



OHIO VALLEY ELECTRIC CORPORATION

3932 U. S. Route 23
P. O. Box 468
Piketon, Ohio 45661
740-289-7200

WRITER'S DIRECT DIAL NO:
740-289-7267

April 17, 2017

Mr. Craig Butler
Director
Ohio Environmental Protection Agency
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, OH 43216-1049

Dear Mr. Butler:

**Re: Ohio Valley Electric Corporation
Kyger Creek Station
Notification of CCR Information Posting**

As required by 40 CFR 257.73(a)(3), the Ohio Valley Electric Corporation is providing notification to the State Director of the Ohio Environmental Protection Agency that a qualified professional engineer has worked with the facility in completing the development of the Emergency Action Plan for the Kyger Creek Station. The plan has been placed in the facility's operating record, as well as on the company's publically accessible internet site, which can be viewed at <http://www.ovec.com/CCRCompliance.php>

If you have any questions, or require any additional information, please call me at (740) 289-7267.

Sincerely,

A handwritten signature in black ink that reads "Gabriel S. Coriell". The signature is written in a cursive style.

Gabriel S. Coriell
Environmental Services Manager

GSC:klr



April 17, 2017
File: 175534017
Revision 0

Ohio Valley Electric Corporation
3932 U.S. Route 23
P.O. Box 468
Piketon, Ohio 45661

**RE: Emergency Action Plan
South Fly Ash Pond and Boiler Slag Pond
EPA Final Coal Combustion Residuals (CCR) Rule
Kyger Creek Station
Cheshire, Gallia County, Ohio**

1.0 PURPOSE

This letter documents Stantec's certification of the emergency action plan (EAP) for the Ohio Valley Electric Corporation (OVEC) Kyger Creek Station's South Fly Ash Pond (SFAP) and Boiler Slag Pond (BSP). The EPA Final CCR Rule requires owners or operators of CCR surface impoundments classified as high or significant hazard potential (per 40 CFR 257.73(a)(2)) to prepare and maintain a written EAP. Stantec has reviewed the existing EAP for the Kyger Creek Station's SFAP and BSP. Based on this assessment, the EAP for the SFAP and BSP is in compliance with requirements listed in 40 CFR 257.73(a)(3).

2.0 EMERGENCY ACTION PLAN - REQUIREMENTS

As described in 40 CFR 257.73(a)(3), for a high hazard or significant hazard potential CCR surface impoundment, a documented EAP is required to:

- A) Define the events or circumstances involving the CCR unit that represent a safety emergency, along with a description of the procedures that will be followed to detect a safety emergency in a timely manner;
- B) Define responsible persons, their respective responsibilities, and notification procedures in the event of a safety emergency involving the CCR unit;
- C) Provide contact information of emergency responders;
- D) Include a map which delineates the downstream area which would be affected in the event of a CCR unit failure and a physical description of the CCR unit; and
- E) Include provisions for an annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders.

Stantec reviewed the existing EAP for the SFAP and BSP (developed in April 2013, last revised April 2016) to ensure the information required above was still accurate.

3.0 SUMMARY OF FINDINGS

Stantec personnel reviewed the Kyger Creek Station's EAP entitled, "Ohio Valley Electric Corporation, Kyger Creek Plant, Emergency Action Plan, South Fly Ash Pond Dam, Boiler Slag Pond Dam (April 6, 2016). Each of the five required tasks as shown above in Section 2.0 is detailed below to evaluate compliance.

- A) In the section entitled, "Emergency Detection, Evaluation and Classification," two conditions are discussed, potentially hazardous and rapid/instantaneous failure. The



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Re: **Emergency Action Plan
South Fly Ash Pond and Boiler Slag Pond
EPA Final Coal Combustion Residuals (CCR) Rule
Kyger Creek Station
Cheshire, Gallia County, Ohio**

- conditions are defined, required notifications are listed, and standardized language is presented for the notifications. The table entitled, "Guidance for Determining Notification Level" defines the events or circumstances involving the CCR unit that represent a safety emergency. Descriptions of the procedures that will be followed to detect a safety emergency in a timely manner are explained in the section entitled "Event Detection". Key features of the dam to observe during site visits and inspections are listed in the section entitled, "Project Description" and are depicted in Attachment I of Appendix D of the EAP.
- B) The section entitled "General Responsibilities" defines responsible persons and their respective responsibilities in the event of a safety emergency involving the CCR unit. Notification procedures in the event of a safety emergency involving the CCR unit are explained in Appendix B – Standby Alert and Appendix C – Notification.
- C) Contact information of emergency responders is provided in Appendix B – Standby Alert and Appendix C – Notification. Section 2 of Appendix E - "Updating and Posting the EAP" describes how all contacts on the notification flowcharts will be called at least once annually to verify that the phone numbers and persons in the specified positions are current.
- D) Attachment II of Appendix D includes a map that delineates the downstream area affected in the event of a CCR unit failure. Breach parameters were based on engineering guidelines provided by the Federal Energy Regulatory Commission. A physical description of the CCR unit is explained in Section 3.1 of Appendix B - "Development of Model Geometry". Physical characteristics of the reservoir, spillway and dam embankments are detailed in Appendix F - "Supplementary Information" as well.
- E) The EPA Final CCR Rule calls for provisions for an annual face-to-face meeting or exercise between representatives of the owner or operator of the CCR unit and the local emergency responders. Section 1 of Appendix D - "Training" describes an annual meeting hosted and facilitated by the Kyger Creek Plant as follows:
- "The Kyger Creek Power Station will host and facilitate an annual training seminar and tabletop exercise for the EAP. Attendance should include staff members of OVEC Environmental, Safety & Health (ES&H) Department, plant personnel, the responsible AEP Geotechnical Engineer and others as designated by Kyger Creek Plant Management or OVEC ES&H Department."

Design with community in mind



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EPA Final Coal Combustion Residuals (CCR) Rule
Kyger Creek Station
Cheshire, Gallia County, Ohio**

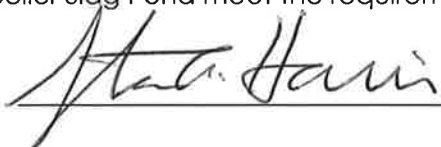
Annual dam maintenance inspections indicate that no amendment to the EAP from the April 2016 update is required. There has not been a change in the hazard potential classification for the SFAP Dam or BSP Dam since the October 2016 significant ratings. The review of the existing SFAP Dam and BSP Dam document shows that the criteria established in the EAP meets the requirements set forth in 40 CFR 257.73(a)(3).

4.0 QUALIFIED PROFESSIONAL ENGINEER CERTIFICATION

I, Stan A. Harris, being a Professional Engineer in good standing in the State of Ohio, do hereby certify, to the best of my knowledge, information, and belief:

1. that the information contained in this certification is prepared in accordance with the accepted practice of engineering;
2. that the information contained herein is accurate as of the date of my signature below; and
3. that the emergency action plan for the OVEC Kyger Creek Station's South Fly Ash Pond and Boiler Slag Pond meet the requirements specified in 40 CFR 257.73(a)(3).

SIGNATURE:

 DATE 4/17/17

ADDRESS: Stantec Consulting Services Inc.
11687 Lebanon Road
Cincinnati, Ohio 45241

TELEPHONE: (513) 842-8200

ATTACHMENTS: Ohio Valley Electric Corporation, Kyger Creek Plant, Emergency Action Plan – South Fly Ash Pond Dam and Boiler Slag Pond Dam (April 2013, revised April 6, 2016)

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Ohio Valley Electric Corporation Kyger Creek Plant

Emergency Action Plan

South Fly Ash Pond Dam

Bottom Ash Pond Dam

April 2013



Revised 4/6/2016

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PURPOSE

This plan establishes the notification procedures for the rapid implementation of the emergency actions to be taken prior to and/or following a failure of the Kyger Creek South Fly Ash Pond Dam and/or the Boiler Slag Pond Dam.

