



**OHIO VALLEY ELECTRIC CORPORATION**

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P. O. Box 468  
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WRITER'S DIRECT DIAL NO:  
740-897-7768

March 14, 2022

**Delivered Electronically**

Ms. Laurie Stevenson  
Director  
Ohio Environmental Protection Agency  
50 West Town Street, Suite 700  
P.O. Box 1049  
Columbus, OH 43216-1049

**Re: Ohio Valley Electric Corporation  
Kyger Creek Station  
Notification of CCR Rule Information Posting  
Annual Certified CCR Surface Impoundment Inspection Report**

Dear Ms. Stevenson:

As required by 40 CFR 257.106(g), the Ohio Valley Electric Corporation (OVEC) is providing notification to the State Director of the Ohio Environmental Protection Agency that a qualified professional engineer has completed the Annual CCR Surface Impoundment Inspection for the 2021 operating year in accordance with 40 CFR 257.83(b) for OVEC's Kyger Creek Station. The inspection report has been placed in the facility's Operating Record as well as on the company's publically accessible internet site.

This information can be viewed on OVEC's publicly accessible internet site at:  
<http://www.ovec.com/CCRCompliance.php>

If you have any questions, or require any additional information, please call me at (740) 897-7768.

Sincerely,

A handwritten signature in black ink that reads "Tim Fulk".

Tim Fulk  
Engineer II

TLF:klr

# **2021 Annual Dam and Dike Inspection Report**

**Bottom Ash Pond Complex  
South Fly Ash Pond**

**Kyger Creek Plant  
Ohio Valley Electric Corporation (OVEC)  
Gallia County, Ohio**

**November 2021**

Prepared for: Ohio Valley Electric Corporation (OVEC)  
3932 U.S. Route 23  
P.O. Box 468  
Piketon, Ohio 45661

Prepared by: American Electric Power Service Corporation  
One Riverside Plaza  
Columbus, OH 43215



**GERS -21-074**

# 2021 Annual Dam and Dike Inspection Report

## Kyger Creek Plant

### Bottom Ash Pond Complex & South Fly Ash Pond

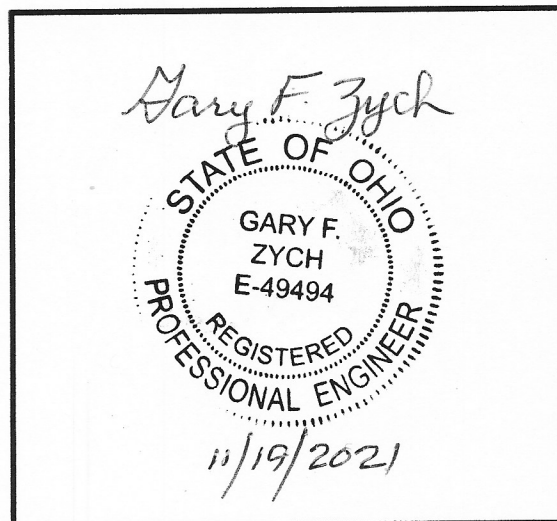
Date of Inspection: September 29, 2021

Document Number: GERS-21-074

PREPARED BY *Brian G. Palmer* DATE 11/18/2021  
Brian G. Palmer, P.E.

REVIEWED BY *Shah Baig* DATE 11-19-2021  
Shah Baig, P.E.

APPROVED BY *Gary Zych* DATE 11/19/2021  
Gary Zych, P.E.  
Manager – AEP Geotechnical Engineering



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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- Inspection Photographs

## **1.0 INTRODUCTION**

This report was prepared by AEP- Geotechnical Engineering Services (GES) section, in part, to fulfill requirements of 40 CFR 257.83 and the Ohio Department of Natural Resource (ODNR), Division of Water Resources Dam Safety Program and to provide Ohio Valley Electric Corporation (OVEC) and Kyger Creek Station with an evaluation of the facility.

Mr. Paul Hutchins, of the Kyger Creek Station provided onsite coordination for inspection activities. The inspection was performed on September 29, 2021 by Mr. Brian Palmer of AEPSC Geotechnical Engineering with Mr. Paul Hutchins and Mr. Dick Shouldis of OVEC. Weather conditions was cloudy, visibility was good, light breeze, with temperatures in mid-60s F to upper 70s F.

## **2.0 DESCRIPTIONS OF IMPOUNDMENTS**

Figure 1 depicts the location of the Kyger Creek plant and its ash ponds.

### **2.1 BOTTOM ASH POND COMPLEX**

Bottom Ash Complex consists of a Boiler Slag Pond (BAP) and a Clearwater Pond (CWP) separated by a Splitter Dike shown in Figure 1. The Ohio River runs parallel to the east dike and OH State Route 7 runs parallel to the west dike. The Bottom Ash Complex is located between SR 7 and Kyger Creek to the west and Ohio River to the east. Kyger Creek also runs parallel to the west section of the dike. The ODNR Inventory Number is 8712-014.

### **2.2 SOUTH FLY ASH POND**

The South Fly Ash Pond is one of two ash ponds that make up the Fly Ash Complex and which are separated by a splitter dike as shown in Figure 1. The second pond is the North Pond which has been capped and closed as part of the North Ash Pond Closure Project. The South Fly Ash Pond remains open and active as a part of the plant's fly ash sluicing operations. The South Fly Ash Pond is located adjacent to SR 7 just north of the Kyger Creek. The ODNR inventory number is 8712-013.

