

**APPLICATION for PERMIT TO CONSTRUCT
ACROSS or ALONG a STREAM and/or
WATER QUALITY CERTIFICATION**

**Proposed AEP Big Sandy Fly Ash
Pond Closure
Agency Interest #2610
Lawrence County, Kentucky
April 2015**

**Prepared by:
URS Corporation**

**Prepared for:
AEP**

URS

**AEP AMERICAN[®]
ELECTRIC
POWER**

April 13, 2015

Mr. Todd Powers, P.E.
Kentucky Department for Environmental Protection
Division of Water – Floodplain Management Section
200 Fair Oaks Lane, 4th Floor
Frankfort, KY 40601

Re: Application for Permit to Construct Across or Along a Stream and/or
Water Quality Certification
Big Sandy fly ash pond Closure Project
Agency Interest #2610
Lawrence County, Kentucky

Dear Mr. Powers,

On behalf of Kentucky Power Company (Kentucky Power), an operating company for American Electric Power (AEP), URS is submitting this Application for a Permit to Construct Across or Along a Stream and/or Water Quality Certification (permit application) for construction activities associated with the permanent closure of the Big Sandy fly ash pond located near Louisa, in Lawrence County, Kentucky (hereafter, the Project).

The Big Sandy Plant currently plans to decommission Unit 2 and convert Unit 1 to natural gas in 2016. As a result, the Plant will discontinue wet-sluicing to the Big Sandy fly ash pond and, the pond will no longer be needed for wastewater or fly ash management. The proposed Project will permanently close the Plant's 130-acre wet fly ash pond behind the Horseford Creek Dam adjacent to Blaine Creek. A site vicinity map is provided as Figure 1 and an overall site layout map is included as Figure 2.

Kentucky Power will permanently close the Big Sandy fly ash pond by draining free water and capping ash in place. Closure will consist of installation of a cap system, main and saddle dam spillways for stormwater management, and an ash pore water management system to collect seepage under the cap. Operations at the facility will include excavation and grading of fly ash for the cap system, the use of a sump and pump station, and lowering of the Horseford Creek Dam.

The proposed construction activities will require coverage under the Permit to Construct Across or Along a Stream and an Individual Kentucky Section 401 Water Quality Certification. It should be noted that during the design process, efforts were made to minimize impacts to the 100-year floodplain of Blaine Creek, waters of the United States and/or Commonwealth of Kentucky, wetland areas and other sensitive features. Although this process served to reduce impacts, approximately 4,071 linear feet of stream, 0.41-acre of wetland, and 0.01-acre of pond will be impacted by closure of the Big Sandy fly ash pond.

Kentucky Power's proposed fly ash pond closure is currently in the final development and design stage. As such, Kentucky Power is currently pursuing permits and regulatory approvals needed for closure of the Big Sandy fly ash pond. Those environmental permits that Kentucky Power has obtained or will be obtaining include an Army Corps of Engineers (USACE) Section 404 Individual Permit, KYDEP Special Waste Landfill Permit, KYDEP Dam Modification Permit, KPDES Discharge Permit from Kentucky Division of Water (KDOW), US Fish and Wildlife Service Section 7 of Endangered Special Act Consultation, and Kentucky Heritage Council Section 106 of the National Historic Preservation Act Consultation.

The attached permit application serves two primary purposes: (1) provide documentation that Lawrence County floodplain coordinator has reviewed and signed Kentucky Power's application for a floodplain construction permit and (2) a request for an Individual Kentucky Section 401 Water Quality Certification. To aid in KDOW's review of this permit application, individual attachments with appendices have been prepared to address specific considerations related to each component of the permit application. Attachment 1 provides information associated with floodplain management considerations that were provided to the Lawrence County floodplain coordinator, and the approval. Attachment 2 provides considerations related to the requested Section 401 Water Quality Certification. Attachment 3 is a DVD containing the Application to the USACE for a Section 404 Individual Permit. The attached Table of Contents summarizes the organization of this document.

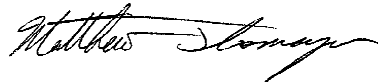
We appreciate your timely review of this information, and we are available to answer any further questions you may have regarding the proposed Project. If you have any questions or require additional information, please feel free to contact the undersigned or Jill Lukehart with AEP at (614) 716-2209.

