



OHIO VALLEY ELECTRIC CORPORATION

3932 U. S. Route 23
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Piketon, Ohio 45661
740-289-7200

WRITER'S DIRECT DIAL NO:
740-897-7768

November 30, 2018

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Craig Butler
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 Mr. Butler:

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 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 publically 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". The signature is written in a cursive, slightly slanted style.

Tim Fulk
Engineer II

TLF:klr

Engineering Reports and Studies Checklist - General

Project Name: Kyger Creek Plant: Fly ash & Bottom Ash Ponds

Originated by: J.T. Massey-Norton

Checked by: Shah baig Date: 10-17-18

Description: Annual 2018 DIMP Inspection

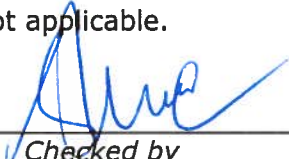
Unique Document ID: GERS-18-045

		Checking Engineer(s) Initials
1.	Cover page includes: unique identification number, reference to date, revision , title, prepared by, reviewed by, approved by.	SSB
2.	Revisions noted on revision page with revision number, reason and date.	NA
3.	Pages numbered, including reference to total number of pages and revision number.	SSB
4.	Executive summary concise (generally limit to one page).	NA
5.	Information in executive summary contained in body of report.	NA
6.	Table of contents including list of figures and tables.	SSB
7.	Introduction with purpose and scope included.	SSB
8.	Objective of work defined.	SSB
9.	Assumptions identified and justified.	NA
10.	Assumptions that must be reviewed as design progresses identified.	NA
11.	Supporting drawings, sketches, charts, drawings included.	SSB
12.	Results summarized.	SSB
13.	Conclusions and recommendations included.	SSB
14.	Bibliography and references included.	NA
15.	References required in appendix.	NA

Engineering Reports and Studies Checklist – General cont.

		Checking Engineer(s) Initials
16.	Text clear and readable.	SSB
17.	Approach reasonable for objective identified.	SSB
18.	Technical content adequate for the report purpose and scope.	SSB
19.	Appropriate interdisciplinary review complete.	SSB

Note: Use N/A to indicate check is not applicable.

Shah Baig  10-17-18
 Checked by Checked by Date
 (Print name legibly) (Signature)

Engineering completed in accordance with E-OI-730.03.01 - Engineering Reports and Studies, and reviewed by:

Mary Zuch GES 10/17/2018
 Engineering Manager Department Date

American Electric Power
1 Riverside Plaza
Columbus, OH 43215
www.aep.com



Ms. Annette Hope, Plant Mgr.
OVEC
Kyger Creek Station
5758 St. Rt. 7 North
Cheshire, Ohio 45620

October 18th, 2018

**RE: KYGER CREEK POWER STATION
BOTTOM ASH COMPLEX AND FLY ASH COMPLEX
ODNR File Nos. 8721-014 and 8721-013
2017DAM AND DIKE INSPECTION REPORT**

Dear Ms. Hope:

The annual dam and dike safety inspection was performed on September 26th, 2018 with Mr. Ken Stapleton, Mr. Tim Folk and Mr. Paul Hutchins who served as the plant contact for this work and also participated in the inspection.

The enclosed report, for the Bottom Ash Pond Complex and Fly Ash Pond Complex was observed to be in good condition indicative of a good and ongoing maintenance program. The report recommends that routine maintenance continue to be implemented to ensure that the pond embankments and other structures remain in a functional and safe condition.

In reviewing supporting documentation, it was noticed that a few of the piezometers were inundated with flood waters which may cause some siltation into the well (see appendix C of the report illustrating the Ohio River stage and the piezometer's water level).

If you have any questions, feel free to contact me (Phone: 614-716-2924, email: jtmasseynorton@aep.com), or Gary Zych (Phone: 614-716-2917, email: gfzych@aep.com).

Sincerely,

A handwritten signature in black ink that reads 'J.T. Massey-Norton'.

J.T. Massey-Norton
Sn hydrogeologist
AEPSC Civil Engineering

cc: OVEC - H. Cleland

American Electric Power
1 Riverside Plaza
Columbus, OH 43215
www.aep.com



Mr. Neil Shop
Ohio Department of Natural Resources
Division of Soil and Water Resources
Dam Safety Program
2045 Morse Road, Bldg. B-3
Columbus, Ohio 43229-6693

October 18, 2018

**RE: KYGER CREEK POWER STATION
BOTTOM ASH COMPLEX AND FLY ASH COMPLEX
ODNR File Nos. 8721-014 and 8721-013
2017 DAM AND DIKE INSPECTION REPORT**

Dear Mr. Shop:

Please find attached for your review the Dam & Dike Inspection report that summarizes the September 26th, 2018 site inspection. In general, good conditions were observed as part of our inspection of the Bottom Ash Complex and Fly Ash Complex. This report includes recommendations for maintenance and improvements for the facility.

If you have any questions, feel free to contact me (Phone: 614-716-2924, email: jtmasseynorton@aep.com), or Gary Zych (Phone: 614-716-2917, email: gfzych@aep.com).

Sincerely,

A handwritten signature in black ink that reads 'J.T. Massey-Norton'.

J.T. Massey-Norton
Sn Hydrogeologist
AEPSC Civil Engineering

cc: Kyger Creek Station/A.G. Hope/P. Hutchins w/o attachments
OVEC, Piketon office/H. Cleland w/o attachments
G. F. Zych w/o attachments

2018 Annual Dam and Dike Inspection Report

Kyger Creek Plant

Boiler Ash Pond Complex & South Fly Ash Pond

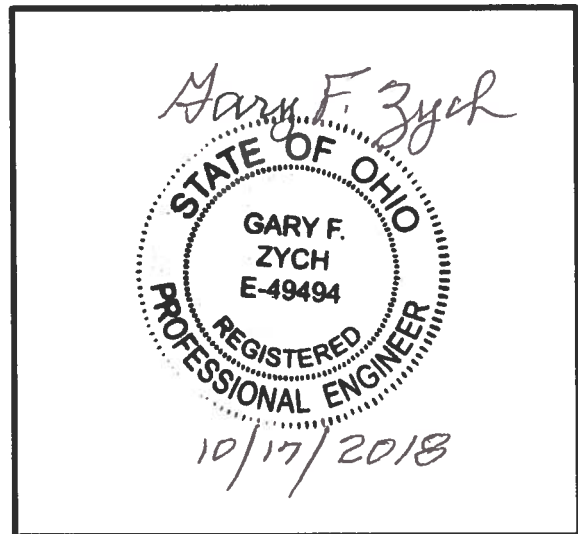
Date of Inspection: September 26, 2018

Document Number: GERS-18-045

PREPARED BY *J.T. Massey-Norton* DATE 10-17-2018
J.T. Massey-Norton

REVIEWED BY *Shah Baig* DATE 10-17-2018
Shah Baig, P.E.

