UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

January 12, 2012

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

VIA E-MAIL

Mr. Alan Wood
American Electric Power
1 Riverside Plaza,
Columbus, Ohio 43215-2373

Re: Request for Action Plan regarding Appalachian Power Co - Clinch River Power Plant

Dear Mr. Wood,

On February 17, 2011 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Appalachian Power Co - Clinch River Power Plant facility. The purpose of this visit was to assess the structural stability of the impoundments or other similar management units that contain “wet” handled CCRs. We thank you and your staff for your cooperation during the site visit. Subsequent to the site visit, EPA sent you a copy of the draft report evaluating the structural stability of the units at the Appalachian Power Co - Clinch River Power Plant facility and requested that you submit comments on the factual accuracy of the draft report to EPA. Your comments were considered in the preparation of the final report.

The final report for the Appalachian Power Co - Clinch River Power Plant facility is enclosed. This report includes a specific condition rating for each CCR management unit and recommendations and actions that our engineering contractors believe should be undertaken to ensure the stability of the CCR impoundment(s) located at the Appalachian Power Co - Clinch River Power Plant facility. These recommendations are listed in Enclosure 2.

Since these recommendations relate to actions which could affect the structural stability of the CCR management unit(s) and, therefore, protection of human health and the environment, EPA believes their implementation should receive the highest priority. Therefore, we request that you inform us on how you intend to address each of the recommendations found in the final report. Your response should include specific plans and schedules for implementing each of the recommendations. If you will not implement a recommendation, please provide a rationale. Please provide a response to this request by February 13, 2012. Please send your response to:

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

If you are using overnight of hand delivery mail, please use the following address:

Mr. Stephen Hoffman
U.S. Environmental Protection Agency
Two Potomac Yard
2733 S. Crystal Drive
5th Floor, N-5838
Arlington, VA 22202-2733

You may also provide a response by e-mail to hoffman.stephen@epa.gov, kohler.james@epa.gov, and englander.jana@epa.gov.

You may assert a business confidentiality claim covering all or part of the information requested, in the manner described by 40 C. F. R. Part 2, Subpart B. Information covered by such a claim will be disclosed by EPA only to the extent and only by means of the procedures set forth in 40 C.F.R. Part 2, Subpart B. If no such claim accompanies the information when EPA receives it, the information may be made available to the public by EPA without further notice to you. If you wish EPA to treat any of your response as "confidential" you must so advise EPA when you submit your response.

EPA will be closely monitoring your progress in implementing the recommendations from these reports and could decide to take additional action if the circumstances warrant.

You should be aware that EPA will be posting the report for this facility on the Agency website shortly.

Given that the site visit related solely to structural stability of the management units, this report and its conclusions in no way relate to compliance with RCRA, CWA, or any other environmental law and are not intended to convey any position related to statutory or regulatory compliance.

Please be advised that providing false, fictitious, or fraudulent statements of representation may subject you to criminal penalties under 18 U.S.C. § 1001.

If you have any questions concerning this matter, please contact Mr. Hoffman in the Office of Resource Conservation and Recovery at (703) 308-8413. Thank you for your continued efforts to ensure protection of human health and the environment.

Sincerely,
/Suzanne Rudzinski/, Director
Office of Resource Conservation and Recovery

Enclosure

Enclosure 2

Appalachian Power Co - Clinch River Power Plant Recommendations (from the final assessment report)

1.0 CONCLUSIONS AND RECOMMENDATIONS

1.1 CONCLUSIONS

Conclusions are based on visual observations from a one-day site visit, February 17, 2011, and review of technical documentation provided by the Owner, which is provided in Appendix A of the final report.

1.1.1 Conclusions Regarding the Structural Soundness of the Management Unit(s)

Ash Pond 1 and Ash Pond 2 did not show any areas of significant structural concern during the one-day site visit. The stability analysis report for Ash Pond 1 was prepared, signed and sealed by the Owner's engineers and indicates that the main perimeter dike for Ash Pond 1 is structurally sound. The stability analysis report for Ash Pond 2 was prepared, signed and sealed by BBC&M engineers and indicates that the main perimeter dike for Ash Pond 2 is structurally sound. However the stability analysis report for Ash Pond 2 assumed that only the ash in contact with the existing water table was saturated and not saturated to the top of the ash in the impoundment. This was assumed because at the time the Owner was considering a closure permit for Ash Pond 2 and that it would be capped and would function as a landfill. The Owner submitted the closure plan for Ash Pond 2 for regulatory approval in 2009 but has since retracted the plan.

We note that the Virginia DCR DSFM has not accepted the structural analysis. The reasons for not accepting the analysis include: the analysis was not sealed by a Virginia PE; the analysis does not address large quantities of shale that the State has indicated were illegally dumped on the North end of Pond #2; and the analysis misrepresents saturation conditions because there are no spillways from the ponds. (See Appendix A – Docs 16 and 17 of the final report)

1.1.2 Conclusions Regarding the Hydrologic/Hydraulic Safety of the Management Unit(s)

Hydrologic/Hydraulic calculations were not provided for Ash Pond 1 or Ash Pond 2 so conclusions regarding hydrologic/hydraulic safety cannot be made at this time.

The Virginia DCR DSFM believes that the utility has misrepresented the drainage areas for the ponds and plans to request additional hydrologic analyses in 2012.