Sincerely,

URS



Benjamin Otto
Senior Ecologist
Benjamin.Otto@aecom.com



Matthew D. Thomayer
Senior Ecologist/Project Manager
Matt.Thomayer@aecom.com

ENCLOSED

Application for Permit to Construct Across of Along a Stream and/or Water Quality Certification
Figure 1 – Site Vicinity Map
Figure 2 – Overview Map

Attachment 1 – Floodplain Management Considerations

Summary of Floodplain Management Considerations sent to Lawrence County floodplain coordinator

Figure 1A – Current Site Conditions

Figure 1B – Spillway Plan and Profile

Figure 1C – Top of Cap Grades

Appendix 1A – Screening Analysis of Project Impacts on the 100-year Water Surface Elevations in Blaine Creek in Lawrence County, Kentucky

Attachment 2 – Section 401 Water Quality Certification Considerations

Summary of Section 401 Water Quality Certification Considerations

Figure 2-1 – Overview Map

Figure 2-2 – Wetland Delineation and Stream Assessment Map

Figure 2-3 – Limit of Disturbance Comparison Match

Appendix 2A: Individual Kentucky Water Quality Certification Fee Form and Power of Attorney

Appendix 2B: USACE Section 404 Jurisdictional Determination and Addendum

Attachment 3 – USACE Section 404 Permit Application (DVD copy)

**APPLICATION FOR PERMIT TO CONSTRUCT ACROSS
OR ALONG A STREAM AND/OR
WATER QUALITY CERTIFICATION**

**COMMONWEALTH OF KENTUCKY
ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
DIVISION OF WATER**

**APPLICATION FOR PERMIT TO CONSTRUCT ACROSS OR ALONG A STREAM
AND / OR WATER QUALITY CERTIFICATION**

Chapter 151 of the Kentucky Revised Statutes requires approval from the Division of Water prior to any construction or other activity in or along a stream that could in any way obstruct flood flows or adversely impact water quality. *If the project involves work in a stream, such as bank stabilization, dredging or relocation, a 401 Water Quality Certification (WQC) from the Division of Water will be required.* This completed form will be forwarded to the Water Quality Branch for WQC processing. The project may not start until all necessary approvals are received from the KDOW. For questions concerning the WQC process, contact the WQC section at 502/564-3410.

If the project will disturb more than 1 acre of soil, A Notice of Intent for Storm Water Discharges will also be required. Both forms must be returned to the Floodplain Management Section of the Division of Water.

1. **OWNER:** Kentucky Power Company dba American Electric Power – Big Sandy Plant
Give name of person(s), company, governmental unit, or other owner of proposed project.

MAILING ADDRESS: c/o Alan R. Wood, 1 Riverside Plaza, Columbus, Ohio 43215

TELEPHONE #: (614) 716-1233 **EMAIL:** arwood@aep.com

2. **AGENT:** Matthew Thomayer
Give name of person(s) submitting application, if other than owner.

ADDRESS: 525 Vine Street, Suite 1800, Cincinnati, Ohio 45202

TELEPHONE #: (513) 651-3440 **EMAIL:** matt.thomayer@aecom.com

ENGINEER: Thomas Kovacic **P.E. NUMBER:** 20958
Contact Division of Water if waiver can be granted.

TELEPHONE #: (216) 622-2420 **EMAIL:** thomas.kovacic@aecom.com

4. **DESCRIPTION OF CONSTRUCTION:** _____
List the items to be constructed in the floodplain

Closure of Big Sandy Fly Ash Pond; Construction of Fly Ash Pond Cap System, Main Dam and Saddle Dam Spillways, and Lowering of Horseford Creek Dam. See additional attachments to this submittal for more detailed explanation.

5. **COUNTY:** Lawrence **NEAREST COMMUNITY:** Louisa, KY

6. **USGS QUAD NAME** Fallsburg, KY and Prichard, WV **LATITUDE/LONGITUDE:** 38.181623/-82.640234

7. **STREAM NAME:** Blaine Creek **WATERSHED SIZE (in acres):** Blaine Creek -14,781 acres

8. **LINEAR FEET OF STREAM IMPACTED:** 4,071

9. **DIRECTIONS TO SITE:** From Frankfort, KY; head east on I-64, take exit 191 (US-23) and follow US-23 south to Big Sandy Power Plant. Site can be accessed by an unnamed haul road west of US 23, across from plant.