PROJECT DESCRIPTION

The Kyger Creek Power Plant is located along the Ohio River in Gallia County, Ohio, south of the town of Cheshire, Ohio. Nearby towns are Addison, Ohio, south on State Route 7 and Point Pleasant, West Virginia.

Both dams (South Fly Ash Pond and Boiler Slag Pond) form upground reservoirs for the disposal of coal ash. The fly ash dam is located across State Route 7, west of the power plant. Discharge from the fly ash dam is directed into Kyger Creek, approximately one mile above its confluence with the Ohio River.

The South Fly Ash Pond (SFAP) dam has a maximum dike height of 40 feet and a surface area of 65 acres. The storage capacity of the pond is 2,500 acre-feet. The maximum operating level is elevation 585'-0" and the crest of the dam is elevation 590'-0". This structure is the active fly ash dam.

The Bottom Ash Complex dam is located on the bank of the Ohio River and has a maximum dike height of 41 feet. The pond complex is divided into two pool areas by a splitter dike. For clarification purposes these pools will be referred to as the Boiler Slag Pond and the Clearwater Pond. The total storage capacity of the pond complex is 1,435 acre-feet.

Features and appurtenances of both the South Fly Ash Pond and Boiler Slag Pond Complex are listed below. An aerial photo containing the below listed features is included in the plan as *Attachment 1*.

Features and Appurtenances

South Fly Ash Pond	Boiler Slag Pond Complex
Floating Platforms	Floating Platforms
Skimmers and Booms	Skimmers and Booms
Monitoring Wells	Monitoring Wells
Flow Monitoring Equipment	Intake Towers
Intake Tower	Discharge Outlet Structure
Discharge Outlet Structure	Flow Monitoring Equipment
WWTP Effluent	Discharge Conduit
Boiler Room Sump Lines	Discharge Structure
Coal Yard Sump Lines	Harsco Minerals Discharge
Fly Ash Sluice Lines	Bottom Ash Sluice Lines

EMERGENCY DETECTION, EVALUATION AND CLASSIFICATION

Notification flowcharts have been developed for two conditions:

A. POTENTIALLY HAZARDOUS CONDITION EXISTS

Days or weeks may be available for response by emergency personnel. A notification flowchart is listed in *Appendix B – Standby Alert*. It is anticipated that this type of condition will allow time to take remedial action. Public officials will not be notified immediately in order to avoid creating unnecessary concern by downstream residents. If conditions worsen, public officials will be notified in the form of the following advisory.

“This is (name) of Ohio Valley Electric Corporation advising you that we are starting constant surveillance of the Kyger Creek Plant (state which dam is under surveillance). We are notifying you of the following condition of the dam(s): (state condition of dam requiring a standby alert). We will inform you if emergency action is required or cancellation of this alert has been made.”

B. RAPID/INSTANTANEOUS FAILURE CONDITION

Minutes to hours may be available for response by emergency personnel. A notification flowchart is listed in *Appendix C – Notification*. Public officials will be alerted so that positive action may be immediately undertaken. The following notification shall be read to each agency contacted.

“This is (name) of Ohio Valley Electric Corporation notifying you that failure of the Kyger Creek Plant (state which dam is under surveillance) is imminent/has occurred. Please take emergency action.”

C. EVENT DETECTION AND EVENT LEVEL DETERMINATION

This section of the Emergency Action Plan (EAP) describes the first step that must be followed whenever an unusual or emergency event is detected at the South Fly Ash Pond Dam or Boiler Slag Pond Dam. This section also describes event detection and information to assist the EAP Coordinator in determining the appropriate level for the event.

Event Detection

Unusual or emergency events may be detected by OVEC personnel or any visitors to the dam. Routine inspections of the dam should be performed per guidance from the dam’s management and maintenance plan. Key features of the dam to observe on site visits and inspections are listed below and can also be viewed in Attachment 1:

- Embankment Crest
- Embankment Slopes
- Downstream Toe Area

- Inlet and Outlet Structures

After any unusual or emergency event is detected and reported to the EAP Coordinator, the EAP Coordinator is responsible for determining the level of the event. If a local emergency services agency receives a 911 call regarding observations of an unusual or emergency event at the dam, the dispatcher shall contact Kyger Creek Power Station which will notify the EAP Coordinator. The EAP Coordinator shall determine the appropriate event level (as defined above) and advise the dispatcher according to the event level.

Level Determination Guidance

The following table shall be used as a guide for determining the appropriate event level. This table attempts to include the most common dam threatening situations; however, an event or condition may arise that is not covered in this table. In the circumstance of multiple events occurring at the dam with conflicting event levels, always designate the more severe event level as the governing event level.

Guidance for Determining Notification Level

Event	Situation	Condition
Toe Erosion by Ohio River	Limited erosion of dike toe / No to minimal embankment movement	Potentially Hazardous
	Limited erosion of dike toe / Minimal embankment movement	Potentially Hazardous
	Erosion of dike toe with rapid embankment movement	Rapid/Instantaneous Failure
Flood Event on Ohio River	Flooding of Ohio River reverses flow through the principal spillway	Potentially Hazardous
	Flooding of Ohio River causes gradual movement in embankment slopes	Potentially Hazardous
	Flooding of Ohio River causes rapid movement in embankment slopes	Rapid/Instantaneous Failure
Blocked Spillway Inlet	Spillway inlet blocked resulting in a raised pool level not overtopping the dam; Spillway inlet still accessible	Potentially Hazardous
	Spillway inlet blocked resulting in a raised pool level not overtopping the dam; Spillway inlet not accessible	Potentially Hazardous
	Spillway inlet blocked resulting in overtopping of the dam	Rapid/Instantaneous Failure
Seepage	New seepage areas in or near the dam	Potentially Hazardous
	New seepage areas with cloudy discharge or increasing flow rate	Potentially Hazardous
	Seepage with discharge greater than 10 gallons per minute	Rapid/Instantaneous Failure
Embankment Cracking	New cracks in the embankment greater than ¼-inch wide without seepage	Potentially Hazardous

Guidance for Determining Notification Level

Event	Situation	Condition
	Cracks in the embankment with seepage	Potentially Hazardous
Embankment Movement	Visual movement/slippage of the embankment slope	Potentially Hazardous
	Sudden or rapidly proceeding slides of the embankment slope	Rapid/Instantaneous Failure
Sinkholes	Observation of new sinkhole in reservoir area or on embankment	Potentially Hazardous
	Rapidly enlarging sinkhole	Potentially Hazardous
Embankment Overtopping	Overtopping flow not eroding the embankment slope; reservoir level expected to lower	Potentially Hazardous
	Overtopping flow not eroding the embankment slope; reservoir level expected to rise	Rapid/Instantaneous Failure
	Overtopping flow eroding the embankment slope	Rapid/Instantaneous Failure
Earthquake	Measurable earthquake felt or reported on or within 50 miles of the dam	Potentially Hazardous
	Earthquake resulting in visible damage to the dam or appurtenances	Potentially Hazardous
	Earthquake resulting in uncontrolled release of water from the dam	Rapid/Instantaneous Failure
Sabotage/ Vandalism	Damage to dam or appurtenances with no impacts to the functioning of the dam	Potentially Hazardous
	Modification to the dam or appurtenances that could adversely impact the function of the dam	Potentially Hazardous
	Damage to dam or appurtenances that has resulted in seepage flow	Potentially Hazardous
	Verified bomb threat that, if carried out, could result in damage to the dam	Potentially Hazardous
	Damage to dam or appurtenances that has resulted in uncontrolled water release	Rapid/Instantaneous Failure

GENERAL RESPONSIBILITIES

To aid local officials in preparing the evacuation plan, maps have been developed showing the approximate limits of the inundated areas due to the uncontrolled release of water from the ash pond dams. The maps, along with a summary of the hydrology report on the dam-break, flood inundation analysis, are included in *Appendix D – Dam Break and Flood Inundation Analysis*.

EAP Coordinator Responsibility

Kyger Creek Station's EAP Coordinator is responsible for preparing revisions to the EAP, establishing training seminars and coordinating any exercises or mock emergencies. The EAP is the contact if there are any questions concerning the plan.

