



## **Coleman Station Legacy CCR Surface Impoundments**

### **Disposal of Coal Combustion Residuals (CCR) from Electric Utilities Final Rule Structural Integrity Criteria for Existing CCR Surface Impoundments Emergency Action Plan**

*This Emergency Action Plan is written in accordance with  
40 CFR Part 257.73(a)(3)(i)(A) through (E) and (a)(3)(iv)*

**May 8, 2026**

**Prepared By:**



**Project ID: 26-0144**

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# **Coleman Station Legacy CCR Surface Impoundment Emergency Action Plan**

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## **1.0 Legacy CCR Surface Impoundment Emergency Action Plan Introduction**

The final rule for the Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments was published in the Federal Register on May 8, 2024. The final rule establishes technical requirements for legacy CCR landfills and surface impoundments under subtitle D of the Resource Conservation and Recovery Act. Per 40 CFR Part 257.73(a)(3)(i) any surface impoundment that has been listed as having a significant hazard potential must have an emergency action plan. The purpose of the “Surface Impoundment Emergency Action Plan (EAP)” is to develop an EAP that will allow the facility and staff to be prepared for a surface impoundment failure event.

Big Rivers Electric Corporation has developed and will implement an EAP (or plan) in the event a dam failure occurs at their former Coleman Generating Station facility, Legacy Pond A CCR Surface Impoundment (see Figures 1 and 2). The same action plan will be implemented in the event that a dam failure occurs at the Low Hazard Legacy CCR Ponds C and D also located at the facility. In addition, this plan is written in accordance, and to comply, with 40 CFR Part 257.73(a)(3)(i). This EAP provides step by step instructions to those individuals at the plant level on how to respond to an emergency action situation. The plan includes notification lists, maps of the CCR surface impoundment, and response procedures. The main goal of the EAP is to offer a quick and effective reference for the staff in the case such an emergency should occur.

## **2.0 Legacy CCR Surface Impoundment Physical Description and Structural Integrity Hazard Potential Classification**

### **2.1 Physical Description**

The Coleman Station Legacy Pond A CCR Surface Impoundment has been in place for 46 plus years. There are no known occurrences of structural instability of the CCR surface impoundment.

The Legacy CCR unit was used for the placement of coal combustion residual material; Primarily sluiced fly ash and bottom ash. No CCR was placed in the pond after the coal units were retired in May 2014. The immediate watershed that drains to the CCR unit, in which the CCR unit is located, is unnamed and 48 acres in size. The watershed discharges to the Ohio River which is located approximately 200 feet east of the structure. This is an elevated structure, and the only inflow is precipitation that falls directly on the structure.

The legacy CCR unit is a combined incised/earthen embankment structure. Embankments

form the perimeter of the structure. The lower portion of the structure is incised. The interior of the pond was used as a borrow area. Original ground inside the structure ranged in elevation from elevation 390 to elevation 400. Based on the Burns & Roe, Inc. Design Manual dated February 1980 the borrow excavation went as low as elevation 388. The Ohio River is located approximately 200 feet east of the structure. Due to surface relief, the toe area of the structure is subject to flooding.

The Inactive Ash Pond A Legacy CCR Impoundment is a combined incised/earthen embankment structure. The pond covers an area of approximately forty-eight (48) acres; the embankment is approximately 5,900 feet long with a maximum height of 30 feet. The east embankment faces the Ohio River and has rock toe armoring and a rock downstream slope where the spillway is located. The embankments were built with 2.5:1 upstream and downstream slopes.

The dike is generally at elevation 415. The dike reaches a maximum height of 27 feet along the northwest corner. The dike reaches a maximum height of approximately 28 feet on the northwest corner. The Associated Engineers, Inc. survey dated March 20, 2019 was reviewed. It should be noted that the current condition was field verified. Based on grading activities that have occurred after the pond ceased receiving CCR there is no longer impounded water visible in the structure. The SM&E geotechnical report dated April 2019 indicated that no groundwater was encountered in holes drilled inside the pond limits. The Ohio River is located approximately 200 feet east of the structure.

Depths of impounded water and CCR are 0.0 feet and 27 feet (at respective locations of maximum impounded water and CCR depths). Corresponding elevations of impounded CCR is 411 feet, above mean sea level.

The CCR impoundment storage peak elevation is 414 which corresponds to the emergency spillway elevation. There is no impounded water and grading has created an irregular top of CCR elevation. The volume of CCR material is approximately 1,470,000 cubic yards.