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

A review of available information regarding the status and condition of the Bottom Ash Pond Complex and the South Fly Ash Pond, including files available in the operating record, such as design and construction information, previous periodic structural stability assessments, previous 7-day inspection reports, and previous annual inspections, has been conducted. Based on the review of the data there were no signs of actual or potential structural weakness or adverse conditions.

### **3.1 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.

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.

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- 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's 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 is normal or desired, and which may have affected the ability of the observer to properly evaluate the structure or particular area being observed 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 defined as a deficiency are considered maintenance or items to be monitored.

A "deficiency" is some evidence that a dam has developed a problem 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, such as seepage that is not clear. Seepage that is unable to be measured and/or observed is considered uncontrolled seepage. [Wet or soft areas are not considered uncontrolled seepage, but they can lead to this type of deficiency. These areas should be monitored frequently.]

2. Displacement of the Embankment

Displacement of an 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 Features

Blockage of Water Control Features 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.

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

The inspection was conducted starting at the South Fly Ash Pond followed by the Bottom Ash Pond Complex. The Photograph numbering for the map and photo pages reflect that order of inspection.

**4.1 BOTTOM ASH POND COMPLEX**

**4.1.1 CHANGES IN GEOMETRY SINCE LAST INSPECTION (257.83(b)(2)(i))**

No modifications have been made to the geometry of the Bottom Ash Pond Complex since the 2020 annual inspection. The geometry of the impoundment has remained essentially unchanged. Changes to the operation are noted in section 4.1.6.

**4.1.2 INSTRUMENTATION (257.83(b)(2)(ii))**

The location and type of instrumentation is shown on Figure 2. The maximum recorded readings of each instrument since the previous annual inspection is shown in Table 1 as follows.

Table 1 - Maximum recorded instruments reading since the previous annual inspection (BAP)

<b>INSTRUMENTATION DATA</b>			
<b>Bottom Ash Pond Complex</b>			
<b>Instrument</b>	<b>Type</b>	<b>Maximum Reading since last annual inspection</b>	<b>Date of reading</b>
KC-1015	Piezometer	549.17	1/7/2021
KC-1016	Piezometer	542.4	1/7/2021
KC-1017	Piezometer	550.79	3/8/2021
KC-1018	Piezometer	541.4	1/7/2021
KC-1021	Piezometer	550.62	3/8/2021
KC-1022	Piezometer	546.34	3/8/2021

**4.1.3 IMPOUNDMENT CHARACTERISTICS (257.83(b)(2)(iii, iv, v))**

Table 2 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.

Table 2 Summary of Relevant Storage Information (BAP)

<b>IMPOUNDMENT CHARACTERISTICS- Bottom Ash Pond Complex</b>		
	<b>Boiler Slag Pond</b>	<b>Clearwater Pond</b>
Approximate <b>Minimum</b> depth (elevation) of impounded water since last annual inspection	9.1 ft. (550.1)	8.1 ft. (549.1)
Approximate <b>Maximum</b> depth (elevation) of impounded water since last annual inspection	19 ft. (560)	19 ft. (560.0)
Approximate <b>Present</b> depth of impounded water at the time of inspection	16.6ft. (557.6)	9 ft. (550.0)
Approximate <b>Minimum</b> depth (elevation) of CCR since last annual inspection	<9 ft. (<550)*	N/A.
Approximate <b>Maximum</b> depth (elevation) of CCR since last annual inspection	~49 ft. (~590)*	N/A
Approximate <b>Present</b> depth (elevation) of CCR at the time of inspection	Varies *	N/A
Storage Capacity of impounding structure at the time of inspection	610 ac-ft.	310 ac-ft.
Approximate volume of impounded water at the time of inspection	~125 ac-ft.	~53 ac-ft.
Approximate volume of CCR at the time of the inspection	~300 ac-ft*	N/A

\*The minimum and maximum levels of CCR material exist at the same time as part of operations of the pond.

**4.1.4 VISUAL INSPECTION (257.83(b)(2)(i))**

A visual inspection of the Bottom Ash Pond Complex was conducted to identify any signs of distress or malfunction of the impoundment and appurtenant structures. The inspection also included the hydraulic structures underlying the base of the dike. Specific items inspected included all structural elements of the dam such as inboard and outboard slopes, crest, and toe; as well as appurtenances such as the outlet structure at the Bottom Ash Pond and Clear Pond, and pipe discharge structure.

Overall the facility is in good condition and is being well maintained. The impoundment is functioning as intended with no signs of potential structural weakness or conditions which are disrupting to the safe operation of the impoundment. Inspection photograph locations are shown on Figure 3. Inspection photos are included in Attachment A. Additional pictures taken during the inspection can be made available upon request.

- (i) The west third of the north dike appears to be in good condition with no visible signs of cracks, settlement, or movement. The vegetation on the exterior slope was in good condition. Trees are noted along the exterior toe area of the western portion of the north dike
- (ii) In preparation of closure of the pond a significant stockpile of bottom ash has been placed at northwest corner of the pond as part of the plan to pre-load the area for proposed future changes to the facility.
- (iii) The west dike appeared in good and stable condition with good vegetation on the exterior slope. The crest appeared in good and stable condition, minor erosion gullies were noticed at the interior slope. Matured trees were present at the toe along the creek