The EAP Coordinator for Kyger Creek Station – Tye E. Schwall

Plan Activation

The Kyger Creek Plant is operated 24 hours per day. The individual acting as the Shift Operating Engineer for a given shift will have the authorization to activate the notification procedures. The notification lists in Appendices B and C include the phone numbers of key individuals/agencies.

Evacuation

State and local officials are charged with the safety of the public are responsible for evacuation planning and implementation during a dam emergency.

Termination, Security and Updates

Termination of the Emergency will be determined by the EAP Coordinator. The EAP Coordinator will also assist local law enforcement with coordinating security. The EAP Coordinator will be responsible for issuing all updates and notifications following the initial plan activation.

APPENDIX A – PREPAREDNESS

A. SURVEILLANCE

The Kyger Creek Plant ash pond dams are normally unattended and do not have remote-controlled systems to regulate their outflow. Because of the nature of the ponds and design of the dams and outlet works, sufficient freeboard normally exists to mitigate any concern of overtopping during a rainfall event. A regular inspection of the dams will be conducted weekly by plant personnel and a safety inspection is conducted yearly by personnel of the American Electric Power Service Corporation's (AEPSC's) Geotechnical Engineering section.

B. ACCESS TO SITE

Primary access to Kyger Creek Station is via Route 7. However, in the event of rapid/instantaneous failure of the east portion of the fly ash dam, Route 7 will be inundated with water. Access will then be through the northwest entrance via AEP's Gavin facility.

C. COMMUNICATION SYSTEM

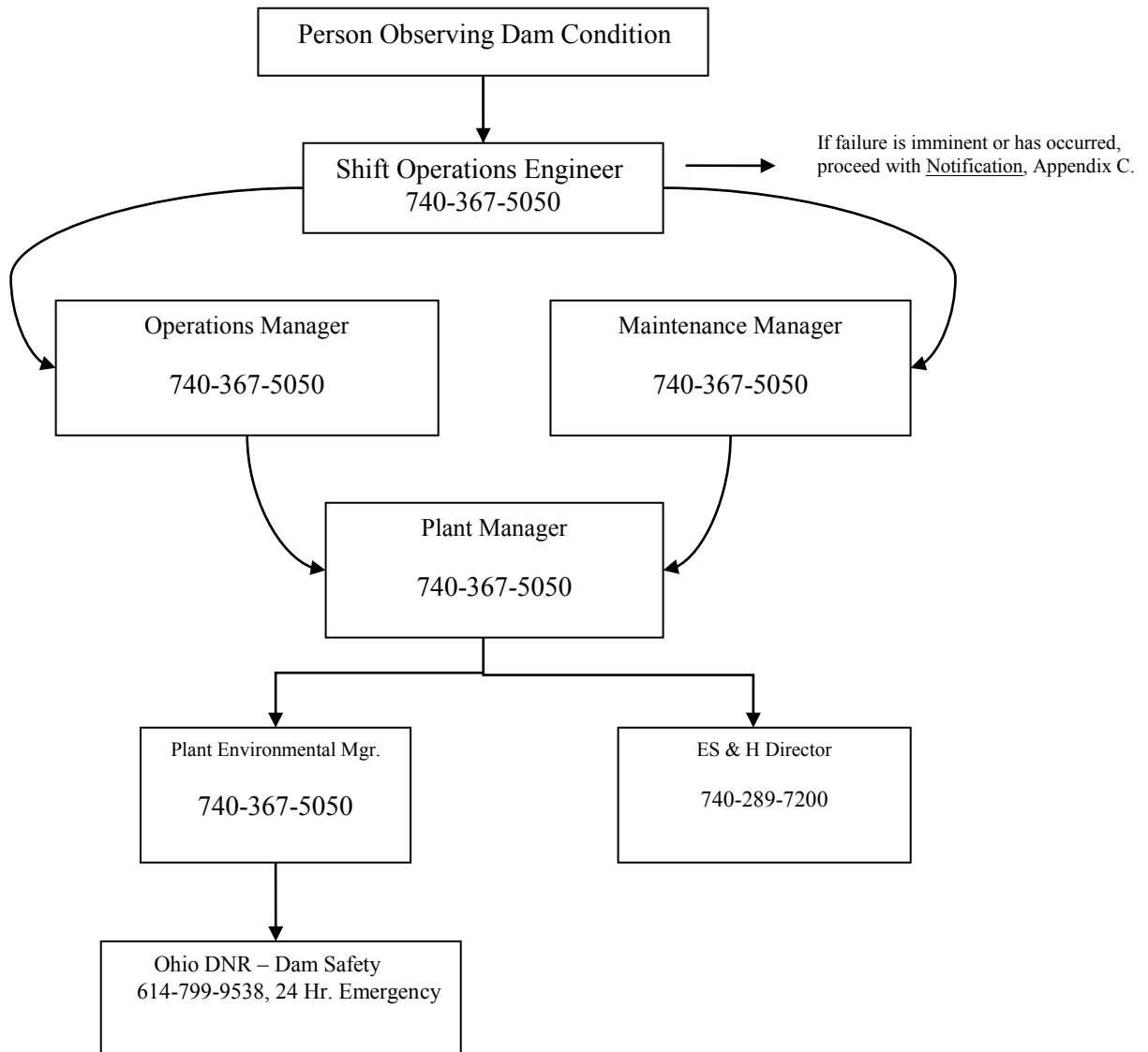
The primary means of communication for any emergency will be the Bell Telephone System. A microwave telephone system for the Ohio Valley Electric Corporation and the AEPSC and its affiliates is also available.

D. EMERGENCY SUPPLIES

Materials necessary to repair earthen embankments are not normally stockpiled at the dams or plant site. The plant operates heavy construction equipment for use in the coal storage area, which are to be used for temporary repairs of the dams if necessary and possible. In the event of a rapid/instantaneous failure condition, such remedial measures would be ineffective, hazardous to the equipment operators and will not be used.