The above depths, elevations, storage capacity and volumes are based on: 1) available measured water surface elevations, 2) Flight derived topographic contours, survey data, and 3) best available as-built design data for the impoundment prior to placement of CCR material (i.e. the Burns and Roe, Inc. 1980 design plans provided by Big Rivers Electric Corporation).

The CCR impoundment emergency discharge consists of a rip rap trapezoidal channel with a bottom width of 20 feet at elevation 414 feet with 30:1 side slopes to elevation 415. This discharges into a rip rap energy dissipation pad. There is no evidence that this emergency spillway has ever discharged. The primary discharge of the impoundment is a discharge structure with adjustable stop logs with a minimum elevation of 388 discharging to a 36" RCP at elevation 386 which discharges to the Ohio River. Stop logs have been placed to elevation 408 and the pond shows no evidence of discharging or accumulating water.

## **2.2 Hazard Potential Classification**

Based on the criteria of 40 CFR Part 257.73 *Structural integrity criteria for existing CCR surface impoundments*, the determination has been made that the Coleman Station Legacy Pond A CCR Surface Impoundment meets the classification of a Moderate / Significant hazard potential CCR surface impoundment (defined as a diked surface impoundment where failure or mis-operation results in no probable loss of human life, but can cause economic loss, environmental damage, disruption of lifeline facilities, or impact other concerns). The determination is based on the high probability that failure of the embankment could result in environmental damage extending beyond the boundaries of the Big Rivers Electric Corporation former Coleman Generating Station (see Figure 3).

### **3.0 Safety Emergency Recognition and Prevention**

#### **3.1 Emergency Definitions and CCR Surface Impoundment Potential Risk**

Imminent/Actual Failure - Description: Impending or actual sudden release of water and/or bottom and fly ash caused by an accident to, or failure of, CCR surface impoundment structures.

Examples: (1) Failure of a segment of the perimeter dam by seepage and/or slope instability, or (2) Failure of a segment of the perimeter dam by erosion or overtopping

Potential Hazard - Description: Potential for sudden release of water and/or bottom and fly ash caused by an accident to or failure of CCR surface impoundment structures. Actions taken during such potentially hazardous events may prevent or mitigate failure. Even if failure is inevitable, in potential situations more time generally is available than in the imminent/actual failure emergency situation to issue warnings and/or take mitigative actions.

The Coleman Station Legacy Pond A CCR Surface Impoundment contains approximately 1,470,000 cubic yards of CCR material based on the latest inspection data. If the dam were to break on the south side, the material in the impoundment would flow into a drainage ditch and across the access road to the adjacent Concrete Plant. If the dam were to break on the west side, the material in the impoundment would flow into a drainage ditch and across Highway 334, River Road. If the dam were to break on the south sides of the CCR surface impoundment, then the majority of the material would most likely only affect the facility itself. If the dam were to break on the East side, the material in the impoundment would flow directly into the Ohio River which is located approximately 200 feet to the east. Preventative measures to avoid a dam failure include visual inspections as detailed below.

#### **3.2 Site and Dam Condition Surveillance**

The Coleman Station Legacy Pond A CCR Surface Impoundment has oversight by trained Big Rivers Electric Corporation personnel including the Maintenance Planner, Environmental Scientist, and Laboratory Technicians. The Maintenance Planner, or their designee check the CCR Surface Impoundment dam at a maximum interval of seven days per

40 CFR Part 257.83(a)(i). The dam is inspected for erosion, wash outs, the presence of water around the dam, and other indicators of potential dam failure.

### **3.3 Detection and Monitoring Devices**

Piezometers are installed on the Coleman Station Legacy Pond A and C CCR Surface Impoundment dams and are checked monthly. The pool is visually observed to determine if water begins to accumulate on a monthly basis.

## **4.0 Notification Procedures**

### **4.1 Notification Sequence**

Notification lists are provided as Tables 1 and 2 at the end of this plan. Table 1 provides contact information for the environmental coordinators and outside emergency response agencies. Table 2 provides contact information for residents/businesses. The tables apply to both emergency conditions; “Imminent Failure” and “Potential Hazard,” as previously defined. Appropriate parties will be notified based on the nature and severity of the incident as determined by the incident commander/designee. In the event of a failure at the Coleman Station Legacy Pond A CCR Surface Impoundment the main concern would be the impoundment spilling onto the drainage ditch which flows into the Ohio river to the east and Highway 334 to the west. If failure is imminent or has occurred, notification and mitigation procedures are a top priority particularly for a potentially hazardous situation. The incident commander/designee, in conjunction with the environmental department, is responsible for this determination. If the chain of notification is altered, participants are encouraged to reestablish the order to ensure that every party is notified as needed.