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- (iv) The interior and exterior slope of the south and west dikes of Clearwater Pond appeared to be in good condition. The crest showed no signs of settlement or deformation. The lower section of the interior slope appeared to have minor erosion due to wave action.
- (v) The decant structure between the Bottom Ash Pond and the Clearwater Pond appear in good condition. The discharge pipe into the Clearwater Pond appeared to be functional.
- (vi) The interior and exterior slopes and the crest of the east dike appeared stable and in good condition. The slope appeared in good and stable conditions with good vegetation cover. The minor rutting noted during the 2020 inspection appears to have been repaired.
- (vii) The overflow decant structure concrete, access deck, and walkway stairs appeared good, stable, and functioning as designed.
- (viii) The Outfall located adjacent to the Clearwater Pond that discharges water to the Ohio River appeared well protected from erosion and in satisfactory condition with proper outflow. Access to the outfall was difficult due to steep slope and difficult terrain.
- (ix) The exterior and interior slopes of the east dike north of the Clearwater Pond appeared to be in good condition. The crest showed no signs of displacement
- (x) The eastern two-thirds of the north dike appeared to be in good condition. The exterior slope had good vegetation. The crest and interior appeared to be stable with no signs of movement.

**4.1.5 EVALUATION OF INSTRUMENTATION**

The pond stages have remained fairly constant since the last annual inspection. A review of the piezometer readings indicates that no adverse trends were observed and the water level fluctuation is also responsive to changing Ohio River levels (Figure 4).

**4.1.6 CHANGES THAT EFFECT STABILITY OR OPERATION (257.83(b)(2)(vii))**

Based on interviews with plant personnel and field observations there were no changes to the Bottom Ash Pond Complex since the last annual inspection that would affect the stability or operation of the impounding structure.

There has been a change in that significant amount of ash has been moved to the northwest corner of the facility to allow for a pre-loading of the area to allow for the future construction of an ash bunker as part of the conversion of the facilities bottom ash handling operations. This change resulted in the need to relocate the western discharge pipes.

**4.2 SOUTH FLY ASH POND**

**4.2.1 CHANGES IN GEOMETRY SINCE LAST INSPECTION (257.83(b)(2)(i))**

No modifications have been made to the geometry of the South Fly Ash Pond since the 2020 annual inspection. The geometry of the impoundment has remained essentially unchanged.

**4.2.2 INSTRUMENTATION (257.83(b)(2)(ii))**

The location and type of instrumentation is shown on Figure 5 at Attachment C. The maximum recorded readings of each instrument since the previous annual inspection is shown in Table 3.

Table 3 Maximum recorded instruments reading since the previous annual inspection (FAP)

<b>INSTRUMENTATION DATA</b>			
<b>South Fly Ash Pond</b>			
<b>Instrument</b>	<b>Type</b>	<b>Maximum Reading since last annual inspection</b>	<b>Date of reading</b>
KC-1003	Piezometer	576.49	10/9/2020
KC-1004	Piezometer	550.49	3/8/2021
KC-1007	Piezometer	581.13	5/6/2021
KC-1008	Piezometer	555.11	2/6/2021
KC-1011	Piezometer	566.39	2/6/2021
KC-1012	Piezometer	561.37	8/3/2021

**4.2.3 IMPOUNDMENT CHARACTERISTICS (257.83(b)(2)(iii, iv, v))**

Table 4 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.

Table 4 Summary of Relevant Storage Information (FAP)

<b>IMPOUNDMENT CHARACTERISTICS</b>	
<b>South Fly Ash Pond</b>	
Approximate <b>Minimum</b> depth (elevation) of impounded water since last annual inspection	19.2 ft. (583.1)
Approximate <b>Maximum</b> depth (elevation) of impounded water since last annual inspection	19.9 ft. (583.8)
Approximate <b>Present</b> depth (elevation) of impounded water since last annual inspection	19.8 ft. (583.7)
Approximate <b>Minimum</b> depth (elevation) of CCR since last annual inspection	~15.0 ft.* (565.0)
Approximate <b>Maximum</b> depth (elevation) of CCR since last annual inspection (ft.)	~38 ft.* (588.0)
Approximate <b>Present</b> depth (elevation) of CCR since last annual inspection	Varies*
Storage Capacity of impounding structure at the time of the inspection	2,500 ac-ft
Approximate volume of impounded water at the time of the inspection	~460 ac-ft
Approximate volume of CCR at the time of the inspection	~1,800 ac-ft

\*The minimum and maximum levels of CCR material exist at the same time as part of operations of the pond.

**4.2.4 VISUAL INSPECTION (257.83(b)(2)(i))**

A visual inspection of the South Fly Ash Pond was conducted to identify any signs of distress or malfunction of the impoundment and appurtenant structures. Specific items inspected included all elements of the dam such as inboard and outboard slopes, crest, and toe; as well as appurtenances such as the outlet structure and pipe discharge structure.

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Overall, the facility is in good condition. The impoundment is functioning as intended with no signs of potential structural weakness or conditions which are disrupting to the safe operation of the impoundment. Inspection photograph locations are shown on Figure 6. Inspection photos are included in Attachment A. Additional pictures taken during the inspection can be made available upon request.