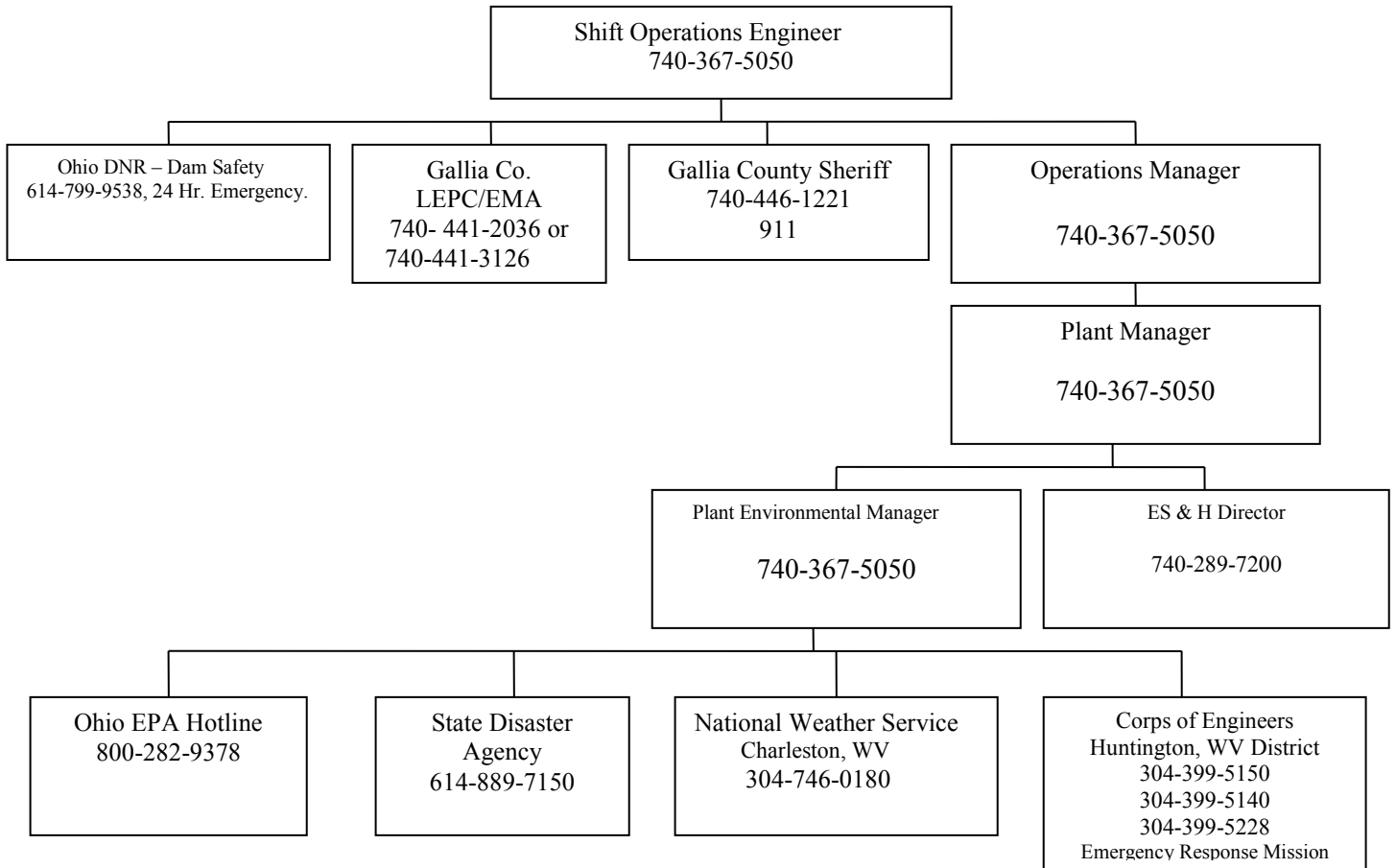
APPENDIX B – STANDBY ALERT

Following is the flowchart illustrating the order of notification for persons/agencies to be contacted following a Standby Alert.



APPENDIX C – NOTIFICATION

Following is the flowchart illustrating the order of notification for persons/agencies to be contacted following a Rapid/Instantaneous Failure Condition.



APPENDIX D – DAM BREAK AND FLOOD INUNDATION ANALYSIS

A. GENERAL

The South Fly Ash Pond dam and the Boiler Slag Pond dam at the Kyger Creek Plant were inspected by the Ohio Department of Natural Resources (ODNR), Division of Water, on August 9, 1995. Both dams are Class II structures as per Administrative Rule 1501:21-13-01.

For a Class II structure, an emergency warning plan is required to notify downstream officials and residents if an unsafe condition develops. Essential to the warning plan are flood inundation maps that delineate the areas affected by a hypothetical failure of the dam. This report summarizes the analysis of the potential flooding hazard in the event of a dam failure.

B. DAM BREAK ANALYSIS

A dam break analysis was conducted for the South Fly Ash Pond dam using the National Weather Service DAMBRK computer model. This structure was used for the analysis since the North Fly Ash Pond is inactive and full of settled fly ash, and failure of the Boiler Slag Pond dam would inundate only agricultural land and/or discharge directly into the Ohio River.

Cross sections of Kyger Creek between the South Fly Ash Pond dam and State Route 7 were determined from aerial photography dated December 1994. For the remaining sections, data from the USGS maps were used. Breach parameters were selected from the Engineering Guidelines by the Federal Energy Regulatory Commission. For an earthen dam, the final breach width at the bottom should range between H to $5H$, where H is the height of the dam. Side slopes of the failure section are $Z:1$ vertical, where Z varies between 0.25 to 1.0. The time to complete the failure is 0.5 to 1.0 hours for overtopping events, longer for piping failures.

Failure of the southern dike of the ash dam was considered the most critical with regard to hazardous flooding potential. This is based on the fact that if the east dike fails, the flood wave will wash over State Route 7 and into the plant's coal yard area. If the west dike fails, the flow will overtop the railroad embankment and spill into the wide flood plain of Kyger Creek before entering the creek. In addition, the most susceptible structures to flooding are located between the railroad crossing and State Route 7.

The cause of the postulated failure is due to piping problems with a failure time in the upper range of the guidelines. The water level in the pond is at the maximum operating level of 587 and the total storage capacity is assumed to behave like water.

The State Route 7 bridge was modeled as a constriction in the analysis. Data was obtained from the Department of Transportation as well as a site visit. The conditions along the Ohio River were assumed to be normal (elevation 538) since the hypothetical piping failure is not related to a flooding event.

C. RESULTS

The breach parameters studied in the analysis varied to determine the critical section. Breach widths between 50-100 feet and failure times of 0.5-1.0 hours were modeled. The final parameters selected are: bottom width of 100 feet, 1:1 side slopes, and a failure time of 0.75 hours.

In the event of a failure, the flood plain below the railroad crossing is inundated, including State Route 7, and Gravel Hill Road. Flooding depths are approximately 20 feet above the normal creek levels. However, no inhabited structures are affected by the flooding. Flooding on the downstream side of the State Route 7 bridge is confined to open, agricultural land that is in the flood plain of the Ohio River. The flood wave has an insignificant effect on the water levels along the Ohio River, typically less than 3 feet. *Attachment II* also shows the limit of flooding due to a dam failure. A copy of the DAMBRK computer results is attached to this summary report.

