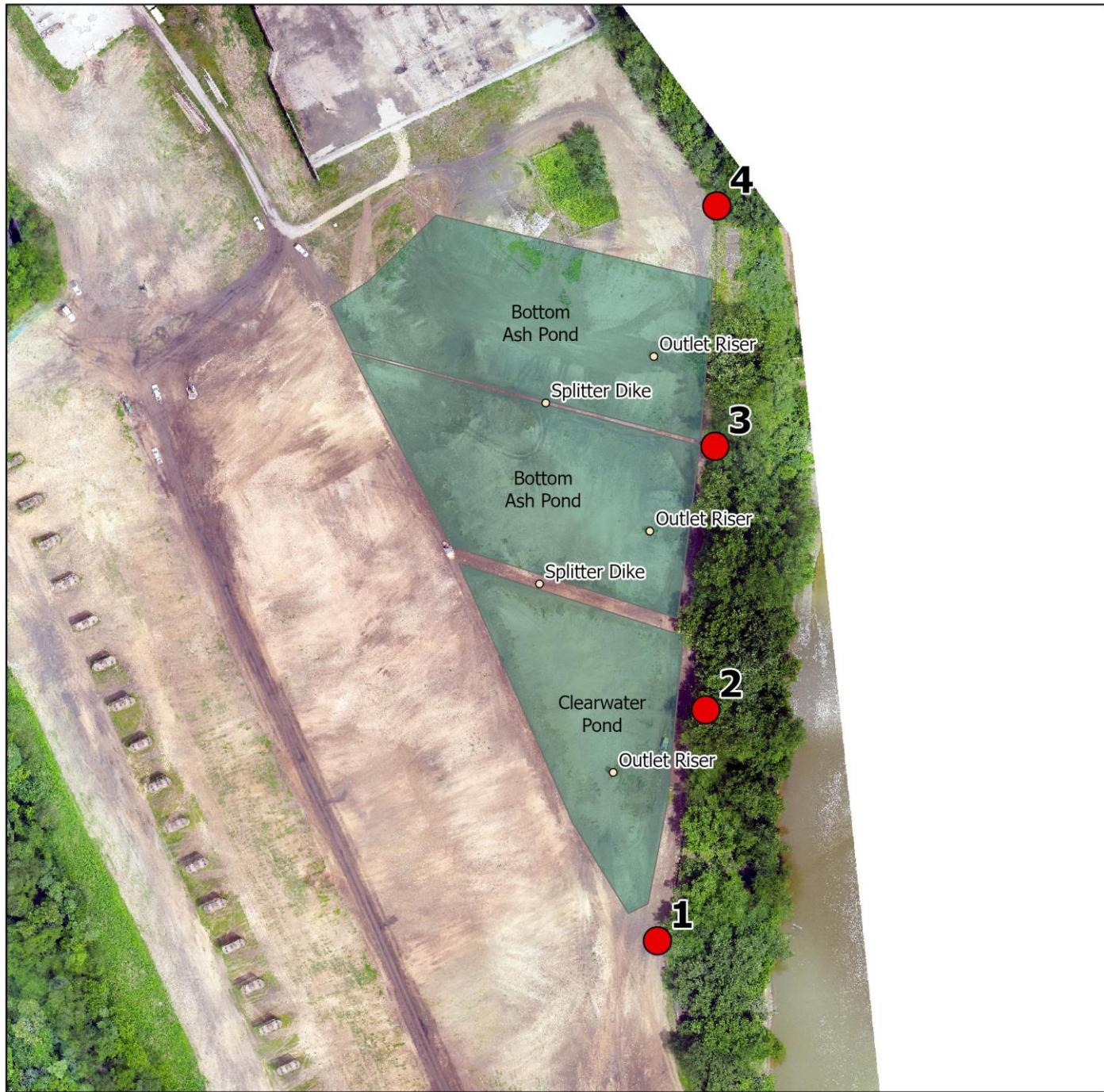
At the Bottom Ash Pond Complex there were no signs of structural weakness or disruptive conditions that were observed at the time of the inspection that would require additional investigation or remedial action. There were no deficiencies noted during this inspection or during any of the periodic 7-day or 30-day inspections. A deficiency is defined as: 1) uncontrolled seepage, 2) displacement of the embankment, 3) blockage of control features, or 4) erosion, more than that requiring minor maintenance.

If any of these conditions occur before the next annual inspection contact AEP Ash Management Services immediately.

**ATTACHMENT A**

**Location Map**

# Philo Bottom Ash Pond Complex



## Legend

- Philo\_Point
- Philo\_Features
- Former Well House

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0 112.5 225 450 Feet



**ATTACHMENT B**

**Inspection Photos**

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Photograph 1:  
Pond Complex Spillway  
Riser



Photograph 2:  
Pond Complex Spillway  
Riser.



Photograph 3:  
General View of Pond  
Complex Dike looking  
North.

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Photograph 4:  
General View of Pond  
Complex Dike looking  
South.



Photograph 5:  
Spillway outlet pipe at  
entrance.



Photograph 6:  
Pond Complex outlet  
pipe.

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Photograph 7: Pond Complex Outlet Pipe in generally good condition with no signs of blockage.