10. IS ANY PORTION OF THE REQUESTED PROJECT NOW COMPLETE? Yes x No If yes, identify the completed portion on the drawings you submit and indicate the date activity was completed. DATE: _____
11. ESTIMATED BEGIN CONSTRUCTION DATE: Tree clearing, October 2015; Major Construction, April 2016
ESTIMATED END CONSTRUCTION DATE: December 2019

13. HAS A PERMIT BEEN RECEIVED FROM THE US ARMY, CORPS OF ENGINEERS? Yes x No If yes, attach a copy of that permit.

14. THE APPLICANT *MUST* ADDRESS PUBLIC NOTICE:

(a) PUBLIC NOTICE HAS BEEN GIVEN FOR THIS PROPOSAL BY THE FOLLOWING MEANS:

- _____ Public notice in newspaper having greatest circulation in area (provide newspaper clipping or affidavit)
- _____ Adjacent property owner(s) affidavits (Contact Division of Water for requirements.)

(b) x I REQUEST WAIVER OF PUBLIC NOTICE BECAUSE:

Kentucky Power is requesting that the Public Notice for the floodplain approval to be waived since the impacts to the floodplain are negligible. Furthermore, the Public Notice will be covered through the USACE Individual 404 Public Notice and/or the 401 Individual Permit Application.

Contact Division of Water for requirements.

15. I HAVE CONTACTED THE FOLLOWING CITY OR COUNTY OFFICIALS CONCERNING THIS PROJECT:

Lawrence County Floodplain Coordinator

Give name and title of person(s) contacted and provide copy of any approval city or county may have issued.

16. LIST OF ATTACHMENTS: Materials provided in this submittal binder, which includes descriptions, tables, drawings and figures.

List plans, profiles, or other drawings and data submitted. Attach a copy of a 7.5 minute USGS topographic map clearly showing the project location.

17. I, Alan R. Wood (owners Initials) CERTIFY THAT THE OWNER OWNS OR HAS EASEMENT RIGHTS ON ALL PROPERTY ON WHICH THIS PROJECT WILL BE LOCATED OR ON WHICH RELATED CONSTRUCTION WILL OCCUR (for dams, this includes the area that would be impounded during the design flood).

18. REMARKS: _____

I hereby request approval for construction across or along a stream as described in this application and any accompanying documents. To the best of my knowledge, all the information provided is true and correct.

SIGNATURE: _____

Owner or Agent sign here. (If signed by Agent, a Power of Attorney should be attached.)