Attachment I



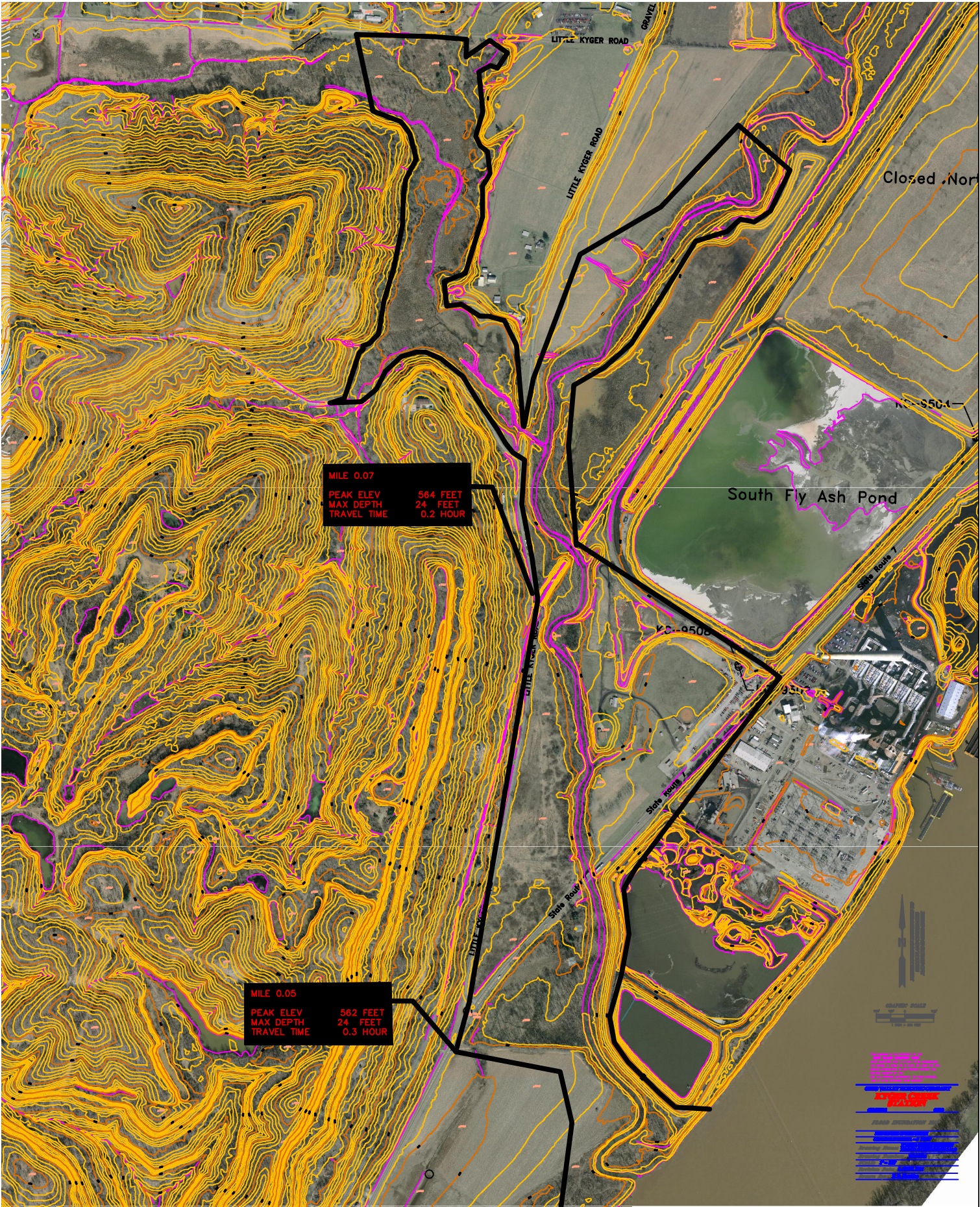
Little Kyger Rd

15

Ohio River Scenic Byway

7

Attachment II



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B O S S . . . D A M B R K (tm)

=====

Copyright (C) 1988-92 Boss Corporation
All Rights Reserved

Version : 3.00
Serial Number : 22191

American Electric Power Service Corp.

PROGRAM ORIGIN :

Boss Dambrk (tm) is an enhanced version of Professor D. L. Fread's 1991 NWS DAMBRK program.

DISCLAIMER :

Boss Dambrk (tm) is a complex program which requires engineering expertise to use correctly. Boss Corporation assumes absolutely no responsibility for the correct use of this program. All results obtained should be carefully examined by an experienced professional engineer to determine if they are reasonable and accurate.

Although Boss Corporation has endeavored to make Boss Dambrk error free, the program is not and cannot be certified as infallible. Therefore, Boss Corporation makes no warranty, either implicit or explicit, as to the correct performance or accuracy of this software.

In no event shall Boss Corporation be liable to anyone for special, collateral, incidental, or consequential damages in connection with or arising out of purchase or use of this software. The sole and exclusive liability to Boss Corporation, regardless of the form of action, shall not exceed the purchase price of this software.

PROJECT DESCRIPTION :

PROJECT TITLE : FAILURE OF SOUTH ASH POND
PROJECT NUMBER : KYGER CREEK ASH PONDS
DESCRIPTION : SOUTH DIKE FAILS
ENGINEER : G. F. ZYCH
DATE OF RUN : 9/17/1996
TIME OF RUN : 1:45 pm

INPUT DATA SUMMARY :

INPUT CONTROL PARAMETERS :

Problem Specification Option	14	
Number of Dynamic Routing Reaches (KKN)	1	
Type of Reservoir Routing (KUI)	1	(dynamic routing)
Number of multiple dams/bridges (MULDAM)	2	
No. of Reservoir Inflow Hydrograph Points (ITEH)	2	
No. of Informational Cross-Sections (NPRT)	0	
Flood-Plain Routing (KFLP)	0	(no)

CROSS-SECTION NUMBERS COINCIDENT
WITH UPSTREAM DAM FACE (IDAM) :

1
6

RESERVOIR VOLUME DESCRIPTION :

Elevation vs. Surface Area Table

Elevation HSA(K) (ft MSL)	Surface Area SA(K) (acres)
590.00	65.000
587.00	64.400
560.00	59.000
550.00	54.000
0.00	0.000
0.00	0.000
0.00	0.000
0.00	0.000

DAM NUMBER : 1

RESERVOIR AND BREACH PARAMETERS :

Initial Elevation of Water Surface (YO, ft MSL)		587.00
Breach Side Slope (Z)	1:	1.00
Breach Bottom Elevation (YBMIN, ft MSL)		550.00
Breach Base Width (BB, ft)		100.00
Time of Breach Formation (TFH, hr)		0.75

RESERVOIR DESCRIPTION :

Water Surface Elevation at Time of Breach (HF, ft MSL)	587.00
Top of Dam Crest Elevation (HD, ft MSL)	590.00
Uncontrolled Spillway Crest Elevation (HSP, ft MSL)	0.00
Spillway Gate Center Elevation (HGT, ft MSL)	0.00
Uncontrolled Spillway Discharge Coefficient (CS)	0.00
Spillway Gate Discharge Coefficient (CG)	0.00
Piping Centerline Elevation (CDO, ft MSL)	568.00
Turbine Discharge (QT, cfs)	500.00

BRIDGE NUMBER : 1

Breach Side Slope (Z)	1:	1.00
Breach Bottom Elevation (YBMIN, ft MSL)		552.00
Breach Base Width (BB, ft)		30.00
Time of Breach Formation (TFH, hr)		1.00
Water Elevation when Breached (HF, ft MSL)		570.00
Top of Roadway Elev (HD, ft MSL)		559.00
Roadway Length (HSPD, ft)		500.00
Emergency Spillway Weir Elev (HGTD, ft MSL)		0.00
Emergency Spillway Weir Length (CSD, ft)		0.00
Bridge Deck Width (CGD, ft)		30.00
Bridge Discharge Coefficient (CDOD)		0.90
Time Step for Embankment Overtopping (QT, hr)		0.10

BRIDGE OPENING GEOMETRY :

Elevation HSBR(K,L) (ft MSL)	Bridge Opening Width BSBR(K,L) (ft)
538.000	30.000
552.000	105.000
556.000	135.000
556.100	0.000
559.000	0.000
561.000	0.000
0.000	0.000
0.000	0.000

BOUNDARY CONDITIONS :

Hydrograph Time Intervals (DHF, hr)	0.00
Routing Period (TEH, hr)	2.00
Breach Development Exponent (BRES)	0.00
Mud/Debris Flow Parameter (MUD)	0
Dry Bed Routing Parameter (IWF)	0
Hydraulic Radius Computation Parameter (KPRES)	0 (R=A/B)
Landslide Simulation (KSL)	0 (none)
Critical Flow Froude Number (DFR)	0.950

INFLOW HYDROGRAPH DESCRIPTION :

Time Elapsed TI(K) (hr)	Upstream Inflow OI(K) (cfs)
0.00	500.0
2.00	500.0

SUMMARY OF PROGRAM CONTROL PARAMETERS :

Problem Specification Option (KKN, KUI, MULDAM, IDAM)	14
Number of Cross-Sections Entered (NS)	13
Number of Top Widths Entered (NCS)	6
Number of Cross-Sectional Hydrographs to Plot (NTT)	1
Flow Type Parameter (KSUPC)	0 (subcritical)
Number of Lateral Inflow Hydrographs (LQ)	1
Number of Points in Gate Control Curve (KCG)	0

CROSS-SECTIONS WHERE HYDROGRAPH REQUESTED :
(maximum allowed = 6)

1

CHANNEL-VALLEY BOUNDARY CONDITIONS :

Max Discharge at Downstream End (QMAXD, cfs)	0.0
Max Lateral Outflow due to Flood Wave (QLL, cfs/ft)	0.0000
Initial Time-Step Size (DTHM, hr)	0.1000
Time at which Dam Starts to Fail (TFI, hr)	0.0000
Theta Weighting Factor (FLI)	0.000
Stage Convergence Criterion (EPSY, ft)	0.000
Downstream Boundary Type Parameter (YDN)	0.25
Slope of Channel Downstream of Dam (SOM, ft/mi)	2.0000

CROSS-SECTION NUMBER : 1

Cross-Section Location (XS(I), mi) 0.000
Flooding Elevation (FSTG(I), ft MSL) 0.000

DOWNSTREAM REACH NUMBER : 1

Reach Contraction-Expansion Coefficient (FKC) -0.300
Minimum Distance Between Interpolated Cross-Sections (DXM, mi) 1.000

CROSS-SECTION and REACH DESCRIPTION :

