



## **AKRON CONSULTING LLC**

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January 19, 2016

Mr. Gary Zych, P.E.,  
American Electric Power Service Corporation  
1 Riverside Plaza  
Columbus, Ohio 43215

**Initial CCR Inspection  
H.W. Pirkey FGD Stackout Area  
Hallsville, Harrison County, Texas**

Dear Mr. Zych:

Akron Consulting, LLC (Akron) performed the initial CCR inspection of the Pirkey FGD Stackout Area at the H.W. Pirkey Power Station on January 18, 2016. This report summarizes our observations of the stackout area during the site inspection.

### **1.0 Introduction**

The final rule was published by the United States Environmental Protection Agency (EPA) to regulate the disposal of coal combustion residuals (CCR) as solid waste under Subtitle D of the Resource Conservation Recovery Act. American Electric Power (AEP) has determined that the Pirkey FGD Stackout Area is included in this scope and purpose of this rule. As part of the rule, an initial annual inspection of the stackout area was performed.

The AEP H.W. Pirkey Plant is located in southern Harrison County, approximately 5 miles southeast of Hallsville, Texas, and approximately 8 miles southwest of Marshall, Texas. The Stackout Area is located in the central portion of the Plant, and approximately 1,200 feet northwest of Brandy Branch Reservoir. The Stackout Area is used as a temporary stockpile site for CCR, including fly ash and flue gas desulfurization (FGD) sludge.

The Stackout Area is an approximate 7-acre storage area for stabilized FGD sludge. The Stackout Area is located directly south of the Surge Pond, directly west of Thickener Tanks 1A and 1B, and directly east of a road that runs south to the on-site Landfill.

Stabilized FGD sludge is temporarily stockpiled directly above natural ground surface (native clay) in the Stackout Area using a radial stacker. The maximum height of the stabilized FGD sludge piles are approximately 41 feet above ground surface. There are no embankments in the Stackout Area. The stabilized FGD sludge piles are located no closer than approximately 50 feet from the perimeter of the Stackout Area, thereby preventing the stabilized FGD sludge from migrating beyond the boundaries of the Stackout Area.

All runoff is collected in the Surge Pond to the north, which has no outlet. All water from this pond is re-used in the FGD Scrubber process.

CCR material is transported to the Stackout Area via a conveyor and radial stacker.

## **2.0 Information Review**

Akron performed a review of the applicable sections of the solid waste permit, historical operating records and volumes, operation plan, and the construction plans.

## **3.0 Visual Inspection**

Akron representative Lane Roberts, P.E., visited the site on January 18, 2016 to perform the visual inspection of the Stackout Area. Mr. Roberts met with Mr. Ron Franklin, the Environmental Manager, before beginning the inspection. Weather conditions were mostly sunny and temperatures were in the low to mid 50's.

### ***3.1 General Information***

Akron visually inspected the perimeter drainage channels, the active waste stockpile areas, areas of previously placed CCR, and the areas adjacent to the Stackout Area. Mr. Roberts regularly walked onto the active areas of the Stackout Area to observe the conditions of previously placed CCR material, noting the conditions of the CCR and looking for signs of potential instability, erosions gullies and rills, and excessively wet areas.

### ***3.2 Geometry***

The dimensions of the Stackout Area are approximately 650 feet from north to south by 450 feet from east to west, resulting in a total area of approximately 7 acres.

### ***3.3 Approximate Volume of CCR***

Based on information obtained from the power plant, the volume of CCR that passed through the Stackout Area in 2015 was approximately 658,200 tons. At the time of the inspection, Akron estimates the approximate volume of CCR at the Stackout Area on January 18, 2016 to be approximately 5,500 tons.

### ***3.4 Structural Appearance***

At the time of the inspection, the CCR in the Stackout Area appears to be structurally stable. There was no evidence of slides, erosion gullies, or rills.

### ***3.5 Stackout Area Drainage Performance***

The Stackout Area appears to be functioning as designed. The active CCR placement areas were graded in a manner to promote drainage into the appropriate drainage controls and prevent ponding. All runoff was directed to the Surge Pond through surface sheet flow directly to the pond or via a perimeter ditch that is located on the west side of the Stackout Area. There is a small pipeline that is located in this ditch that does not appear to negatively affect the function of the ditch.

## **4.0 Conclusions and Recommendations (Other than Normal Maintenance Items)**

Based on the findings of the January 18, 2016 inspection, Akron recommends the following actions:

- Clean out the perimeter drainage ditches to survey and verify they have adequate hydraulic capacity.
- Survey and verify that all grading in the Stackout Area is such that there is positive drainage to the Surge Pond.

## 5.0 Certification (Statement of Professional Opinion)

I, Lane D. Roberts, a Licensed Professional Engineer in the State of Texas with Akron Consulting LLC (TBPE Firm Registration No. 14014), as a consultant to American Electric Power, do hereby certify that this inspection report was prepared by me or under my direct supervision, and that the information presented is true, correct, and accurate to the best of my knowledge. This Certification is a Statement of my Professional Opinion relative to the Initial CCR Inspection at the Pirkey FGD Stackout Area. The Inspection was based on certain information provided by others that Akron has relied on but not independently verified, and the visual observations made by Mr. Roberts at the Site during specific site visits. Therefore, this Statement of Professional Opinion is limited to the information available to Akron at the time the Inspection was performed. It is my professional opinion that the Inspection was performed consistent with the technical requirements of the United States Environmental Protection Agency's "Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments," published in the Federal Register on April 17, 2015 with an effective date of October 19, 2015.

If you have any questions, please contact Mr. Lane Roberts, P.E. directly at 903-720-4822.

Sincerely,



Lane D. Roberts, P.E.  
Project Engineer  
**Akron Consulting, LLC**  
**TBPE Firm #14014**



Date: 1-19-2016

Attachments: Photographs



**Photograph 1. Stackout Area Looking North**



**Photograph 2. Sheet Flow into Surge Pond Looking East**



**Photograph 3. Start of West Ditch Looking North**



**Photograph 4. West Ditch Looking South**