- (i) The exterior slope of the east dike appeared in good condition. The rock blankets (repair areas) along the slope appeared stable and well maintained. An active animal burrow was observed during the inspection.
- (ii) Heavy vegetation was observed around the discharge inlet at the southeast corner. The walkway over the discharged was in fair condition.
- (iii) The crest and interior slope of the east dike were in fair condition. There was no signs of settlement or misalignment of the crest. Minor erosion reels were noted in the CCR material deposited on the interior of the slope. The erosion had not impacted the integrity of the dike.
- (iv) The crest and interior slope of the north dike between the north and south ponds showed no signs of any significant settlement, deformation, or cracks. The interior slope consists of riprap protection and appeared in good and stable condition.
- (v) The interior slope of the west dike with riprap protection appeared in good condition with controlled vegetation in the upper section. The crest had no signs of distress and the access ramp to the perimeter road appeared good.
- (vi) The access structure platform, deck, and handrail to the outlet structure appeared in fair and stable condition. The visible concrete, railings, metal deck, stop logs, and accessories appeared in functional condition.
- (vii) The condition of the south dike crest and interior slope appeared in good and stable condition.
- (viii) The exterior slope of the south dike appeared to be in satisfactory condition. The toe area below the south dike has been used as a temporary construction laydown area and will need to be regraded to properly drain when work is complete.
- (ix) The overall condition of the west dike exterior slope consists of several sections with riprap protection along the slope. The slope appeared in good and stable condition.
- (x) The drainage channel located at the toe of the west slope indicated positive drainage but consists of thick brush and vegetation growth. The heavy vegetation limits the ability to inspect the area and should be cut. The discharge pipe appeared to have unobstructed flow under the perimeter road.
- (xi) The exterior slope of the north dike between the north and south ponds appeared to be in satisfactory condition.

#### **4.2.5 EVALUATION OF INSTRUMENTATION**

The pond stages have remained fairly constant since the last annual inspection. A review of the piezometer hydrographs for each piezometer indicates that no adverse trends are present (Figure 7).

#### **4.2.6 CHANGES THAT AFFECT STABILITY OR OPERATION (257.83(b)(2)(i))**

Based on interviews with plant personnel and field observations there were no changes to the South Fly Ash Pond since the last annual inspection that would affect the stability or operation of the impounding structure.

## **5.0 SUMMARY OF FINDINGS**

### **5.1 GENERAL OBSERVATIONS**

The following general observations were identified during the visual inspection:

#### **Bottom Ash Pond Complex**

- 1) The interior and exterior slopes and crest of the dikes were generally in satisfactory and stable condition. The dikes did not show any signs of structural weakness or instability. The vegetation along the downstream slopes of the dikes were recently mowed in most locations. The crest did not contain any significant ruts or other signs of instability.
- 2) The hydraulic structures of the Bottom Ash Pond and the Clear Water Pond were generally in good condition. There were no signs of deterioration of the concrete or steel structures. Spare stop logs were available for use. Flow within the pipes appeared unobstructed.
- 3) The access to the outfall pipe to the Ohio River at the east dike had no walkway or stairs. The outfall appeared to be functioning without obstruction.

#### **South Fly Ash Pond**

- 1) The interior and exterior slopes and crest of the dikes were generally in good and stable condition. The dikes did not show any significant signs of structural weakness, distress or instability. The vegetation along the exterior slopes were recently mowed in most locations. The crest did not contain any ruts or other signs of instability.
- 2) Overgrown vegetation was present along toe of the west exterior slope and drainage channel.
- 3) The hydraulic structures of the South Fly Ash Pond were in generally in good condition. There were no signs of deterioration of the concrete or steel structures. Flow within the pipes appeared unobstructed.
- 4) The toe ditch at the east dike downstream slope is functioning with positive flow. The issues with the State Route 7 culvert identified in previous reports has been remedied.

### **5.2 MAINTENANCE ITEMS**

The following maintenance items were identified during the visual inspection.

#### **Bottom Ash Pond Complex**

- 1) The plant is actively performing maintenance in controlling vegetation along the crest and the exterior embankment slopes. Minor vegetation was observed within the interior embankment slopes.
- 2) An access walkway should be installed from the dike to the outfall at the east dike for inspection and maintenance activities.

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**South Fly Ash Pond**

- 1) The plant is actively performing maintenance in controlling vegetation along the crest and the interior/exterior embankment slopes.
- 2) Continue animal control and repair activities to address active animal burrows
- 3) The area along drainage channel at the west embankment toe exhibited excessive vegetation. The vegetation should be periodically mowed to prevent woody vegetation or control growth through the application of herbicide to facilitate inspection of these areas.

**5.3 ITEMS TO MONITOR**

The following items were identified during the visual inspection as items to be monitored, see inspection map for locations:

**Bottom Ash Pond Complex**

- 1) None

**South Fly Ash Pond**

- 1) Continue to monitor wet areas previously observed and mitigate any additional areas with the installation of rock blankets using the approved ODNR detail for controlling seepage areas along embankment slope. If conditions change flow rate increases or the seep water is not clear it should be brought to the immediate attention of AEP-Geotechnical Engineering.
- 2) The seepage located beyond the south toe was observed to be clear. The plant should continue periodic monitoring of the area for movement of sediments or uncontrolled/significant changes to discharge.
- 3) Continue to monitor the condition of the pipe culvert at the toe drain of the east dike and make a note in the inspection report if the condition of drainage deteriorates further.

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

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 inspections. A deficiency is defined as either 1) uncontrolled seepage, 2) displacement of the embankment, 3) blockage of control features, or 4) erosion, more than minor maintenance. If any of these conditions occur before the next annual inspection contact AEP Geotechnical Engineering immediately.