1.1.3 Conclusions Regarding the Adequacy of Supporting Technical Documentation

The supporting technical documentation provided is adequate for preparation of this report. Data reviewed by Dewberry did not contain hydrologic/hydraulic calculations. Technical documentation reviewed in preparation of this report is provided in Appendix A of the final report.

1.1.4 Conclusions Regarding the Description of the Management Unit(s)

The description of Ash Pond 1 and Ash Pond 2 provided by the Owner was an accurate representation of what Dewberry observed in the field. We note that Virginia DCR DSFM does not believe that accurate information concerning drainage conditions at the site has been provided by the Owner. (See Appendix A – Docs 16 and 17 of the final report)

1.1.5 Conclusions Regarding the Field Observations

Dewberry staff was provided adequate access to Ash Pond 1 and Ash Pond 2 to complete the field assessment. The visual assessment of the perimeter dikes for both ponds showed no significant signs of erosion, settlement or instability. Seepage was observed along the down slope of Ash Pond 1 but was well controlled with monitoring weirs. No seepage was observed at

Ash Pond 2. The spillway for Ash Pond 1 appeared to be functioning properly. The spillway for Ash Pond 2 is currently not active. During the field assessment it was noted that a large boulder had dislodged from the adjacent hillside and impacted one of the slurry pipes that conveys bottom ash to Ash Pond 1. This pipe showed no visible signs of leakage. Dewberry understands that the boulder would be removed and the pipe repaired as appropriate. No other indications of unsafe conditions or conditions needing immediate remedial action were noted during the one-day site visit. However, subsequent to the site visit the Regional Engineer, DCR DSFM, who participated in the site visit, indicated considerable concern about the safety of both ash ponds. Based upon observations made during the site visit the Virginia DCR DSFM plans to take action in 2012 that could require AEP to analyze and, if necessary, remediate both ash ponds.

1.1.6 Conclusions Regarding the Adequacy of Maintenance and Methods of Operation
Current operation and maintenance procedures appear adequate for Ash Pond 1. Operation and maintenance procedures were discontinued at Ash Pond 2 when it became inactive in 1998. Virginia DSC DSFM has indicated that woody vegetation control on both dams does not comply with state regulations. (Appendix A – Docs 16 and 17 of the final report)

1.1.7 Conclusions Regarding the Adequacy of the Surveillance and Monitoring Program
Current surveillance and monitoring program procedures appear adequate for Ash Pond 1. Although Ash Pond 2 became inactive in 1998, surveillance and monitoring procedures for the pond are still in effect. Ash Pond 2 is monitored at the same time monitoring procedures for Ash Pond 1 are conducted. However, a written record of monitoring results for Ash Pond 2 is not kept.

1.1.8 Classification Regarding Suitability for Continued Safe and Reliable Operation
Clinch River Ash Pond 1 is rated FAIR with acceptable performance expected under static and seismic loading conditions in accordance with applicable safety regulatory criteria. Ash Pond 2 is rated POOR due to use of potentially non-representative assumptions in the structural stability analysis and the lack of hydrologic data addressing drainage to the pond. A hydrologic and hydraulic analysis is required for both units to demonstrate adequate hydrologic loading conditions. The classifications are based on the one-day visual assessment performed by Dewberry and supporting technical documentation provided in Appendix A of the final report.
We note that the Regional Engineer, Virginia DSC DSFM, has indicated that in 2012 the State will require additional hydrology-related action be taken by the utility for Ash Ponds 1 and 2, and that additional structural analyses will be required for Ash Pond 2. (see Appendix A – Docs 16 and 17 of the final report)

1.2 RECOMMENDATIONS
1.2.1 Recommendations Regarding the Structural Stability
Perform a structural stability analysis of Ash Pond 2 that is representative of ash saturation conditions in the pond.

1.2.2 Recommendations Regarding the Hydrologic/Hydraulic Safety
A hydrologic and hydraulic analysis should be performed to evaluate the hydrologic/hydraulic safety of Ash Pond 1 and Ash Pond 2. The analysis should consider off-site drainage to Ash Pond 1 and Ash Pond 2 and should be in accordance with all requirements for such analyses as required by Virginia Department of Conservation and Recreation (VA DCR), Division of Dam Safety and Floodplain Management, including spillway capacity. This recommendation is consistent with our understanding of the State's planned actions in 2012.

1.2.3 Recommendations Regarding the Maintenance and Methods of Operation

It is recommended that the facility maintain frequent inspections of Ash Pond 1 and resume recording monitoring results for inspections of Ash Pond 2 in accordance with Owner's current inspection program until such time that the facility is formally closed and the closure is approved by the state. It is recommended that all underbrush and trees be removed from the Ash Pond 2 perimeter dike in accordance with VA DCR DSFM requirements. It is recommended that all animal burrows located along the perimeter dike of Ash Pond 1 and Ash Pond 2 be backfilled in accordance with standard geotechnical engineering practices for dams, and monitored for future reoccurrence. It is recommended that the Owner perform an interior inspection of all outfall pipes from the Ash Pond 1 & 2 outlet structures to the reclaim pond as well as an interior inspection of the pipe systems that bypass off-site drainage through Ash Pond 1. Interior inspections should focus on the structural integrity of the pipes as well as seepage paths into and out of the pipes. The inspection report should summarize findings and remedial action required, if any.

1.2.4 Recommendations Regarding Continued Safe and Reliable Operation

No recommendations, other than the above studies and maintenance activities, appear warranted at this time.