Elevation HS(K, I) (ft MSL)	Channel Top Width BS(K, I) (ft)	Channel Manning n CM(K, I)	Storage Top Width BSS(K, I) (ft)
546.00	1100.0	0.0120	0.0
560.00	1150.0	0.0150	0.0
580.00	1210.0	0.0200	0.0
587.00	1230.0	0.0200	0.0
590.00	1250.0	0.0250	0.0
591.00	1250.0	0.0250	0.0

CROSS-SECTION NUMBER : 2

Cross-Section Location (XS(I), mi) 0.070
Flooding Elevation (FSTG(I), ft MSL) 0.000

DOWNSTREAM REACH NUMBER : 2

Reach Contraction-Expansion Coefficient (FKC) -0.300
Minimum Distance Between Interpolated Cross-Sections (DXM, mi) 1.000

CROSS-SECTION and REACH DESCRIPTION :

Elevation HS(K,I) (ft MSL)	Channel Top Width BS(K,I) (ft)	Channel Manning n CM(K,I)	Storage Top Width BSS(K,I) (ft)
540.00	25.0	0.0200	0.0
546.00	110.0	0.0300	0.0
548.00	145.0	0.0300	0.0
560.00	185.0	0.0350	0.0
565.00	220.0	0.0350	0.0
566.00	240.0	0.0400	0.0

CROSS-SECTION NUMBER : 3

Cross-Section Location (XS(I), mi) 0.150
Flooding Elevation (FSTG(I), ft MSL) 0.000

DOWNSTREAM REACH NUMBER : 3

Reach Contraction-Expansion Coefficient (FKC) 0.000
Minimum Distance Between Interpolated Cross-Sections (DXM, mi) 1.000

CROSS-SECTION and REACH DESCRIPTION :

Elevation HS(K, I) (ft MSL)	Channel Top Width BS(K, I) (ft)	Channel Manning n CM(K, I)	Storage Top Width BSS(K, I) (ft)
539.70	20.0	0.0250	0.0
546.00	110.0	0.0300	0.0
552.00	160.0	0.0350	0.0
558.00	230.0	0.0400	0.0
560.00	420.0	0.0450	0.0
564.00	450.0	0.0450	0.0

CROSS-SECTION NUMBER : 4

Cross-Section Location (XS(I), mi) 0.240
 Flooding Elevation (FSTG(I), ft MSL) 0.000

DOWNSTREAM REACH NUMBER : 4

Reach Contraction-Expansion Coefficient (FKC) -0.300
 Minimum Distance Between Interpolated Cross-Sections (DXM, mi) 1.000

CROSS-SECTION and REACH DESCRIPTION :

Elevation HS(K, I) (ft MSL)	Channel Top Width BS(K, I) (ft)	Channel Manning n CM(K, I)	Storage Top Width BSS(K, I) (ft)
539.40	20.0	0.0250	0.0
545.00	100.0	0.0300	0.0
552.00	160.0	0.0300	0.0
556.00	270.0	0.0350	0.0
558.00	620.0	0.0400	0.0
564.00	650.0	0.0400	0.0

CROSS-SECTION NUMBER : 5

Cross-Section Location (XS(I), mi) 0.460
Flooding Elevation (FSTG(I), ft MSL) 0.000

DOWNSTREAM REACH NUMBER : 5

Reach Contraction-Expansion Coefficient (FKC) -0.400
Minimum Distance Between Interpolated Cross-Sections (DXM, mi) 1.000

CROSS-SECTION and REACH DESCRIPTION :

Elevation HS(K, I) (ft MSL)	Channel Top Width BS(K, I) (ft)	Channel Manning n CM(K, I)	Storage Top Width BSS(K, I) (ft)
538.70	20.0	0.0200	0.0
545.00	90.0	0.0300	0.0
552.00	130.0	0.0350	0.0
556.00	230.0	0.0350	0.0
558.00	650.0	0.0450	0.0
562.00	700.0	0.0450	0.0

CROSS-SECTION NUMBER : 6 U/S SIDE OF SR 7

Cross-Section Location (XS(I), mi) 0.500
 Flooding Elevation (FSTG(I), ft MSL) 0.000

DOWNSTREAM REACH NUMBER : 6

Reach Contraction-Expansion Coefficient (FKC) 0.300
 Minimum Distance Between Interpolated Cross-Sections (DXM, mi) 1.000

CROSS-SECTION and REACH DESCRIPTION :

Elevation HS(K, I) (ft MSL)	Channel Top Width BS(K, I) (ft)	Channel Manning n CM(K, I)	Storage Top Width BSS(K, I) (ft)
538.00	20.0	0.0200	0.0
545.00	70.0	0.0300	0.0
552.00	105.0	0.0300	0.0
558.00	150.0	0.0350	0.0
560.00	600.0	0.0400	0.0
561.00	600.0	0.0400	0.0

CROSS-SECTION NUMBER : 7

Cross-Section Location (XS(I), mi) 0.520
 Flooding Elevation (FSTG(I), ft MSL) 0.000

DOWNSTREAM REACH NUMBER : 7

Reach Contraction-Expansion Coefficient (FKC) 0.000
 Minimum Distance Between Interpolated Cross-Sections (DXM, mi) 1.000

CROSS-SECTION and REACH DESCRIPTION :

Elevation HS(K, I) (ft MSL)	Channel Top Width BS(K, I) (ft)	Channel Manning n CM(K, I)	Storage Top Width BSS(K, I) (ft)
537.50	20.0	0.0200	0.0
545.00	75.0	0.0300	0.0
552.00	105.0	0.0300	0.0
558.00	150.0	0.0350	0.0
560.00	600.0	0.0450	0.0
561.00	600.0	0.0450	0.0

CROSS-SECTION NUMBER : 8

Cross-Section Location (XS(I), mi) 0.560
Flooding Elevation (FSTG(I), ft MSL) 0.000

DOWNSTREAM REACH NUMBER : 8

Reach Contraction-Expansion Coefficient (FKC) -0.350
Minimum Distance Between Interpolated Cross-Sections (DXM, mi) 0.100

CROSS-SECTION and REACH DESCRIPTION :

Elevation HS(K, I) (ft MSL)	Channel Top Width BS(K, I) (ft)	Channel Manning n CM(K, I)	Storage Top Width BSS(K, I) (ft)
537.00	25.0	0.0200	0.0
540.00	45.0	0.0250	0.0
552.00	140.0	0.0350	0.0
561.00	600.0	0.0450	0.0
565.00	1300.0	0.0450	0.0
566.00	1300.0	0.0450	0.0

CROSS-SECTION NUMBER : 9 LATERAL INFLOW FOR OHIO R

Cross-Section Location (XS(I), mi) 0.760
 Flooding Elevation (FSTG(I), ft MSL) 0.000

DOWNSTREAM REACH NUMBER : 9

Reach Contraction-Expansion Coefficient (FKC) -0.250
 Minimum Distance Between Interpolated Cross-Sections (DXM, mi) 0.150

CROSS-SECTION and REACH DESCRIPTION :

Elevation HS(K, I) (ft MSL)	Channel Top Width BS(K, I) (ft)	Channel Manning n CM(K, I)	Storage Top Width BSS(K, I) (ft)
534.50	20.0	0.0300	0.0
540.00	75.0	0.0350	0.0
552.00	200.0	0.0400	0.0
560.00	540.0	0.0450	0.0
565.00	1360.0	0.0450	0.0
566.00	1370.0	0.0450	0.0

PROJECT TITLE : FAILURE OF SOUTH ASH POND
 PROJECT NUMBER : KYGER CREEK ASH PONDS

9/17/1996

CROSS-SECTION NUMBER : 10

Cross-Section Location (XS(I), mi) 0.900
 Flooding Elevation (FSTG(I), ft MSL) 0.000

DOWNSTREAM REACH NUMBER : 10

Reach Contraction-Expansion Coefficient (FKC) -0.250
 Minimum Distance Between Interpolated Cross-Sections (DXM, mi) 0.100

CROSS-SECTION and REACH DESCRIPTION :