## **Figures**

Figure 1 – Site Location Map

Figure 2 – BAP Piezometer Location Map

Figure 3 – BAP Inspection Photograph Location Map

Figure 4 – BAP Piezometer Data

Figure 5 – SFAP Piezometer Location Map

Figure 6 – SFAP Inspection Photograph Location Map

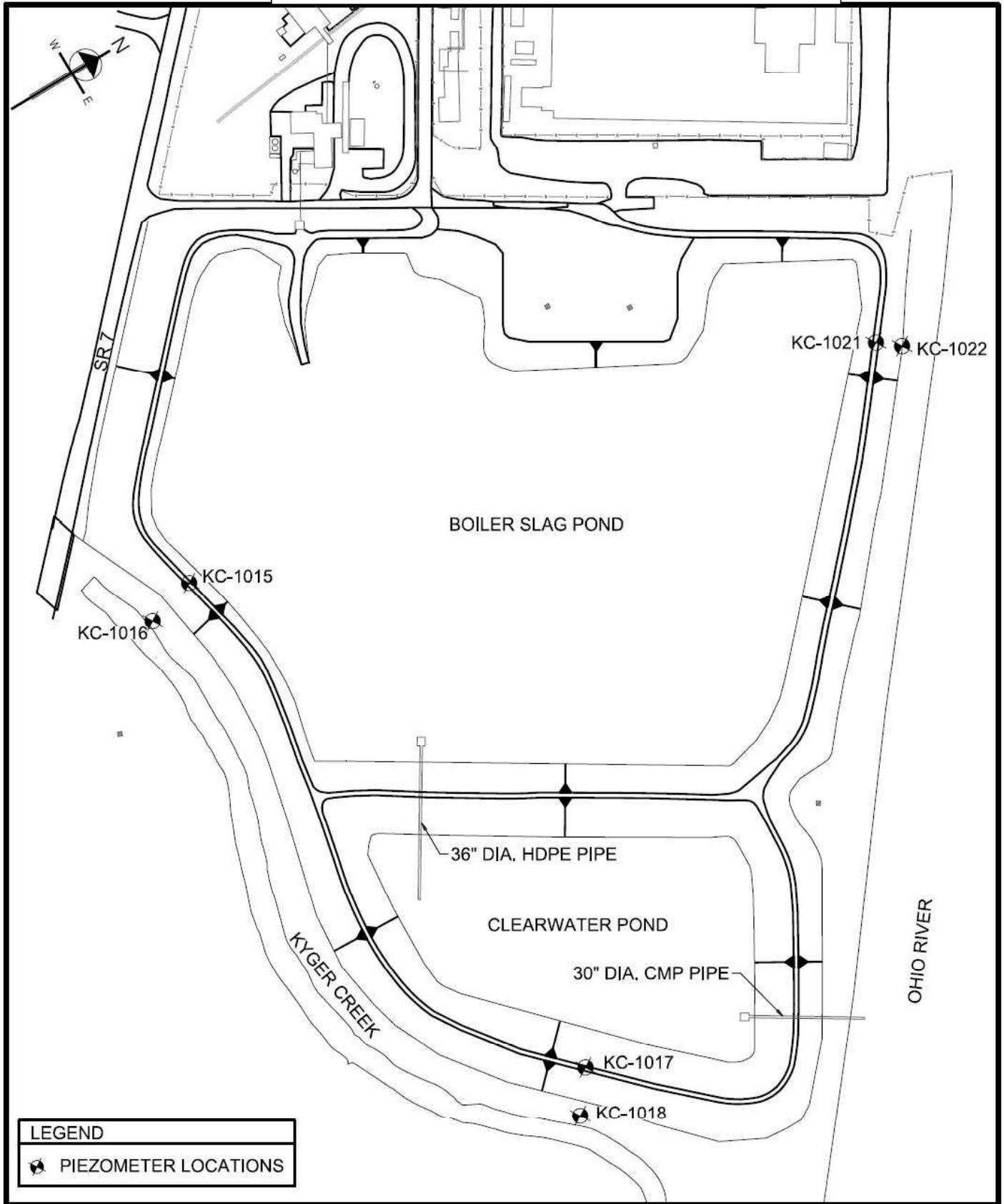
Figure 7 – SFAP Piezometer Data


NOTE: The inspection was conducted starting at the South Fly Ash Pond followed by the Bottom Ash Pond Complex. The Photograph numbering for the map and photo pages reflect that order of inspection.


**Figure 1 – Site Location Map**  
Kyger Creek Plant, Cheshire, OH



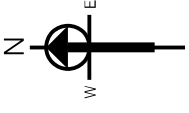
**Figure 2 – Piezometer Location Map**



<b>LEGEND</b>
 <b>PIEZOMETER LOCATIONS</b>

DRN BY:	KYGER CREEK POWER STATION	DWG NO:
DATE:	SHEET 1 OF 1	 <b>AMERICAN ELECTRIC POWER</b> AEP SERVICE CORP. 1 RIVERSIDE PLAZA COLUMBUS, OH 43215
SCALE: 1"=250'	BOTTOM ASH POND COMPLEX	





**LEGEND**



PHOTO LOCATION

PHOTO DIRECTION

DRAWING NUMBER:

FIGURE 3

**KYGER CREEK  
BOTTOM ASH POND COMPLEX  
PHOTOGRAPH MAP**

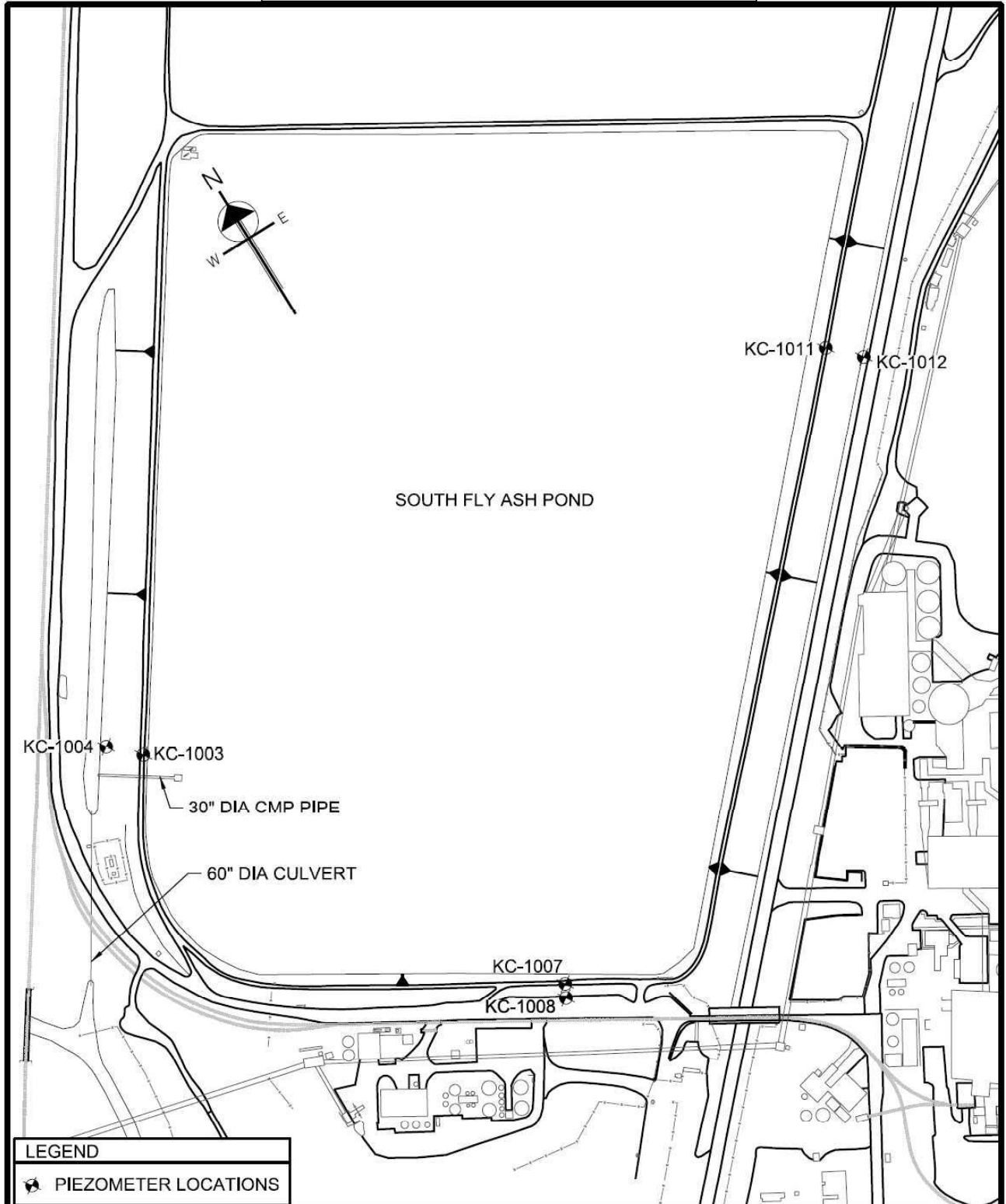
2021



AEP SERVICE CORP.  
1 RIVERSIDE PLAZA  
COLUMBUS, OH 43215



**Figure 5 – Piezometer Location Map**

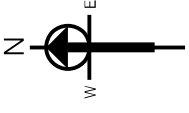


<b>LEGEND</b>
<b>PIEZOMETER LOCATIONS</b>

DRN BY:
DATE:
SCALE: 1"=300'