### **4.2 Modes of Communication with Responsible Persons**

The primary modes of communication with responsible persons are land-line telephones and cell phones. If someone cannot be contacted for any reason, then an alternate person performing the position will be contacted by telephone/cell phone. If telephones or cell phones are out of order, an alternate mode of communication listed below will be used:

- Use two-way radio
- Use Paging System
- Deliver in person

Big Rivers Electric Corporation uses cell phones for routine communication purposes. If needed, other parties have equipment and personnel available to aid with communication with the local police/sheriff and county emergency management personnel.

### **4.3 Notification of Potentially Affected Residents and Businesses**

The incident commander/designee for the Coleman Station will determine who to notify, including any affected residents and/or businesses, in the case of an imminent or actual CCR surface impoundment dam failure.

#### **4.4 Notification Responsibilities**

The incident commander/designee will ensure proper notifications are made. Calling 911 will allow the dispatcher to send out all appropriate emergency response personnel as requested and/or needed for the particular incident. The Hancock County Emergency Management Service has a notification phone call system in place called ALERT HANCOCK COUNTY. The Hancock County Emergency Management Director can initiate the phone call system for the facility. The contact number for the Hancock County Emergency Management Director is (270) 927-1310. The system can be utilized to assist with any necessary notifications and appropriate responses including evacuations.

Appropriate contractors will be utilized to assist the incident commander/designee with any mitigative actions being taken. The objectives of the mitigative actions are to minimize the impact of any event that has occurred. Big Rivers Electric Corporation personnel can contact Clean Harbors Environmental Services and Associated Engineers, Inc. to assist with emergency events.

### **5.0 Emergency Operations and Repair**

The objective of the emergency operations and repair is to prevent or reduce the impact of an impending sudden release of water and/or bottom and fly ash. It should be anticipated that this work may need to be performed during adverse conditions and will require various supplies and resources. The primary methods of mitigating potential impact are regulating the flow, minimizing flooding potential and coordinating emergency repairs.

#### **5.1 Response During Adverse Conditions**

Requests for assistance can be made to the county and state emergency offices and/or environmental response contractors/consultants including Summit Environmental Services, LLC and Associated Engineers, Inc. (contact information provided below) to assist with the incident and make recommendations to Big Rivers Electric Corporation concerning the equipment and materials needed to mitigate the incident.

<u>Company</u>	<u>Address</u>	<u>Phone Number</u>
Clean Harbors Environmental	261 Eiler Avenue Louisville, Ky 40214	1 (800) 645-8265 (513)-681-6242
Associated Engineers, Inc.	2740 North Main Street Madisonville, KY 42431	(270) 821-7732

## **6.0 Annual Face to Face Meeting with Local Emergency Responders**

An annual face to face meeting will be held with local emergency responders per 40 CFR Part 257.73 (a)(3)(E). The meeting will be held whether or not an incident occurred the previous year. If an incident did occur, the annual meeting date may be moved to discuss the incident soon after it occurs. If no incidents have occurred, an annual meeting will be held to inform the local emergency responders about the legacy CCR surface impoundment EAP and the role they would play in assisting the facility. In addition, the meeting will cover general information about the legacy CCR surface impoundments. The potential risks the legacy CCR surface impoundments may pose will be explained, as well as, the preventative measures the plant is taking to avoid these potential issues. Documentation of the annual face to face meeting will be recorded and placed in the operating record for the Coleman Station Legacy CCR Surface Impoundments.