APPROVED BY *Gary Zych* DATE 10/17/2018
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).

2018 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**

September 26, 2018

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
1 Riverside Plaza
Columbus, OH 43215



GERS -18- 045

2018 Annual Dam and Dike Inspection Report

Kyger Creek Plant

Boiler Ash Pond Complex & South Fly Ash Pond

Date of Inspection: September 26, 2018

Document Number: GERS-18-045

PREPARED BY _____ DATE _____
J.T. Massey-Norton

REVIEWED BY _____ DATE _____
Shah Baig, P.E.

APPROVED BY _____ DATE _____
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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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 26th, 2018 by Mr. J.T. Massey-Norton of AEPSC Geotechnical Engineering with Mr. Paul Hutchins, Mr. Tim Folk and Mr. Kenneth Stapleton of OVEC. Weather conditions were overcast with temperatures in upper-70s F to low-80s F.

2.0 DESCRIPTIONS OF IMPOUNDMENTS

Figure 1 depicts the location of the Kyger Creek plant and its respective pond complexes.

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 2. 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 divided by a splitter dike as shown in Figure 3. 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 part of the plants fly ash sluicing operations. The South Fly Ash Pond is located along 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, which include 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.
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 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 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 by 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 picked up and safely carried off by a drain. Seepage that is collected by a drain can still be uncontrolled if it is not safely collected and 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.

Note: 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 large scale movement of part of the dam. Common signs of displacement are cracks, scraps, bulges, depressions, sinkholes and slides.

3. Blockage of Control Features

Blockage of 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))

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 2017 annual inspection. The geometry of the impoundment has remained essentially unchanged.

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.

Table 1

INSTRUMENTATION DATA Bottom Ash Pond Complex			
Instrument	Type	Maximum Reading since last annual inspection	Date of reading
KC-1015	Piezometer	557.87	2/20/2018
KC-1016	Piezometer	541.20	1/23/2018
KC-1017	Piezometer	550.59	2/20/2018
KC-1018	Piezometer	542.10	3/19/2018
KC-1021	Piezometer	556.62	2/20/2018
KC-1022	Piezometer	554.24	4/18/2018

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

IMPOUNDMENT CHARACTERISTICS Bottom Ash Pond Complex		
	Boiler Slag Pond	Clearwater Pond
Approximate Minimum depth (elevation) of impounded water since last annual inspection	16.2 ft. (557.2)	8.1 ft.(549.1)
Approximate Maximum depth (elevation) of impounded water since last annual inspection	19.1 ft. (560.1)	19.2 ft. (560.2)
Approximate Present depth of impounded water at the time of the inspection	17.5 ft. (558.5)	8.8 ft. (549.8)

Approximate Minimum depth (elevation) of CCR since last annual inspection	41 ft. (582.0)*	N/A.
Approximate Maximum depth (elevation) of CCR since last annual inspection	41 ft. (582.0)*	N/A
Approximate Present depth (elevation) of CCR at the time of the inspection	41 ft. (582.0)*	N/A
Storage Capacity of impounding structure at the time of the inspection	610 ac-ft.	310 ac-ft.
Approximate volume of impounded water at the time of the inspection	181 ac-ft.	53 ac-ft.
Approximate volume of CCR at the time of the inspection	300 ac-ft	N/A

*Boiler slag is currently stockpiled within the impoundment in preparation for sales for beneficial use.

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 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 photos are included in Attachment A. Additional pictures taken during the inspection can be made available upon request.

Vegetation is well established and is controlled through an active maintenance program (Photo 1).

Discharge into the boiler slag pond is unobstructed and free draining (Photo 2).

The decant structure for the clear water pond was observed to be in good condition and flow was unobstructed (Photo 3).

Surface seals and concrete pads for the dam's piezometers were observed to be free of defects (Photo 4).

4.1.5 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 were observed and the water level fluctuation is also responsive to changing Ohio River stages (Attachment 3). Maximum piezometer water levels were nearly coincident with high river stages for the Ohio River (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.

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 2017 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 2. The maximum recorded readings of each instrument since the previous annual inspection is shown in Table 3.

Table 3

INSTRUMENTATION DATA			
South Fly Ash Pond			
Instrument	Type	Maximum Reading since last annual inspection	Date of reading
KC-1003	Piezometer	575.39	1/23/2018
KC-1004	Piezometer	551.29	9/28/2017
KC-1007	Piezometer	579.53	4/18/2018
KC-1008	Piezometer	559.31	4/18/2018
KC-1011	Piezometer	568.29	2/20/2018
KC-1012	Piezometer	561.77	2/20/2018

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

IMPOUNDMENT CHARACTERISTICS	
South Fly Ash Pond	
	South Fly Ash Pond
Approximate Minimum depth (elevation) of impounded water since last annual inspection	19.1ft. (583.0)
Approximate Maximum depth (elevation) of impounded water since last annual inspection	20.1 ft. (584.0)
Approximate Present depth (elevation) of impounded water since last annual inspection	19.5 ft. (583.5)
Approximate Minimum depth (elevation) of CCR since last annual inspection	13.9 ft. (563.9)

Approximate Maximum depth (elevation) of CCR since last annual inspection (ft.)	36 ft. (586.0)
Approximate Present depth (elevation) of CCR since last annual inspection	36 ft. (586.0)
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 c.y.

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. The inspection also included 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 and pipe discharge structure.

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 photos are included in Attachment A. Additional pictures taken during the inspection can be made available upon request.

Discharge into the fly ash pond was observed to be free flowing and unobstructed (Photos 5 and 6).