DATE: 3/9/2015

SIGNATURE OF LOCAL FLOODPLAIN COORDINATOR: _____

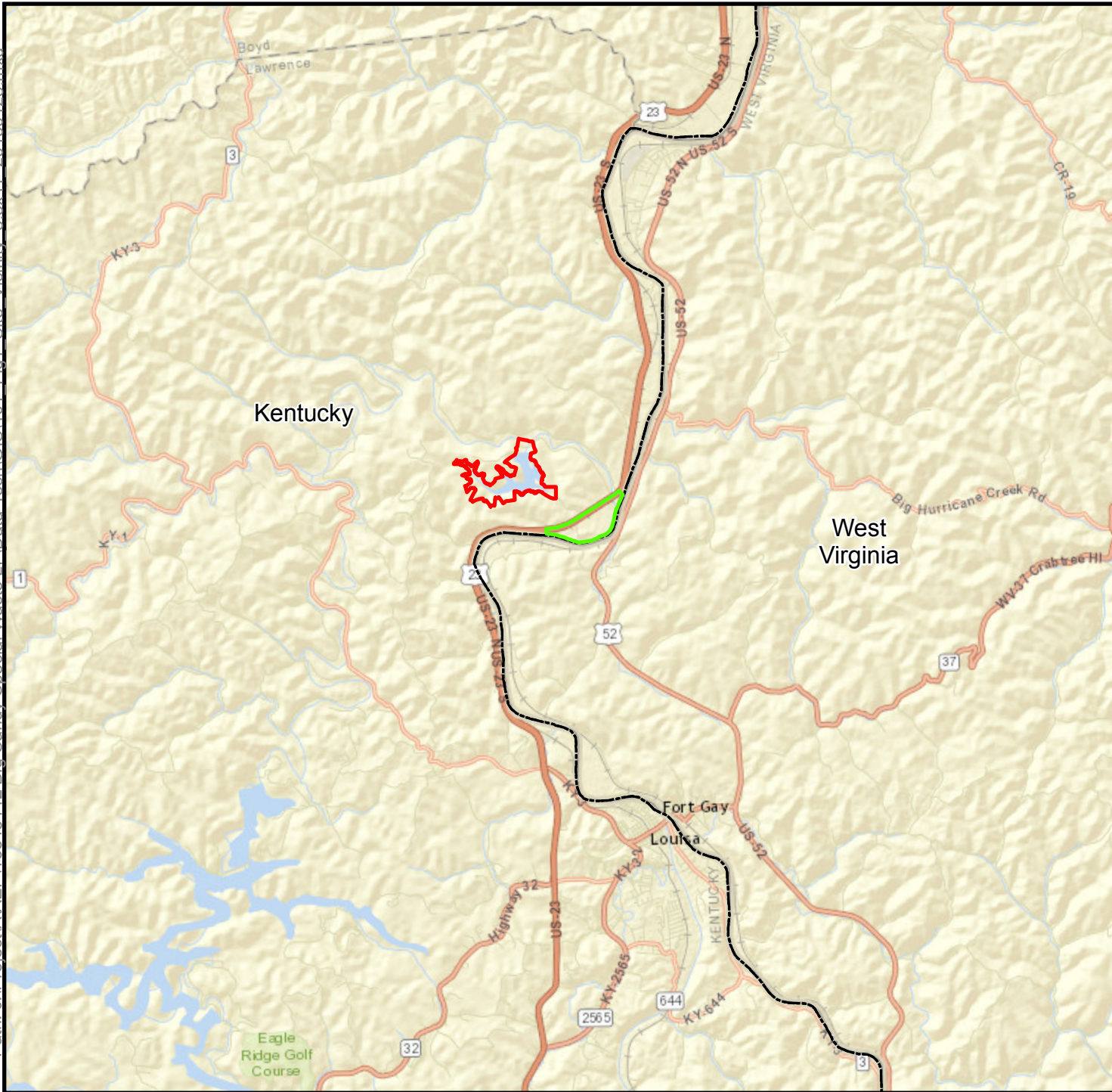
Permit application will be returned to applicant if not properly endorsed by the local floodplain coordinator.

DATE: 03.12.15




SUBMIT APPLICATION AND ATTACHMENTS TO:

Floodplain Management Section
Division of Water
200 Fair Oaks Lane
Frankfort, KY 40601