**Table 1**

<b>Coleman Station Legacy CCR Surface Impoundment EAP Notification List</b>	
<b>Emergency Coordinators</b>	<b>Phone Number</b>
<b>Environmental Coordinators</b>	
<b>Primary Environmental Coordinator:</b>	
Director, Environmental Compliance: Mark Bertram	Office Phone: (270) 844-6297
	Cell Phone: (270) 869-7815
<b>Secondary Environmental Coordinator:</b>	
Manager, Environmental Compliance: Greg Dick	Office Phone: (270) 844-5708
	Cell Phone: (618) 841-9279
<b>Emergency Response Agencies</b>	
Hancock County Emergency Management System	911 or (270) 927-1310
Hawesville Volunteer Fire Department	911 or (270) 927-8498
Hancock County Rescue Squad	(270) 927-6591
Hancock County Sheriff's Department	(270) 927-6247
Hancock County Ambulance Service	(270)927-1312
Owensboro Health Regional Hospital	(270)417-2000
Perry County Memorial Hospital	(812) 547-7011
Lewisport Volunteer Fire Department	911 or (270) 295-3321
National Response Center (NRC)	1 (800) 424-8802
Kentucky Emergency Response Commission (KERC)	1 (800) 564-7815
Kentucky Department of Fish and Wildlife	1 (800) 25-ALERT (25378)
U.S. Coast Guard - Owensboro, KY	(502) 582-6474 or (270) 685-0650
U.S. Army Corps of Engineers - Newburgh, IN	(812) 853-0472

**Table 2**

<b>Resident/Business Notification List</b>	
<b>Resident/Business</b>	<b>Phone Number</b>
Century Aluminum	(270) 685-2493
Southwire Co.	(270) 927-6971
Winchell Farms, Inc.	(270) 617-1935
Concrete Supply Hawesville, KY	(270) 927-6996
Yager C and H LLC	(270) 926-3611
Stephen Ogle	(270) 295-6717
Shelby & Heather Emmick	(270) 295-4300

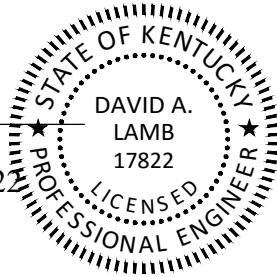
**Pond D Legacy CCR Surface Impoundment**

**Professional Engineer Certification [Per 40 CFR Part 257.73]  
Coleman Station Legacy CCR Surface Impoundment Emergency Action Plan**

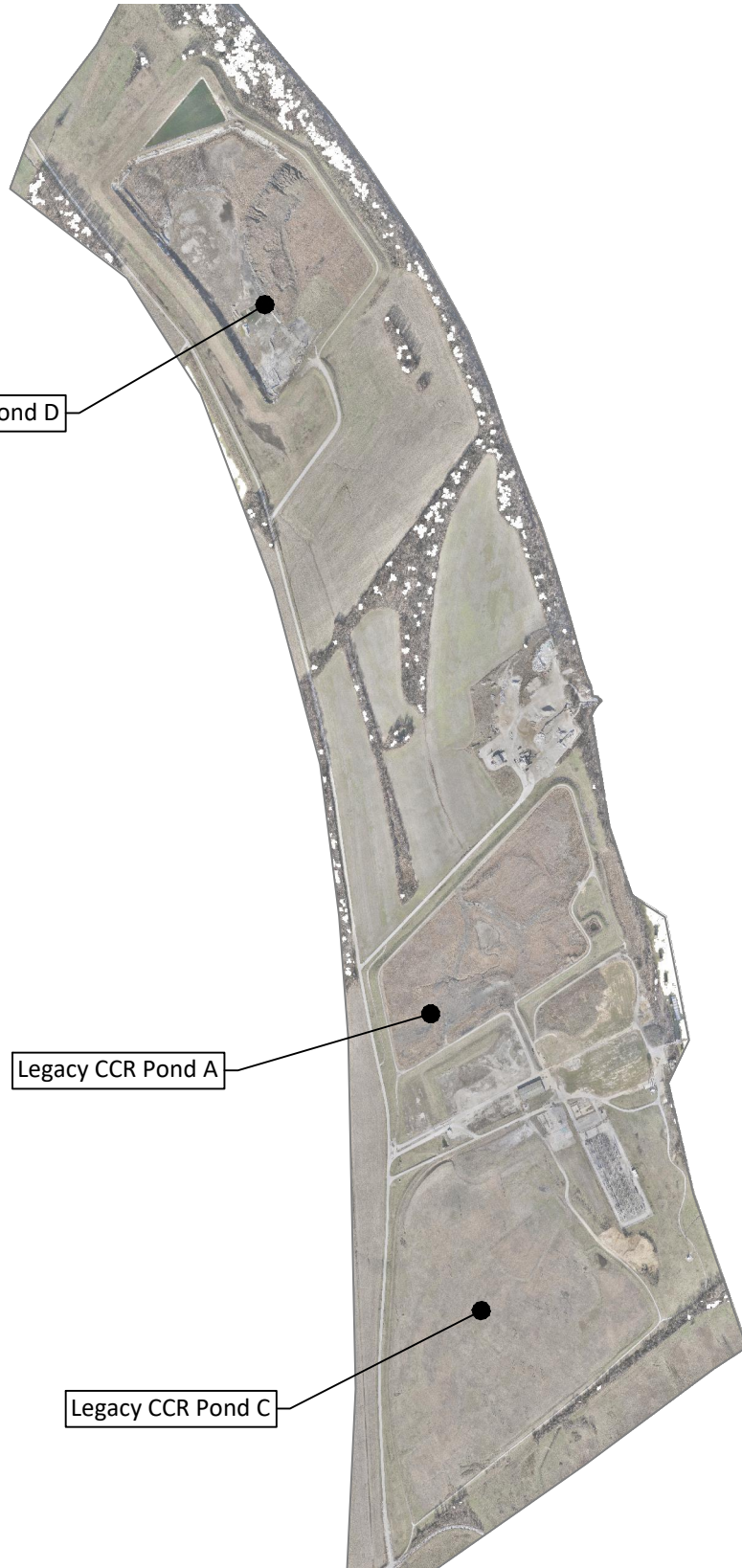
I hereby certify that myself or an agent under my review has prepared this Emergency Action Plan (Plan), and being familiar with the provisions of the final rule to regulate the disposal of coal combustion residuals (CCR) as solid waste under subtitle D of the Resource Conservation and Recovery Act (RCRA), attest that this Plan has been prepared in accordance with good engineering practices and meets the intent of 40 CFR Part 257.73. To the best of my knowledge and belief, the information contained in this Plan is true, complete, and accurate.



