

US EPA ARCHIVE DOCUMENT



August 26, 2011

VIA-Email

Mr. Stephen Hoffman
U.S. Environmental Protection Agency (5304P)
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Final Report: Specific Site Assessment for Coal Combustion Waste Impoundments at Empire District Electric Company, Asbury Power Station, Asbury, Missouri – July 2011

Dear Mr. Hoffman,

The Empire District Electric Company (Empire District) received the above report with an attached letter, dated July 28, 2011, which listed the recommended course(s) of action resulting from the Coal Ash Site Assessment at our Asbury Power Plant. The initial inspection on November 4, 2010, as it related to Federal Emergency Management Agency (FEMA) guidelines for dam safety, was both constructive and informative in its scope of work. The final report and recommendations provided will be an important resource for Empire District to enhance and assure the structural integrity of our coal combustion waste impoundment.

Plans and Schedules for Implementing Final Report Recommendations

12.1 Corrective Measures and Analyses for the Structures

Item 1

Previously noted progress on the removal of tree growth and vegetation to maintain the downstream embankment will continue. A minimum of 25 feet of clear space will be provided between the downstream toe and the tree line. Empire District expects to complete the removal of all heavy vegetation and tree growth at the Asbury site no later than December 2012.

Item 2-5

On August 24, 2011 Empire District released a Request for Proposal (RFP) for geotechnical studies and work to complete a coal ash site structural assessment that includes the following items as part of the listed scope of services and requirements for the Asbury site:

- Conduct a geotechnical exploration program to assess the embankment and foundation soil material type and properties to provide the information needed to perform a slope analysis.

- Perform a slope stability analysis of the perimeter embankments of the coal combustion waste (CCW) impoundment for the full range of expected load conditions, including appropriate application of equipment and surcharge loads related to the storage of CCW in the Lower Pond.
- Evaluate the liquefaction potential of CCW stored in the Lower Pond and assess the impacts with respect to perimeter embankment stability.
- Perform hydrologic and hydraulic analyses of the CCW impoundments. Assess the ability of the ash pond facilities to safely pass and or store the recommended inflow design flood (IDF). Develop stage-storage curves for the impoundments and stage discharge curves for spillway(s).

Empire District will select a qualified contractor for the RFP project in December 2011 and expects to complete all phases of the assessment work in December 2012.

12.2 Corrective Measures Required for Instrumentation and Monitoring Procedures

Additional scope of services / requirements for the RFP includes the following:

Install piezometers at various locations on the perimeter embankments of the Lower Pond and South Pond to facilitate monitoring of potential seepage. Install survey monuments on the embankments to enable monitoring of potential embankment movements.

12.3 Corrective Measures Required for Maintenance and Surveillance Procedures

Empire District will develop and document annual inspections of the Asbury ash pond and settling basin by corporate and plant staff familiar with dam safety evaluations. An additional inspection will be conducted every 5 years by a third-party professional engineer with experience in dam safety evaluations. The next third-party dam safety evaluation will be scheduled by November 2015. Empire District will implement appropriate early warning measures to closely monitor water levels in the CCW impoundments. Automated water level and alarm systems will be evaluated for installation at the Lower and South Ponds.

Please note, the undersigned is now the responsible officer at Empire District for the management of CCW impoundments. If I can address any questions you may have regarding the Asbury site please contact me at 417-625-6587 or bmertens@empiredistrict.com.

Respectfully,



Blake Mertens
Vice President – Energy Supply
The Empire District Electric Company