Embankment slopes and crest were observed to be in good condition (Photos 7, 8 and 9).

A minor seepage area (approximately 6 ft in diameter) was observed along the outboard slope of the pond's east embankments during the inspection and is intermittent based of the seven day inspection reports. (See Figure 3 for approximate location). A seep along the south dike was observed to be visually clear and flow is consistent with previous observations (Photo 10).

Discharge from the fly ash pond was observed to be free flowing and unobstructed (Photos 11 and 12).

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 were observed (Attachment 3).

4.2.6 CHANGES THAT EFFECT 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 outboard slopes, crest and inboard slopes of the embankment were generally in good condition. The embankments did not show any signs of structural weakness or instability. The vegetation along the embankments was recently mowed in most locations. The crest did not contain any ruts or other signs of instability. Specific maintenance and items to monitor are described in the subsequent sections of this report.
- 2) The hydraulic structures of the Boiler Slag Pond and the Clear Water Pond were generally in good condition. There were no signs of deterioration of the concrete or steel structures. Stop logs were available for use. Flow within the pipes appeared unobstructed. Specific maintenance and items to monitor are described in the subsequent sections of this report.

South Fly Ash Pond

- 3) The outboard slopes, crest and inboard slopes of the embankment were generally in good condition. The embankments did not show any signs of structural weakness or instability. The vegetation along the embankments was recently mowed in most locations. The crest did not contain any ruts or other signs of instability. Specific maintenance and items to monitor are described in the subsequent sections of this report.
- 4) 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.

5.2 MAINTENANCE ITEMS

The following maintenance items were identified during the visual inspection.

Bottom Ash Pond Complex

- 5) 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.

South Fly Ash Pond

- 6) The plant is actively performing maintenance in controlling vegetation along the crest and the interior/exterior embankment slopes. A few small locations in close proximity to the water's shoreline along the west embankment slope exhibited excessive vegetation. The vegetation should be periodically mowed to prevent woody vegetation or controlled through the application of a 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

- 7) A portion of the north dike has trees and woody vegetation located on the outboard slope which serve as a wind break for the boiler slag reclaim operations. The trees are located on a portion of the dike that is well above the normal pool and maximum pool elevations of the impoundment therefore they are not currently being recommended for removal. This area should be monitored for instability in the event the trees are uprooted and for other movements in the embankment. In the future if the pool elevation of the pond is raised the removal of these trees should be re-evaluated.

South Fly Ash Pond

- 8) Isolated wet areas observed through the weekly inspections should continue to be monitored for flow rate and clarity of flow. The plant is actively mitigating such areas and repairing them using the same ODNR approved detail for controlling previous seepage areas along embankment slope. If the flow rate increases or the water coming from the seep is not clear it should be brought to the immediate attention of AEP-Geotechnical Engineering.
- 9) The seepage located beyond the south toe was observed to be similar flow rate to previous inspections. Weekly inspections have noted that the flow rate is steady at 24 gpm. The flow was clear and there was no accumulation of solids around the seepage areas. The flow rate and clarity of this seep should continue to be monitored during the 7 day inspections.

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 this inspection or during any of the periodic 7-day or 30-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

ATTACHMENT A

Photos

**2018 Annual Dam and Dike Inspection Report
Kyger Creek Plant
Photos**



Photo 1 Typical view showing good conditions of the boiler slag embankment.



Photo 2 Typical view showing good conditions of the boiler slag embankment and stockpile of material to be used for beneficial utilization.



Photo 3 Typical view showing good conditions of the decant structure and interior embankment.



Photo 4 Typical view showing good conditions of the flush mounted piezometer installation showing the well cap seal and concrete pad.



Photo 5 Typical view showing good conditions of unobstructed discharge into the south fly ash pond.



Photo 6 Typical view showing conditions of unobstructed discharge into the fly ash pond.



Photo 7 Typical view showing good conditions of the east embankment showing a uniform slope and a well maintained vegetative cover.



Photo 8 Typical view showing good conditions of the north embankment showing a uniform slope and a well maintained vegetative cover.



Photo 9 Typical view showing good conditions of the west embankment showing a uniform slope and crest. No erosion of the interior pond slopes was observed.



Photo 10 Typical view showing fair conditions of the south fly ash pond discharge structure. Additional mowing is scheduled to be performed within this area.



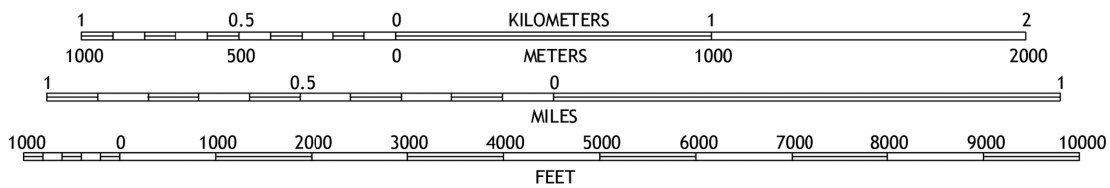
Photo 11 Typical view showing unobstructed flow from the south fly ash pond.



Photo 12 – Typical view of seep along the south dike showing a visually clear discharge.

ATTACHMENT B

Figures



THIS DRAWING IS CLASSIFIED AS:

AEP PUBLIC

REFERENCE AEP'S CORPORATE INFORMATION SECURITY POLICY

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OHIO VALLEY ELECTRIC COMPANY

KYGER CREEK PLANT

CHESHIRE

OHIO

SOUTH FLY ASH & BOILER SLAG POND

USGS TOPO MAP

7.5-MINUTE SERIES

UNIT:
15

DRAWING NUMBER:
LOCATION MAP

REV:
1

SCALE: 1"=2000'

CIVIL ENGINEERING

DR:

CH:

SUP:

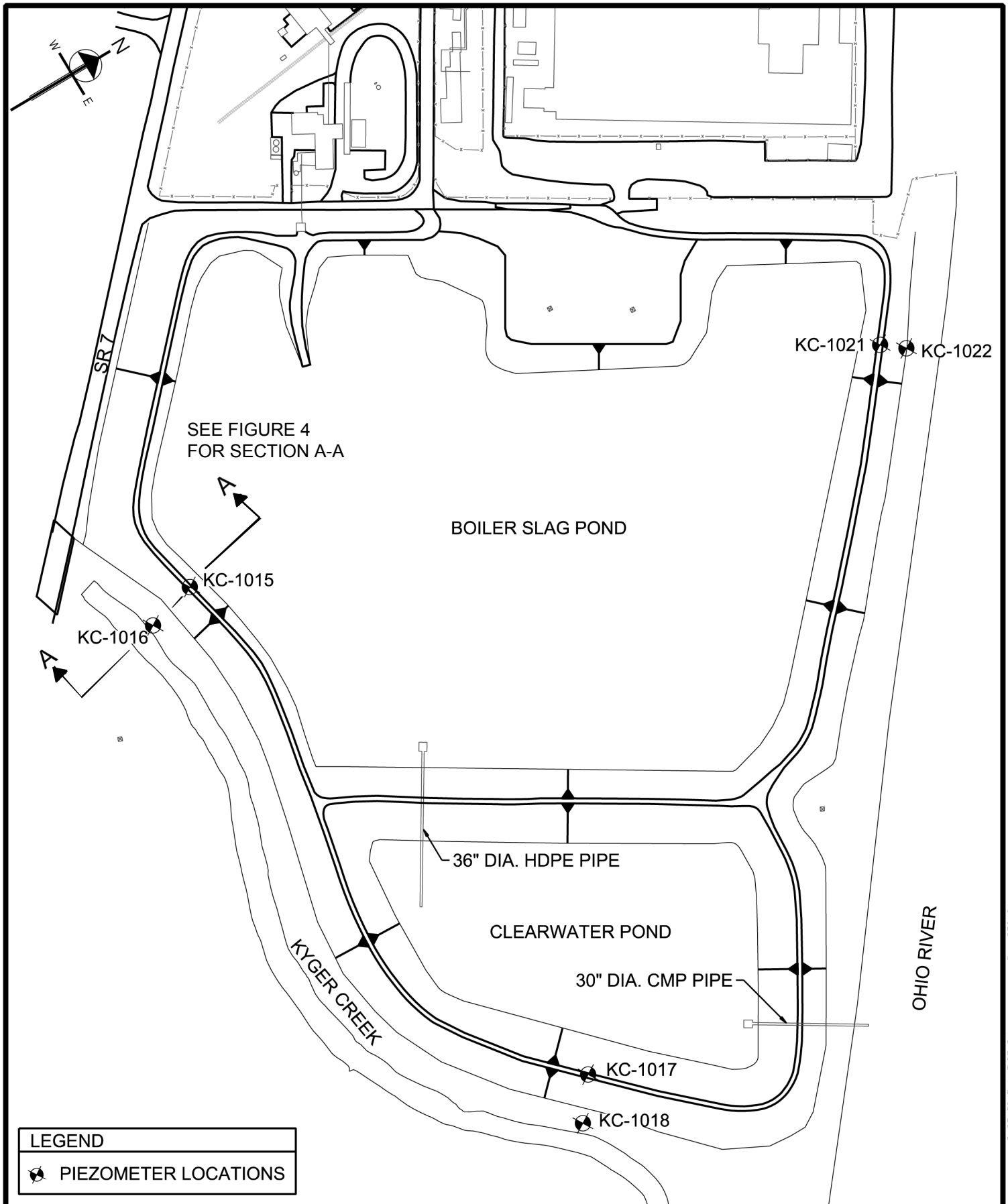
ENG:

DATE: 10/4/16

FIGURE 1



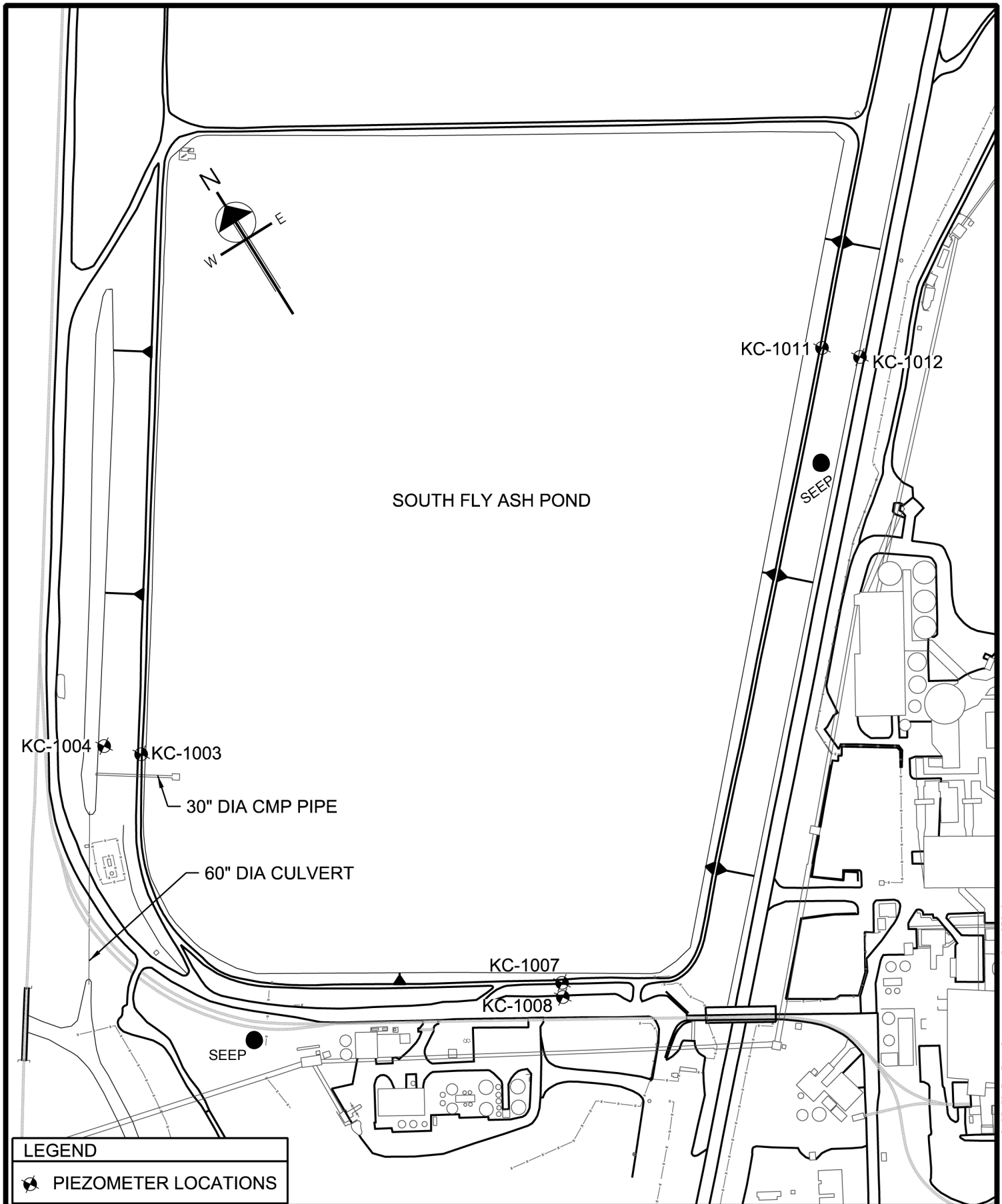
AEP SERVICE CORP.
1 RIVERSIDE PLAZA
COLUMBUS, OH 43215