\_\_\_\_\_  
David A. Lamb P.E.  
State of Kentucky License No. 17822



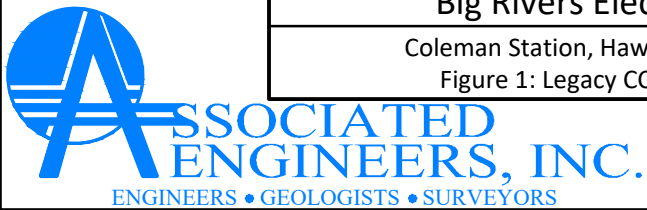
Date: May 8, 2026



Legacy CCR Pond D

Legacy CCR Pond A

Legacy CCR Pond C



**Big Rivers Electric Corp.**

Coleman Station, Hawesville, Kentucky

Figure 1: Legacy CCR Ponds Map

Job Number: DLP 26-022

Revisions:

Date: 05/07/2026

Scale: 1" = 1500'

Drawn By: D.T.H.

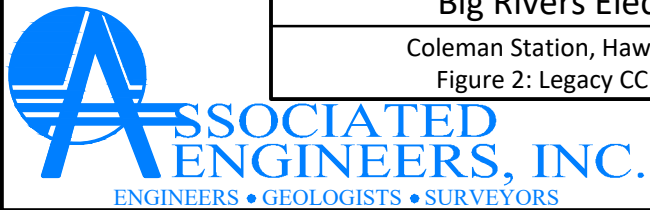
Owensboro, KY  
Phone: (270) 684-8450

2740 North Main St. ■ Madisonville, KY 42431  
Phone: (270) 821-7732 ■ Fax: (270) 821-7789  
[www.associatedengineers.com](http://www.associatedengineers.com)