KYGER CREEK POWER STATION
<b>SHEET 1 OF 1</b>
<b>SOUTH FLY ASH POND</b>

DWG NO:
<b>AMERICAN ELECTRIC POWER</b>
<b>AEP SERVICE CORP.</b> 1 RIVERSIDE PLAZA COLUMBUS, OH 43215



**LEGEND**

○ PHOTO LOCATION

➔ PHOTO DIRECTION

DRAWING NUMBER: **FIGURE 6**

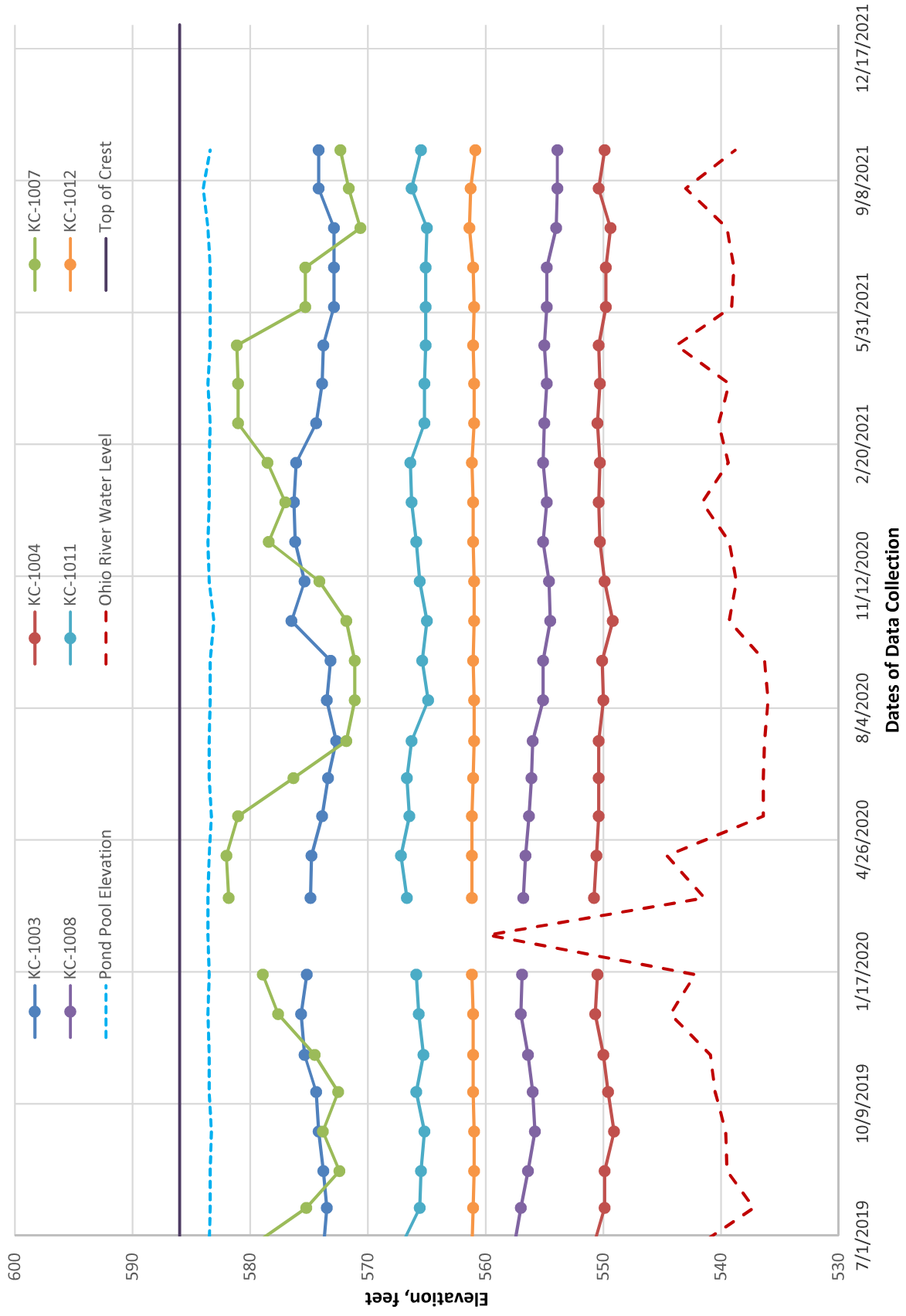
**KYGER CREEK  
SOUTH FLY ASH POND  
PHOTOGRAPH MAP**

2021



AEP SERVICE CORP.  
1 RIVERSIDE PLAZA  
COLUMBUS, OH 43215

**Figure 7 - South Flyash Pond Piezometer Data.**



***Annual Dam and Dike Inspection Report (2021)***  
***Kyger Creek Plant***

**Attachment A**

Inspection Photographs

# AEP GES Dam Inspection

Plant Name:

Inspector:

Unit:

Date:

Photo #:

Notes:



Photo #:

Notes:



# AEP GES Dam Inspection

Plant Name:

Inspector:

Unit:

Date:

Photo #:

Notes:



Photo #:

Notes:





# AEP GES Dam Inspection

Plant Name:

Inspector:

Unit:

Date:

Photo #:

Notes:



Photo #:

Notes:



# AEP GES Dam Inspection

Plant Name:

Inspector:

Unit:

Date:

Photo #:

Notes:



Photo #:

Notes:



# AEP GES Dam Inspection

Plant Name: Kyger Creek

Inspector: B. Palmer

Unit: Fly Ash Pond

Date: September 29, 2021

Photo #: 9

Notes: General condition of dike below pipe rack support along exterior slope of east dike



N38 54.999 W82 7.801

Photo #: 10

Notes: General condition of east dike exterior slope looking north



N38 54.962 W82 7.845

# AEP GES Dam Inspection

Plant Name:

Inspector:

Unit:

Date:

Photo #:

Notes:



Photo #:

Notes:



# AEP GES Dam Inspection

Plant Name: Kyger Creek

Inspector: B. Palmer

Unit: Fly Ash Pond

Date: September 29, 2021

Photo #: 13

Notes:

General condition of discharge structure located at southeast. Heavy vegetation inside the pond around the structure made inspection difficult.



N38 54.969 W82 7.883

Photo #: 14

Notes:

General condition of southeast exterior corner with pipes entering the pond



N38 54.964 W82 7.881

# AEP GES Dam Inspection

Plant Name: Kyger Creek

Inspector: B. Palmer

Unit: Fly Ash Pond

Date: September 29, 2021

Photo #: 15

Notes:

General condition of east dike interior slope and crest looking northeast



N38 54.965 W82 7.874

Photo #: 16

Notes:

General condition of east dike interior slope and crest looking south



N38 55.008 W82 7.808

# AEP GES Dam Inspection

Plant Name: Kyger Creek

Inspector: B. Palmer

Unit: Fly Ash Pond

Date: September 29, 2021

Photo #: 17

Notes:

Typical erosion observed in the ash along interior slope on the east dike.