LEGEND
PIEZOMETER LOCATIONS

DRN BY:	KYGER CREEK POWER STATION	DWG NO: FIGURE 2
DATE:	SHEET 1 OF 1	 AEP SERVICE CORP. 1 RIVERSIDE PLAZA COLUMBUS, OH 43215
SCALE: 1"=250'	BOTTOM ASH POND COMPLEX	


PLOT TIME: 11:47:07 PM
 BY: s259464
 DATE: 11/14/2016



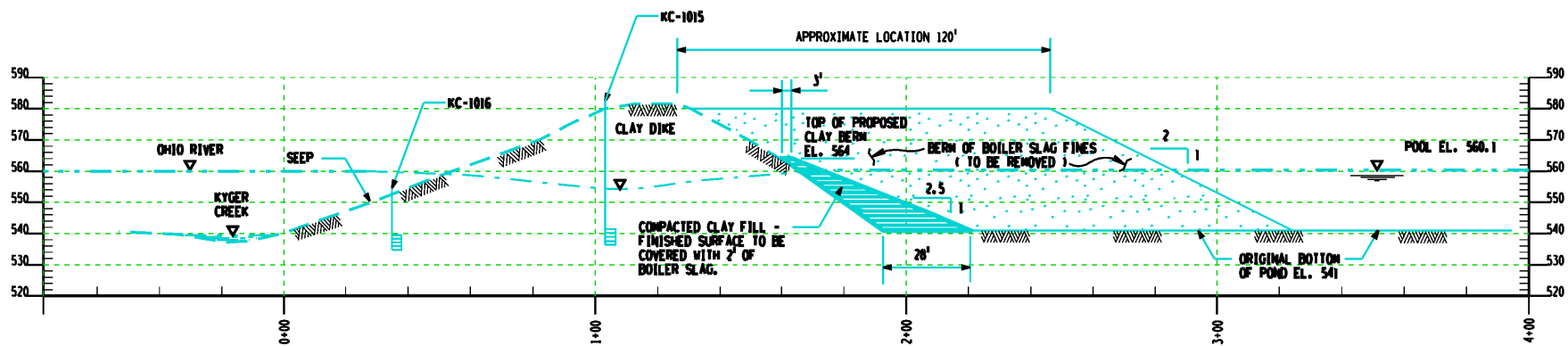
LEGEND
 **PIEZOMETER LOCATIONS**

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

KYGER CREEK POWER STATION
SHEET 1 OF 1
 SOUTH FLY ASH POND

DWG NO: **FIGURE 3**
 **AMERICAN ELECTRIC POWER**
 AEP SERVICE CORP.
 1 RIVERSIDE PLAZA
 COLUMBUS, OH 43215

PLOT TIME: 11:51:11 PM
 BY: s259464
 PLOT DATE: 11/14/2016



SECTION A-A

SCALE: 1" = 20'