Lexington, KY  
Phone: (859) 286-3000



Legacy CCR Pond A



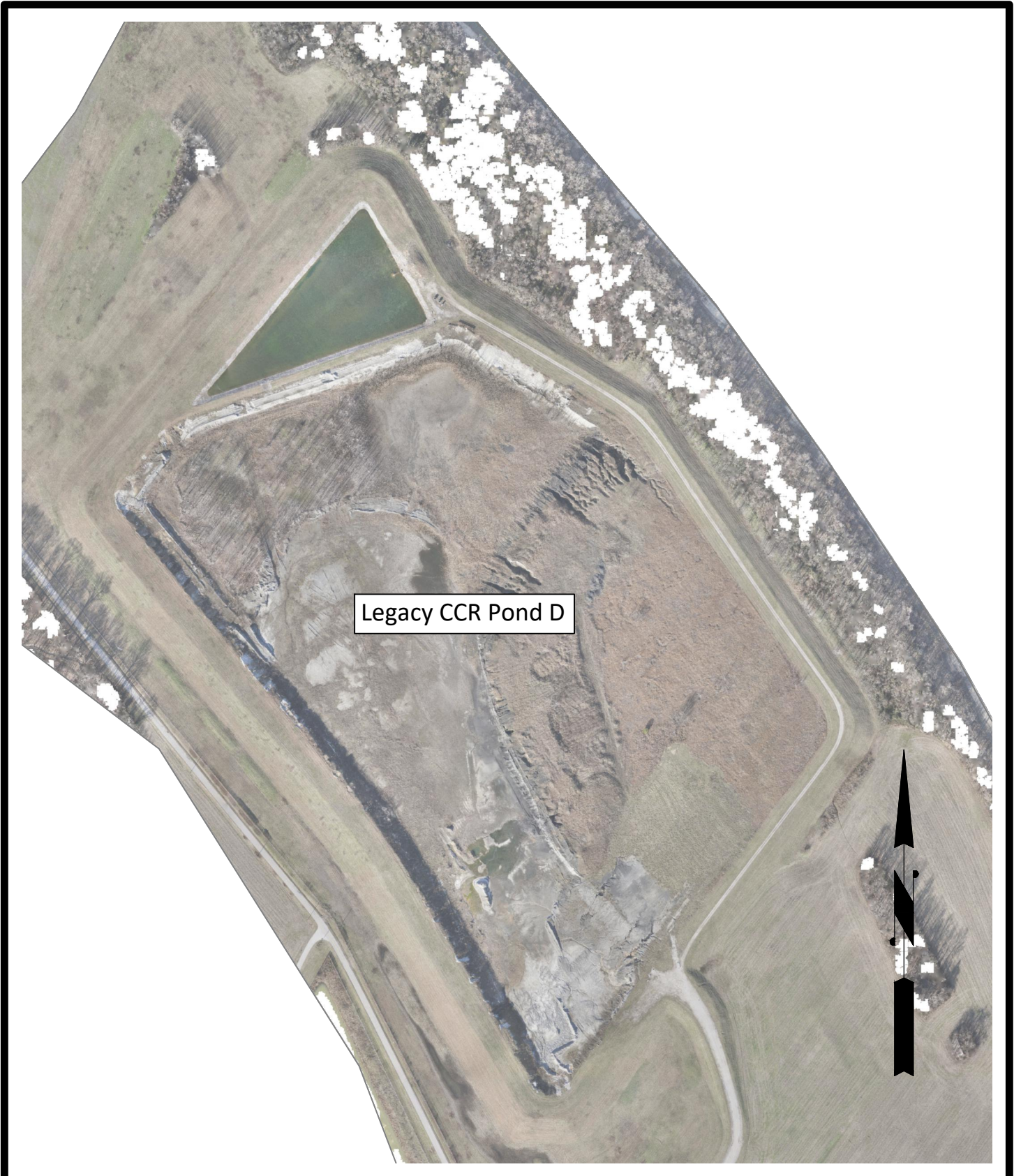
**Big Rivers Electric Corp.**  
 Coleman Station, Hawesville, Kentucky  
 Figure 2: Legacy CCR Pond A Map

Job Number:	DLP 26-022	Revisions:
Date:	05/07/2026	
Scale:	1" = 400'	
Drawn By:	D.T.H.	

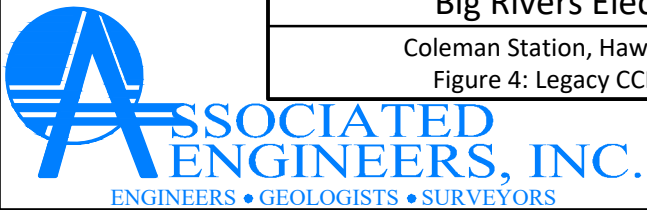
Owensboro, KY  
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2740 North Main St. ■ Madisonville, KY 42431  
 Phone: (270) 821-7732 ■ Fax: (270) 821-7789  
[www.associatedengineers.com](http://www.associatedengineers.com)

Lexington, KY  
 Phone: (859) 286-3000



Legacy CCR Pond D



Big Rivers Electric Corp.  
 Coleman Station, Hawesville, Kentucky  
 Figure 4: Legacy CCR Pond D Map

Job Number:	DLP 26-022	Revisions:
Date:	05/07/2026	
Scale:	1" = 400'	
Drawn By:	D.T.H.	

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 Phone: (270) 684-8450

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