N38 55.017 W82 7.798

Photo #: 18

Notes:

General condition of east dike crest looking north



N38 55.080 W82 7.725

# AEP GES Dam Inspection

Plant Name:

Inspector:

Unit:

Date:

Photo #:

Notes:



Photo #:

Notes:





# AEP GES Dam Inspection

Plant Name:

Inspector:

Unit:

Date:

Photo #:

Notes:



Photo #:

Notes:



# AEP GES Dam Inspection

Plant Name:

Inspector:

Unit:

Date:

Photo #:

Notes:



Photo #:

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# AEP GES Dam Inspection

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Photo #:

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# AEP GES Dam Inspection

Plant Name:

Inspector:

Unit:

Date:

Photo #:

Notes:



Photo #:

Notes:



# AEP GES Dam Inspection

Plant Name: Kyger Creek

Inspector: B. Palmer

Unit: Bottom Ash Pond

Date: September 29, 2021

Photo #: 47

Notes: General condition of north dike exterior dike looking west



N38 54.737 W82 7.939

Photo #: 48

Notes: General condition of north dike interior slope looking west



N38 54.737 W82 7.944

# AEP GES Dam Inspection

Plant Name: Kyger Creek

Inspector: B. Palmer

Unit: Bottom Ash Pond

Date: September 29, 2021

Photo #: 49

Notes:

General condition of north dike exterior slope looking east



N38 54.772 W82 8.013

Photo #: 50

Notes:

General condition of north dike interior slope looking east



N38 54.766 W82 8.020

# AEP GES Dam Inspection

Plant Name: Kyger Creek

Inspector: B. Palmer

Unit: Bottom Ash Pond

Date: September 29, 2021

Photo #: 51

Notes:

General condition of west dike exterior slope looking south



N38 54.773 W82 8.028

Photo #: 52

Notes:

General condition of west dike interior slope looking south



N38 54.742 W82 8.052



# AEP GES Dam Inspection

Plant Name:

Inspector:

Unit:

Date:

Photo #:

Notes:



Photo #:

Notes:



# AEP GES Dam Inspection

Plant Name: Kyger Creek

Inspector: B. Palmer

Unit: Bottom Ash Pond

Date: September 29, 2021

Photo #: 55

Notes:

General condition of west dike interior slope looking northwest



N38 54.655 W82 8.084

Photo #: 56

Notes:

General condition of west dike exterior slope looking southeast



N38 54.616 W82 8.098

# AEP GES Dam Inspection

Plant Name: Kyger Creek

Inspector: B. Palmer

Unit: Bottom Ash Pond

Date: September 29, 2021

Photo #: 57

Notes: General condition of west dike interior slope looking northwest



N38 54.604 W82 8.087

Photo #: 58

Notes: General condition of north slope of splitter dike looking east



N38 54.600 W82 8.088

# AEP GES Dam Inspection

Plant Name:

Inspector:

Unit:

Date:

Photo #:

Notes:



Photo #:

Notes:



# AEP GES Dam Inspection

Plant Name: Kyger Creek

Inspector: B. Palmer

Unit: Bottom Ash Pond

Date: September 29, 2021

Photo #: 61

Notes: General condition of south dike interior slope and crest looking east



N38 54.501 W82 8.084

Photo #: 62

Notes: General condition of south dike exterior slope looking west



N38 54.445 W82 8.015

# AEP GES Dam Inspection

Plant Name:

Inspector:

Unit:

Date:

Photo #:

Notes:



Photo #:

Notes:



# AEP GES Dam Inspection

Plant Name: Kyger Creek

Inspector: B. Palmer

Unit: Bottom Ash Pond

Date: September 29, 2021

Photo #: 65

Notes: Clearwater pond discharge outfall to Ohio River



N38 54.449 W82 7.959

Photo #: 66

Notes: Outfall structure in Clearwater Pond



N38 54.464 W82 7.990

# AEP GES Dam Inspection

Plant Name:

Inspector:

Unit:

Date:

Photo #:

Notes:



Photo #:

Notes:





# AEP GES Dam Inspection

Plant Name: Kyger Creek

Inspector: B. Palmer

Unit: Bottom Ash Pond

Date: September 29, 2021

Photo #: 69

Notes:

General condition of south slope of splitter dike looking west.



N38 54.518 W82 7.941

Photo #: 70

Notes:

General condition of discharge structure into Clearwater Pond from BAP



N38 54.572 W82 8.048

# AEP GES Dam Inspection

Plant Name:

Inspector:

Unit:

Date:

Photo #:

Notes:



Photo #:

Notes:



# AEP GES Dam Inspection

Plant Name:

Inspector:

Unit:

Date:

Photo #:

Notes:



Photo #:

Notes:



# AEP GES Dam Inspection

Plant Name: Kyger Creek

Inspector: B. Palmer

Unit: Bottom Ash Pond

Date: September 29, 2021

Photo #: 75

Notes: General condition of east dike interior slope looking north with east Discharge pipe in background



N38 54.621 W82 7.809

Photo #: 76

Notes: General condition of east dike exterior looking south



N38 54.648 W82 7.772

# AEP GES Dam Inspection

Plant Name:

Inspector:

Unit:

Date:

Photo #:

Notes:



Photo #:

Notes:



# AEP GES Dam Inspection

Plant Name:

Inspector:

Unit:

Date:

Photo #:

Notes:



Photo #:

Notes:



# AEP GES Dam Inspection

Plant Name:

Inspector:

Unit:

Date:

Photo #:

Notes:



Photo #:

Notes:



# AEP GES Dam Inspection

Plant Name: Kyger Creek

Inspector: B. Palmer

Unit: Bottom Ash Pond

Date: September 29, 2021

Photo #: 83

Notes: West discharge pipes on along north dike interior slope



N38 54.688 W82 7.920

Photo #: 84

Notes: General condition of north dike interior slope looking north



N38 54.690 W82 7.936