Elevation HS(K, I) (ft MSL)	Channel Top Width BS(K, I) (ft)	Channel Manning n CM(K, I)	Storage Top Width BSS(K, I) (ft)
532.00	40.0	0.0200	0.0
538.00	150.0	0.0300	0.0
540.00	500.0	0.0350	0.0
558.00	1200.0	0.0400	0.0
560.00	1500.0	0.0500	0.0
561.00	1500.0	0.0500	0.0

CROSS-SECTION NUMBER : 11

Cross-Section Location (XS(I), mi) 1.040
Flooding Elevation (FSTG(I), ft MSL) 0.000

DOWNSTREAM REACH NUMBER : 11

Reach Contraction-Expansion Coefficient (FKC) 0.000
Minimum Distance Between Interpolated Cross-Sections (DXM, mi) 2.000

CROSS-SECTION and REACH DESCRIPTION :

Elevation HS(K, I) (ft MSL)	Channel Top Width BS(K, I) (ft)	Channel Manning n CM(K, I)	Storage Top Width BSS(K, I) (ft)
525.00	400.0	0.0150	0.0
538.00	1028.0	0.0200	0.0
556.00	1150.0	0.0300	0.0
558.00	1200.0	0.0350	0.0
560.00	2300.0	0.0500	0.0
561.00	2300.0	0.0500	0.0

CROSS-SECTION NUMBER : 12

Cross-Section Location (XS(I), mi) 2.840
Flooding Elevation (FSTG(I), ft MSL) 0.000

DOWNSTREAM REACH NUMBER : 12

Reach Contraction-Expansion Coefficient (FKC) 0.000
Minimum Distance Between Interpolated Cross-Sections (DXM, mi) 2.000

CROSS-SECTION and REACH DESCRIPTION :

Elevation HS(K, I) (ft MSL)	Channel Top Width BS(K, I) (ft)	Channel Manning n CM(K, I)	Storage Top Width BSS(K, I) (ft)
515.60	960.0	0.0150	0.0
538.00	1060.0	0.0200	0.0
550.00	1280.0	0.0250	0.0
558.00	1950.0	0.0300	0.0
560.00	2100.0	0.0500	0.0
561.00	2100.0	0.0500	0.0

CROSS-SECTION NUMBER : 13

Cross-Section Location (XS(I), mi) 4.440
 Flooding Elevation (FSTG(I), ft MSL) 0.000

CROSS-SECTION DESCRIPTION :

Elevation HS(K, I) (ft MSL)	Channel Top Width BS(K, I) (ft)	Storage Top Width BSS(K, I) (ft)
514.00	1100.0	0.0
538.00	1200.0	0.0
550.00	1300.0	0.0
558.00	1350.0	0.0
560.00	2600.0	0.0
561.00	2600.0	0.0

- WARNING: At cross-section reach 8 the distance between interpolated cross-sections (DXM) should be changed to 0.067 due to expansion/contraction criteria
- WARNING: At cross-section reach 10 the distance between interpolated cross-sections (DXM) should be changed to 0.003 due to expansion/contraction criteria
- WARNING: At cross-section reach 2 the distance between interpolated cross-sections (DXM) should be changed to 0.193 due to (WAVE SPEED * DT) criteria
- WARNING: At cross-section reach 3 the distance between interpolated cross-sections (DXM) should be changed to 0.184 due to (WAVE SPEED * DT) criteria
- WARNING: At cross-section reach 4 the distance between interpolated cross-sections (DXM) should be changed to 0.179 due to (WAVE SPEED * DT) criteria
- WARNING: At cross-section reach 5 the distance between interpolated cross-sections (DXM) should be changed to 0.213 due to (WAVE SPEED * DT) criteria
- WARNING: At cross-section reach 7 the distance between interpolated cross-sections (DXM) should be changed to 0.250 due to (WAVE SPEED * DT) criteria
- WARNING: At cross-section reach 11 the distance between interpolated cross-sections (DXM) should be changed to 0.219 due to (WAVE SPEED * DT) criteria
- WARNING: At cross-section reach 12 the distance between interpolated cross-sections (DXM) should be changed to 0.176 due to (WAVE SPEED * DT) criteria
- WARNING: At cross-section reach 10 the distance between interpolated cross-sections (DXM) should be changed to 0.104 due to change of slope criteria

DISTANCE BETWEEN INTERPOLATED CROSS-SECTIONS
(DXM) THAT WILL BE USED IN COMPUTATIONS :

Down Stream Reach Number I=1, NS1	Interp. Cross Section Distance DXM(I) (mi)
1	101.0000
2	1.0000
3	1.0000
4	1.0000
5	1.0000
6	101.0000
7	1.0000
8	0.1000
9	0.1500
10	0.1000
11	2.0000
12	2.0000

LATERAL INFLOW DESCRIPTION :

Cross-Section Reach Number (LQX(I))

10

Hydro- Graph Entry I	Lateral Inflow OL(I) (cfs)
1	15000.
2	15000.

DOWNSTREAM BOUNDARY RATING CURVE :

Stage at D.S. Boundary RH(K) (ft MSL)	Discharge at D.S. Boundary RQ(K) (cfs)
538.00	10000.0
540.00	25000.0
542.00	50000.0
0.00	0.0
0.00	0.0
0.00	0.0
0.00	0.0
0.00	0.0

Total number of cross-sections (original+interpoated)

14

Maximum number of cross-sections allowed

2000

OUTPUT DATA SUMMARY :CROSS-SECTION and REACH SUMMARY :

Cross Section Number	Cross Section Location (mi)	Bottom Elevation (ft MSL)	Reach Number	Reach Length (mi)	Reach Slope (ft/mi)
1	0.000	546.000			
2	0.070	540.000	1	0.070	85.714

WARNING: Slopes greater than 50 ft/mi may cause supercritical flow

3	0.150	539.700	2	0.080	3.750
4	0.240	539.400	3	0.090	3.333
5	0.460	538.700	4	0.220	3.182
6	0.500	538.000	5	0.040	17.500
7	0.520	537.500	6	0.020	25.000
8	0.560	537.000	7	0.040	12.500
9	0.760	534.500	8	0.200	12.500
10	0.900	532.000	9	0.140	17.857
11	1.040	525.000	10	0.140	50.000

WARNING: Slopes greater than 50 ft/mi may cause supercritical flow

12	2.840	515.600	11	1.800	5.222
13	4.440	514.000	12	1.600	1.000

RE-NUMBERED DAM/BRIDGE CROSS-SECTIONS :

<u>Dam/ Bridge</u>	<u>Revised Cross Section Number</u>
1	1
2	6

Number of Intermediate Cross-Sections (NN(NS))

14

Number of Time Steps (NNU)

2

INITIAL CONDITIONS TABLE :

Cross Section Number	Cross Section Location	Normal Flow Water Elevation YN (ft MSL)	Normal Flow Depth DEPN (ft)	Critical Flow Water Elevation YC (ft MSL)	Critical Flow Depth DEPC (ft)	Froude Indicator (0 = sub) (1 = sup) IFR	Iteration Count for Computing Nrml Dpth ITN
1	0.000	546.18	0.18	546.18	0.18	0	13
2	0.070	543.60	3.60	541.92	1.92	0	12
3	0.150	543.80	4.10	541.79	2.09	0	12
4	0.240	543.55	4.15	541.49	2.09	0	12
5	0.460	541.35	2.65	540.88	2.18	0	12
6	0.500	540.70	2.70	540.32	2.32	0	12
7	0.520	540.71	3.21	539.82	2.32	0	12
8	0.560	539.82	2.82	539.10	2.10	0	12
9	0.660	538.55	2.80	537.90	2.15	0	12
10	0.760	537.64	3.14	536.72	2.22	0	12
11	0.900	533.34	1.34	533.50	1.50	0	12
12	1.040	529.45	4.45	528.35	3.35	0	13
13	2.840	520.16	4.56	517.60	2.00	0	13
14	4.440	518.19	4.19	515.83	1.83	0	13

SUMMARY OF INITIAL DOWNSTREAM BOUNDARY CONDITIONS :