FIGURES



LEGEND

-  Project Boundary
-  Big Sandy Plant Boundary
-  State Boundary



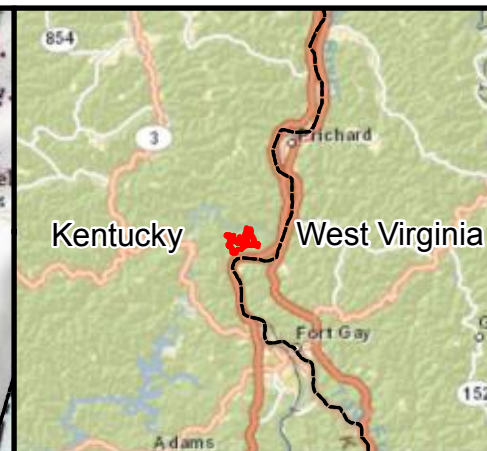
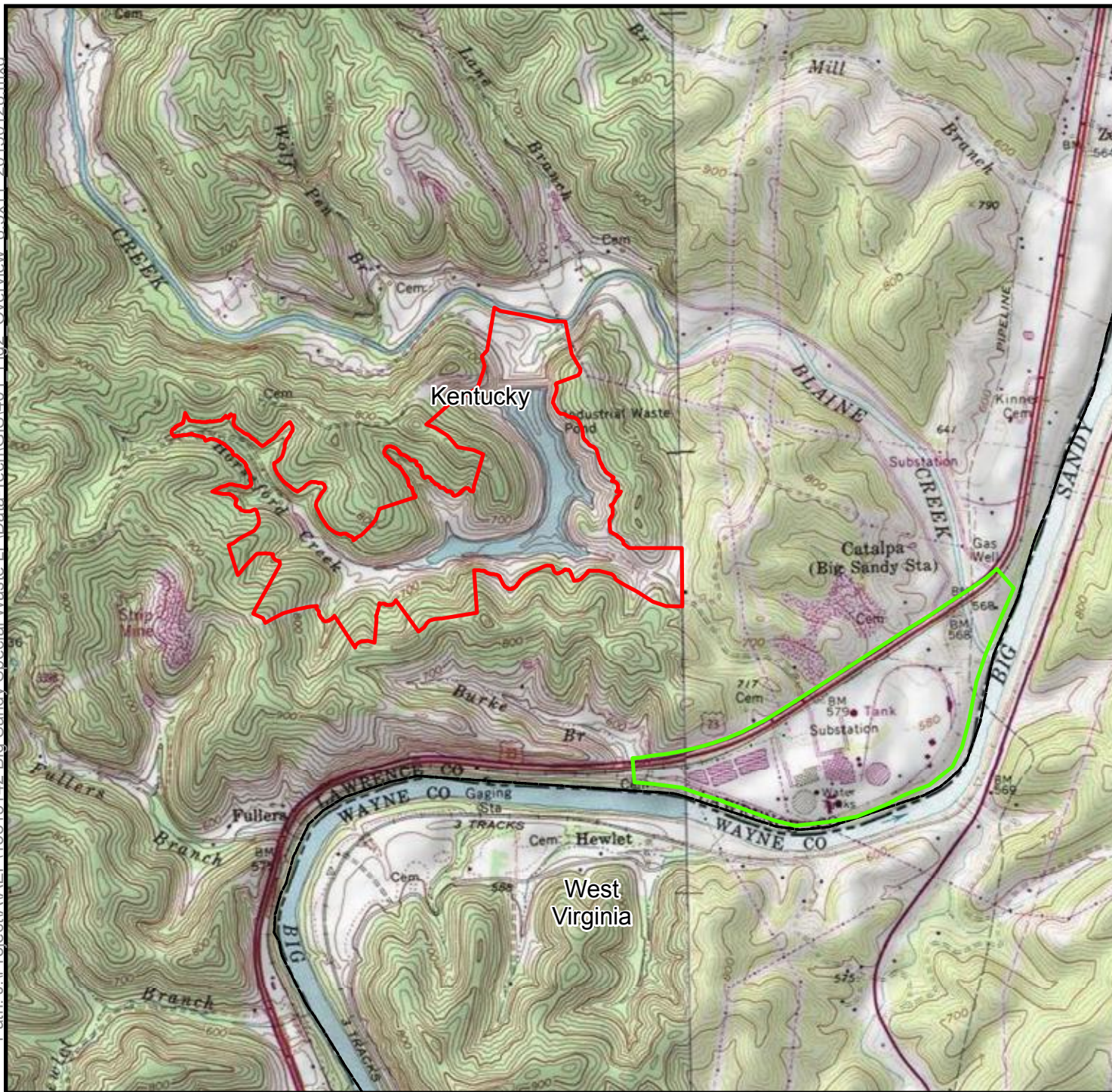
BASE MAP SOURCE:
ArcGIS Online World Imagery
Fallsburg, KY; Prichard, WV
7.5' USGS Topographic Quadrangles






*Big Sandy Fly Ash
Pond Closure*

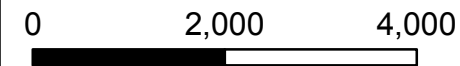
**FIGURE 1
SITE VICINITY MAP**





LEGEND

-  Project Boundary
-  Big Sandy Plant Boundary
-  State Boundary



Scale in Feet

BASE MAP SOURCE:
ArcGIS Online World Imagery
Fallsburg, KY; Prichard, KY
7.5' USGS Topographic Quadrangles



*Big Sandy Fly Ash
Pond Closure*

**FIGURE 2
OVERVIEW MAP**