DATE OF MEASUREMENT	OHIO RIVER	PIEZOMETERS		BOILER SLAG POND
		KC 1015	KC 1016	
FEB 20, 2018	560.0	557.8	NM*	560.1

* NO MEASUREMENT

DRAWING NUMBER: **FIGURE 4**

**KYGER CREEK PLANT
BOTTOM ASH POND
CROSS - SECTION**

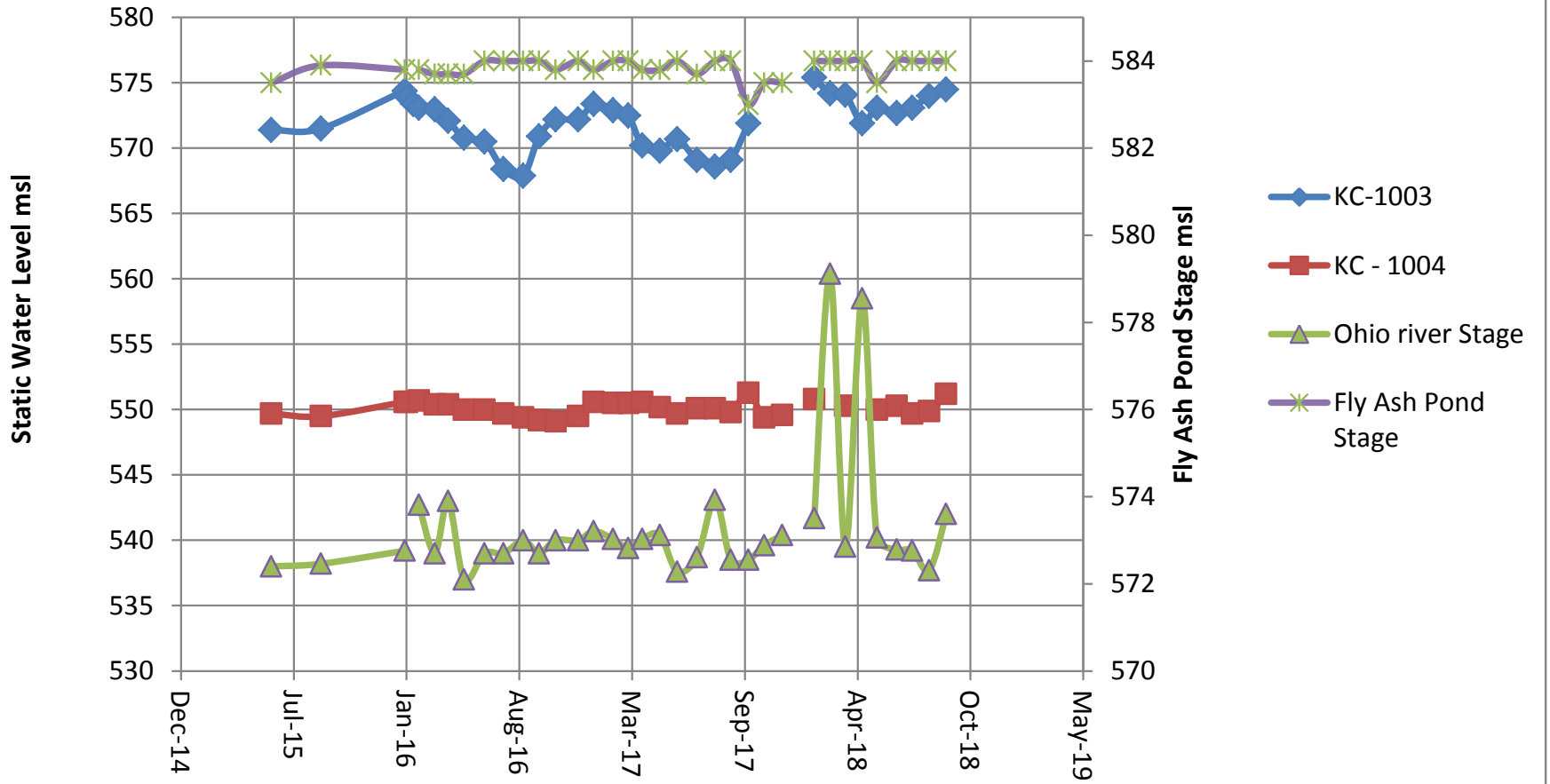
AEP AMERICAN ELECTRIC POWER	AEP SERVICE CORP. 1 RIVERSIDE PLAZA COLUMBUS, OH 43215
--------------------------------------------	-----------------------------------------------------------------------

PLOT DATE: 10/17/2018
 PLOT TIME: 10:15:12 AM
 BY: sz79452
 CROSS REFS:

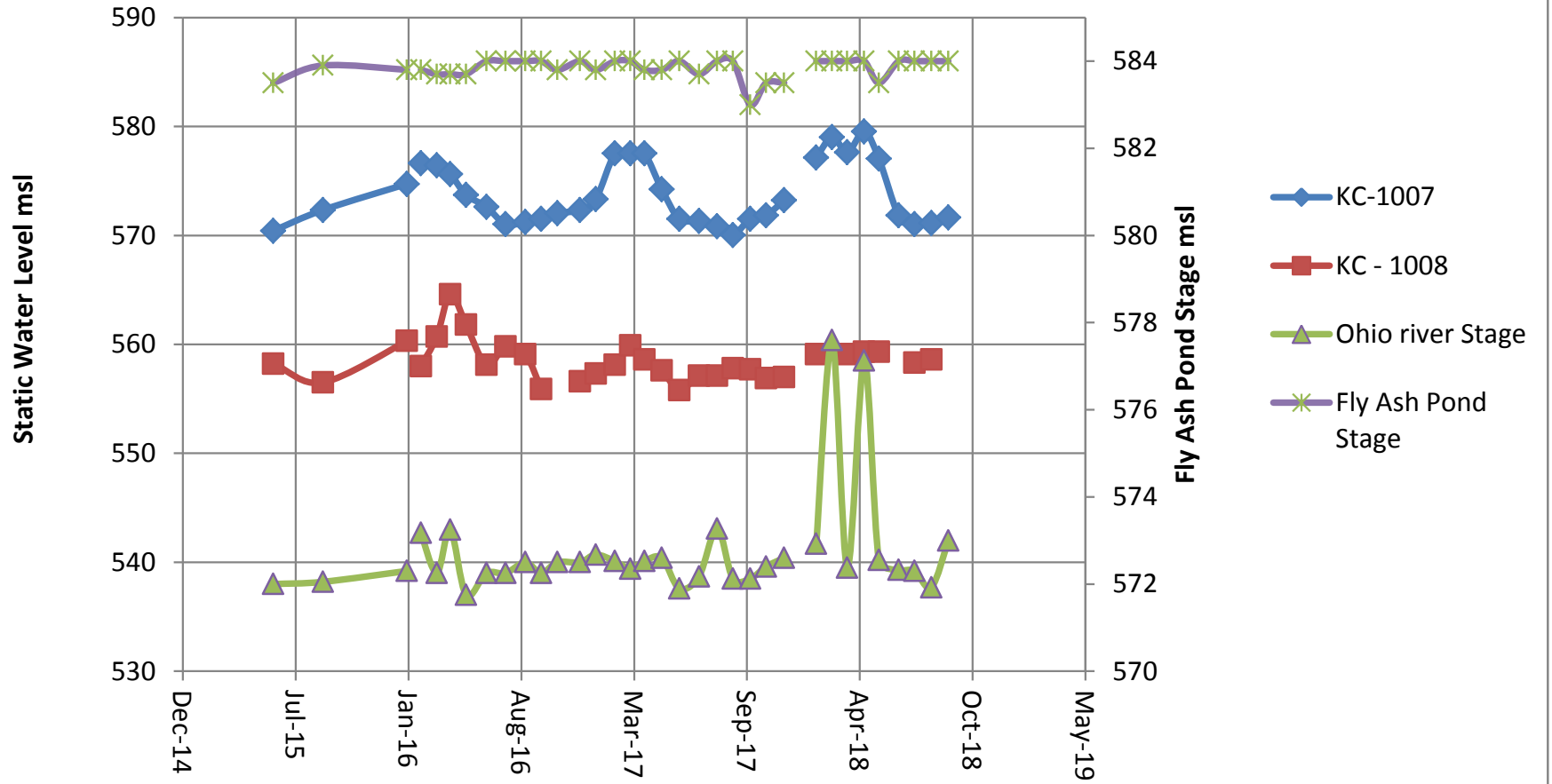
ATTACHMENT C

Pond Stage Hydrographs and Piezometer Hydrographs

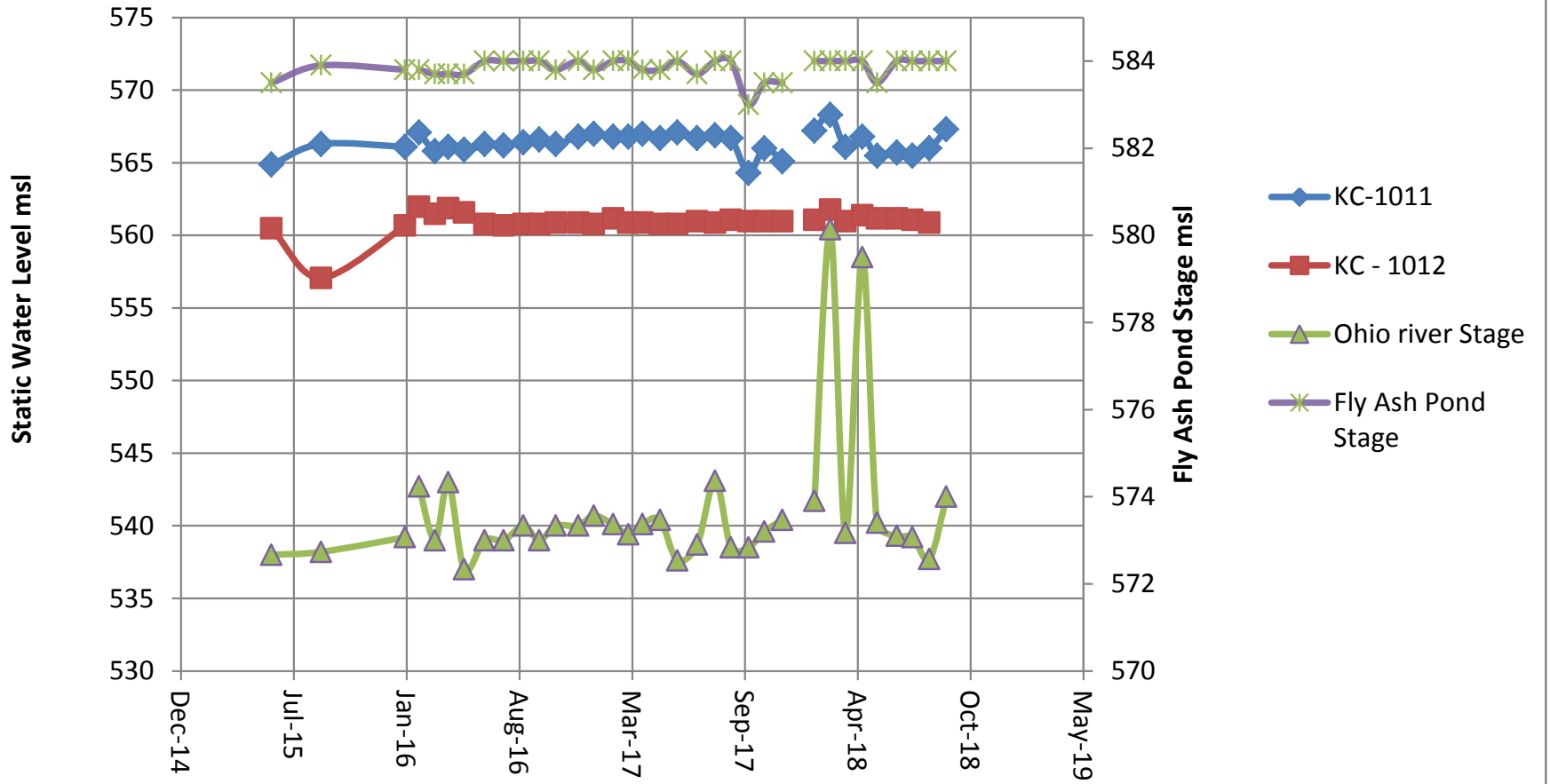
Kyger Creek Plant
Fly Ash Pond
Figure C-1