Cross-section Number at Downstream End of Model (IN) 14
 Initial Water Surface Elev. at Downstream End (YNN, ft MSL) 538.733
 Initial Flow Depth at Downstream End (DEP, ft) 24.733

COMPUTED STEP BACKWATER TABLE :

Cross Section Number	Cross Section Location	Flow	Backwater Water Surface Elevation	Backwater Water Depth	Iteration Count for Computing Backwater
I	X (mi)	OIL (cfs)	YIL (ft MSL)	DEP (ft)	ITB
13	2.840	15500.0	538.740	23.140	5
12	1.040	15500.0	538.752	13.752	3
11	0.900	500.0	538.937	6.937	3
10	0.760	500.0	538.991	4.491	4
9	0.660	500.0	539.221	3.471	4
8	0.560	500.0	539.891	2.891	4
7	0.520	500.0	540.384	2.884	4
6	0.500	500.0	541.459	3.459	10
5	0.460	500.0	541.863	3.163	5
4	0.240	500.0	543.383	3.983	4
3	0.150	500.0	543.720	4.020	4
2	0.070	500.0	543.966	3.966	4
1	0.000	500.0	587.000	41.000	0

INITIAL CONDITIONS :

Interp. Cross-Section I	Initial Water Elevation YI(I) (ft MSL)	Initial Flow QDI(I) (cfs)
1	587.00	500.0
2	543.97	500.0
3	543.72	500.0
4	543.38	500.0
5	541.86	500.0
6	541.46	500.0
7	540.38	500.0
8	539.89	500.0
9	539.22	500.0
10	538.99	500.0
11	538.94	500.0
12	538.75	15500.0
13	538.74	15500.0
14	538.73	15500.0

ROUTING COMPLETED :

Number of Time Steps Used (KTIME)	19
Maximum Number of Time Steps Allowed	2999
Total Time of Flood Routing (TT, hr)	2.0
Flood Wave Arrival Time based upon a WSEL Increase of (ft)	1.00

CONSERVATION OF MASS RESULTS :

Should be close to 0.00%, a negative value denotes flow volume was lost during the routing, a positive value denotes flow volume was gained during the routing. Normalized as a percent of inflow volume, maximum change in conservation of mass during routing was -0.41

PROJECT TITLE : FAILURE OF SOUTH ASH POND
 PROJECT NUMBER : KYGER CREEK ASH PONDS

9/17/1996

FLOOD CREST SUMMARY :

Cross Section Location (mi)	Maximum Stage Elevation (ft MSL)	Maximum Flow (cfs)	Time To Maximum Stage (hr)	Maximum Flow Velocity (ft/sec)	Flood Elevation (ft MSL)	Time To Flood Elevation (hr)	Flood Wave Arrival Time (hr)
0.000	587.00	30753	0.000	1.10	0.00	0.00	0.00
0.070	564.34	30753	0.700	9.27	0.00	0.00	0.20
0.150	564.25	30749	0.700	7.61	0.00	0.00	0.20
0.240	564.02	30914	0.700	6.93	0.00	0.00	0.20
0.460	563.01	30278	0.700	7.53	0.00	0.00	0.20
0.500	562.15	30070	0.700	10.85	0.00	0.00	0.20
0.520	557.77	30070	0.800	20.81	0.00	0.00	0.20
0.560	560.22	29851	0.700	11.32	0.00	0.00	0.20
0.660	558.22	29358	0.700	10.76	0.00	0.00	0.20
0.760	555.96	28918	0.700	11.59	0.00	0.00	0.20
0.900	540.67	28645	1.200	22.42	0.00	0.00	0.80
1.040	540.49	43413	1.100	3.79	0.00	0.00	0.80
2.840	540.55	36308	1.100	1.45	0.00	0.00	0.80
4.440	540.56	32060	1.000	1.04	0.00	0.00	0.80

COMPUTED DISCHARGES AT REQUESTED
STATIONS WHERE HYDROGRAPHS ARE PLOTTED :

Time Step Count K	Elapsed Time (x 1000) TTP(K) (hr)	Station 1 Discharge (x 1000) QC(K,1) (cfs)	Station 2 Discharge (x 1000) QC(K,2) (cfs)	Station 3 Discharge (x 1000) QC(K,3) (cfs)	Station 4 Discharge (x 1000) QC(K,4) (cfs)	Station 5 Discharge (x 1000) QC(K,5) (cfs)	Station 6 Discharge (x 1000) QC(K,6) (cfs)
1	0.000	0.50					
3	0.200	8.13					
5	0.400	26.58					
7	0.600	30.47					
9	0.800	22.93					
11	1.000	11.79					
13	1.200	8.14					
15	1.400	5.91					
17	1.600	4.46					
19	1.800	3.48					

END OF OUTPUT

Appendix E - EAP Review, Testing and Revision

1. Training

The Kyger Creek Power Station will host and facilitate an annual training seminar and tabletop exercise for the EAP. Attendance should include staff members of OVEC Environmental, Safety & Health (ES&H) Department, plant personnel, the responsible AEP Geotechnical Engineer and others as designated by Kyger Creek Plant Management or OVEC ES&H Department.

Training will cover overall EAP procedure and usage, as well as problem detection and evaluation. Before the tabletop exercise begins, meeting participants will visit the dam to familiarize themselves with the dam site.

The tabletop exercise will begin with the facilitator presenting a scenario of an unusual or emergency event at the dam. The scenario will be developed prior to the exercise. Once the scenario has been presented, the participants will discuss the responses and actions that they would take to address and resolve the scenario. The narrator will control the discussion, ensuring realistic responses and developing the scenario throughout the exercise. The EAP Coordinator should complete an event log as they would during an actual event.

After the tabletop exercise, the EAP will be reviewed and discussed. OVEC ES&H Department will prepare a written summary of the periodic test and revise the EAP as necessary.

2. Updating and Posting the EAP

OVEC ES&H Department will review and, if needed, update the EAP at least once each year. The EAP annual review will include the following:

- Calling all contacts on the notification flow charts in the EAP to verify that the phone numbers and persons in the specified positions are current. The EAP will be revised if any of the contacts have changed. In addition, the EAP Coordinator will ask if the person contacted knows where the EAP is kept and if responsibilities as described in the EAP are understood.
- Calling the locally available resources to verify that the phone numbers, addresses, and services are current.
- Reviewing summary of periodic tests and implementing proposed revisions.

OVEC ES&H Department is responsible for updating the EAP documents. The EAP document held by the Kyger Creek Power Station is the master document. When revisions occur, OVEC ES&H Department will provide the revised pages and a revised revision summary page to all EAP document holders.

The EAP document must be up-to-date and placed in a prominent location near the posted notification flow charts. The document holders are responsible for revising the outdated copy of the respective document(s) whenever revisions are received. Outdated pages shall be immediately discarded to avoid any confusion with the revisions.

FORM E.1
EAP REVIEW VERIFICATION STATEMENT

Name of Dam: South Fly Ash /Bottom Ash Pond Complexes

Date of Drill: 3/31/2016

- A. The current EAP is on hand and all revisions have been inserted.
- B. The emergency procedures observed during the drill were in accordance with the EAP.
- C. The readiness evaluated in the drill was acceptable.
- D. The communications network is correct and was verified.
- E. The training of personnel is sufficient and acceptable.
- F. The EAP Annual Review procedures were followed.

Additional Comments:

Gallia County Emergency personnel were present for the review, as well as AEP Gavin Plant personnel.



4/4/2016

(Individual responsible for conducting
EAP Annual Review)

Date

Henry Cleland

(printed name)



4-5-16

Date

Tye Schwall

(printed name)

FORM E.2

Revisions

For revision procedures, reference Appendix E.

Revision No.	Date	Revisions Made
<u>4</u>	<u>4/4/2016</u>	<u>Attachment I, Appendix E</u>
<u> </u>	<u> </u>	<u> </u>
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Revised pages inserted in this EAP by



(Signature)

Henry Cleland

(Printed Name)

4/4/2016

(Date)