

US EPA ARCHIVE DOCUMENT



AEP Welsh Power Plant
Pittsburg, Texas
US EPA Inspection – June 30, 2010
Primary Ash Pond
Secondary Ash Pond
Active Bottom Ash Pond
Action Plan based on Final Recommendations – May 2011

AEP has reviewed the final report provided by Dewberry & Davis (D&D) as part of their assessment of the ash impoundment facilities at the Welsh Plant and would like to offer the following comments. AEP's comments are denoted in *italic* print after each excerpt from the D&D final report.

1.2.1 Recommendations Regarding the Structural Stability

It is recommended that AEP monitor the slopes and embankments of the Primary Ash and Secondary Ash Management Units. This is based on the embankment failure of a section of the Secondary Ash Pond and the findings presented in the 22 June 2010 geotechnical report. The scope of the recommended monitoring system is outlined in Section 1.2.7.

It is recommended that AEP perform a slope stability analysis of the Active Bottom Ash Storage Pond.

Response:

AEP's comments addressing the recommended slope monitoring program are provided as a part of the comments under the Section 1.2.7 Recommendations, below.

AEP will perform a slope stability analysis for the Active Bottom Ash Pond by May 1, 2012.

1.2.3 Recommendations Regarding the Supporting Technical Documentation

Structural stability documentation for the Active Bottom Ash Storage Pond was not provided; this documentation is needed.

Response:

AEP's comments regarding the recommended slope stability analysis are provided as a part of the comments under the Section 1.2.1 Recommendations, above.

1.2.6 Recommendations Regarding the Maintenance and Methods of Operation

Primary Ash, Secondary Ash, and Active Bottom Ash Storage Ponds— Information presented in the June 2010 geotechnical engineering reports indicates that the Primary Ash Pond and Secondary Ash Pond embankments have localized areas subject to slope failures related to water entering the embankment.

Dewberry recommends that any cracks observed during routine inspections be repaired and sealed to prevent rainwater from entering the embankments.

Response:

AEP will implement a maintenance and monitoring program as part of its routine inspections for any observed cracks on the embankments of the ash ponds. All identified cracks will be repaired as necessary to restore the area to its original condition. The identified areas will be graded, seeded/mulched and/or stoned and sealed in order to prevent surface water from entering into the embankment.

1.2.7 Recommendations Regarding the Surveillance and Monitoring Program

Primary Ash and Secondary Ash – Due to the slope failure on a portion of the down gradient side of the Secondary Ash Pond, Dewberry recommends installing a slope monitoring system. As the Primary Ash Pond was constructed together with the Secondary Ash Pond, the recommendation for a slope monitoring system applies to both ponds.

The recommended slope monitoring system should provide for measurement of vertical and lateral movements of critical areas of the embankments. A network of benchmarks for elevation measurements combined with slope inclinometers installed at the crest, mid slope and near the embankment toe will provide important data needed to monitor slope stability.

Response:

AEP will install inclinometers and benchmark monuments at critical areas along the crest of the primary and secondary ash pond embankments to monitor vertical and lateral movements by May 1, 2012. Due to limited access, it may be unsuitable to install inclinometers on the mid slope and/or near the toe of the embankments. The mid slopes are steep and have little area for benching to provide access and the toe areas of the embankments are completely submerged under water from the adjacent cooling lake. AEP will then implement a combined program of inclinometers and benchmarks along with visual monitoring for sloughs and movement on the mid slopes and/or near the water line areas to evaluate the potential for any additional movements.