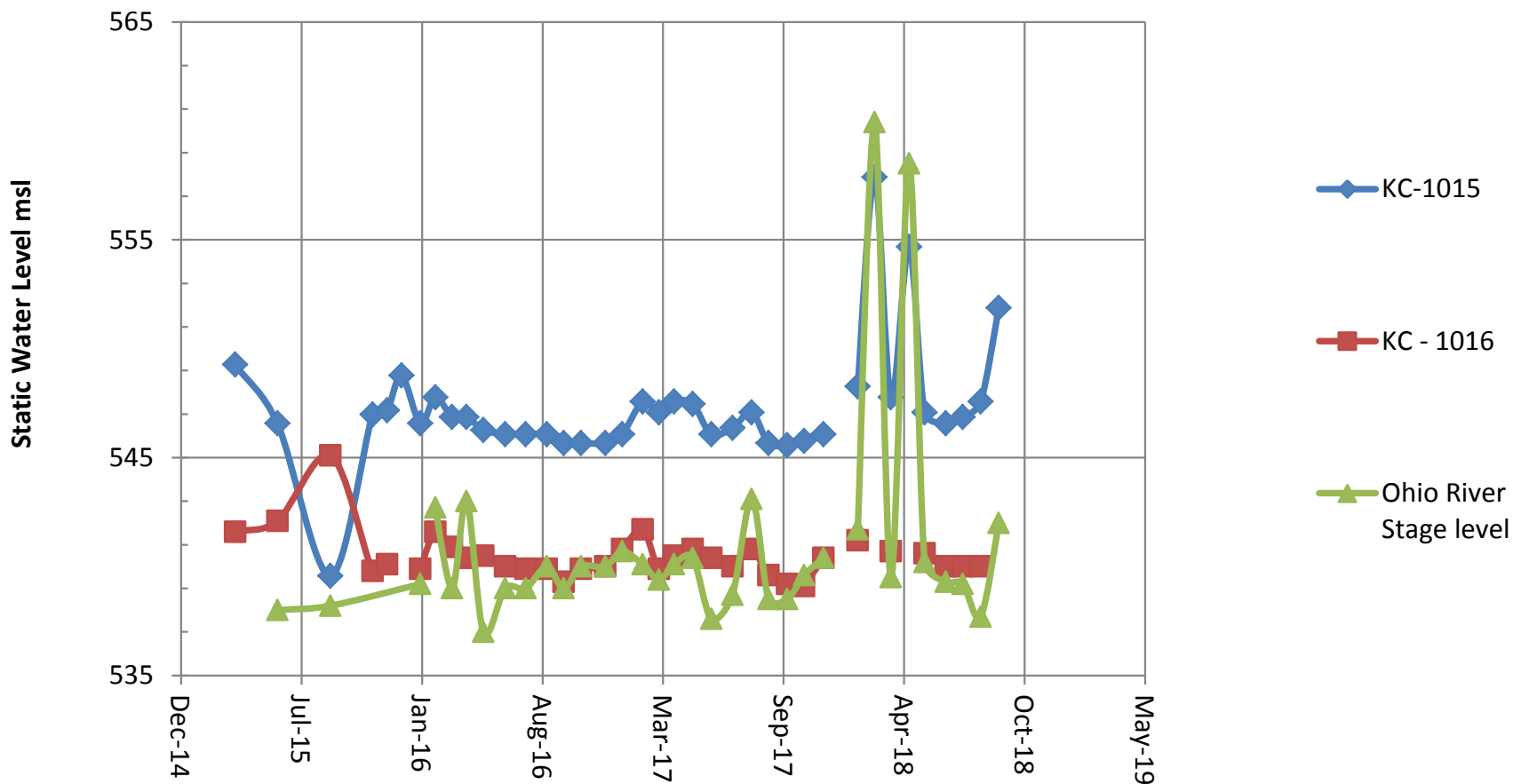
Kyger Creek Plant
Fly Ash Pond
Figure C-2



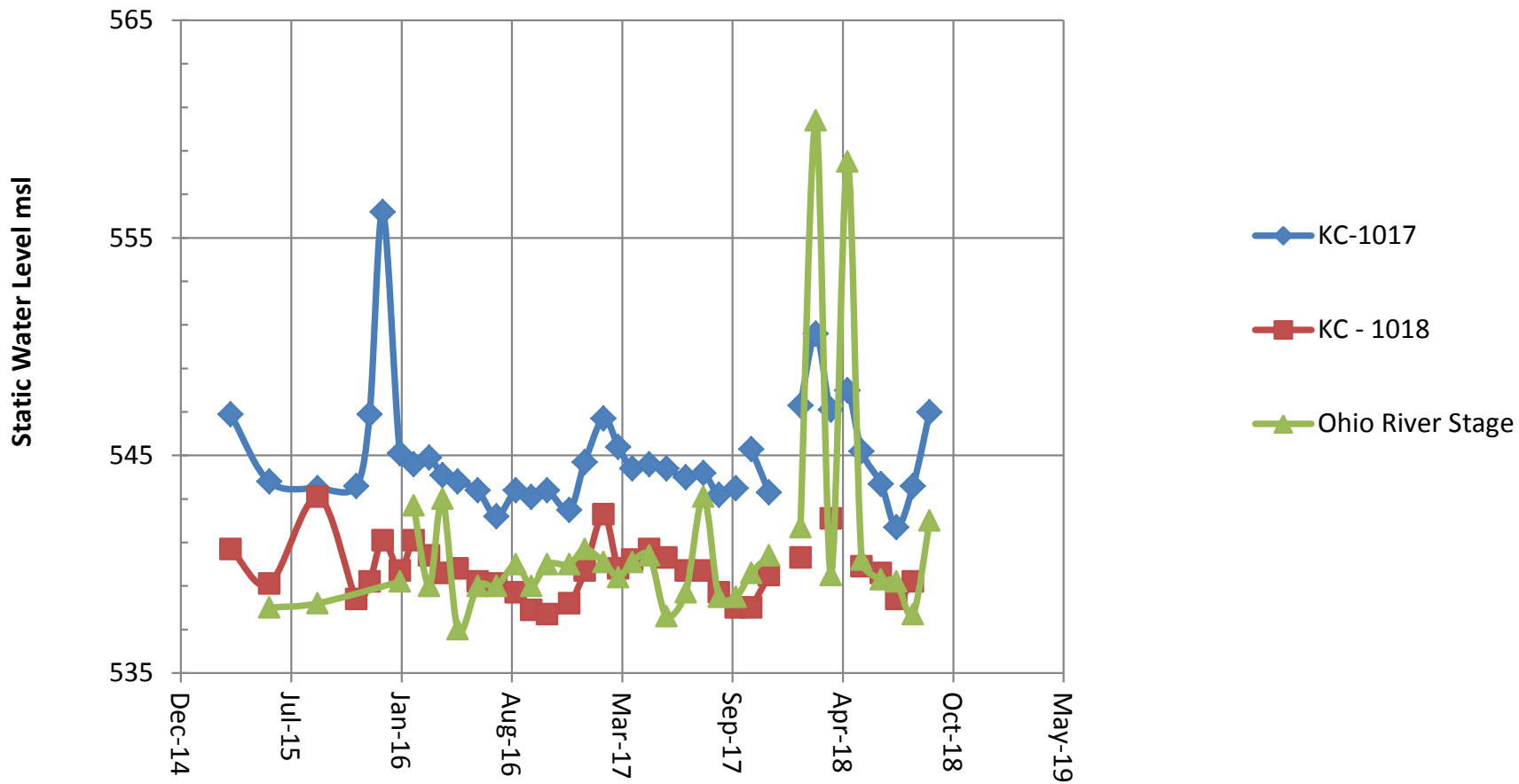
Kyger Creek Plant
Fly Ash Pond
Figure C-3



Kyger Creek Plant
Bottom Ash Pond
Figure C-4



Kyger Creek Plant
Bottom Ash Pond
Figure C-5



Kyger Creek Plant
Bottom Ash Pond
Figure C-6

