

US EPA ARCHIVE DOCUMENT



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

January 7, 2011

OFFICE OF  
SOLID WASTE AND  
EMERGENCY RESPONSE

VIA E-MAIL AND FEDERAL EXPRESS

Mr. Charles Huling, Vice President, Environmental Affairs  
Georgia Power  
241 Ralph McGill Blvd., N.E. 22<sup>nd</sup> Floor, bin 10221  
Atlanta, Georgia 30308-3374

Dear Mr. Huling,

On April 26-27, 2010 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Plant McDonough Station. 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 Plant McDonough Station 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 Plant McDonough Station is enclosed. This report includes a specific 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 Plant McDonough Station. These recommendations are listed in Enclosure 2.

Since these recommendations relate to actions which could affect the structural stability of the CCR management units 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 explain why. Please provide a response to this request by February 7, 2011. Please send your response to:

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

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

Mr. Stephen Hoffman  
US Environmental Protection Agency  
Two Potomac Yard  
2733 S. Crystal Drive  
5<sup>th</sup> Floor, N-237  
Arlington, VA 22202-2733

You may also provide a response by e-mail to [hoffman.stephen@epa.gov](mailto:hoffman.stephen@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 ongoing efforts to ensure protection of human health and the environment.

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

Enclosures

Enclosure 2  
Plant McDonough Station Recommendations

#### **4.2 Hydrologic and Hydraulic Recommendations**

Plant McDonough's Ash Ponds 1, 2, and 3 are not classified by state of Georgia EPD. Ash Pond 4, classified by EPD as Category 1, has a wet storage area and is hydraulically connected (downstream of) to AP3. AMEC recommended that Georgia Power determine what rainfall event is appropriate for each ash pond and then evaluate whether each ash pond can safely contain or pass the inflow due to the design storm. Subsequently, the September 21, 2010 submittal addressed this issue. Based on the submitted information, Southern Company concluded, and AMEC agrees, that the storm water capacities of Ash Ponds 1, 2, 3, and 4 are adequate.

#### **4.3 Geotechnical and Stability Recommendations**

In our draft report, AMEC recommended that clarification of the engineering soil strength parameters were determined from the testing laboratory data and that the stability analyses include design storm peak/surcharge stage water levels that reflect appropriate phreatic surfaces due to pre-saturation by appropriate antecedent precipitation and the limited outflow capacity of the pond. Likewise, the stability analyses should consider all critical stages during the life of the facility, such as maximum pool area and surcharge due to maximum ash stack storage height, as well as likely loading combinations (maximum ash stack storage and earthquake or maximum pool area and design storm inflow). Furthermore, the previous analyses limit the failure surfaces to circular surfaces; AMEC recommended that the slope stability analyses include slip surface optimization to allow for noncircular failure surfaces. Results for stability analyses for Ash Pond 1, cross section AP1-B fail to meet the minimum safety factors for rapid drawdown and steady state conditions for the downstream slope. Management or construction modifications should be investigated to improve the dike stability in this area. Subsequently, Southern Company performed additional stability analyses and submitted a revised stability analyses document (MCD-API 076A) on September 21, 2010.

The west flank of Ash Pond 3 is near a public thoroughfare (Maner Rd SE) and, at the time of the site visit, it was estimated that failure of the dike on that side would not result in loss of human life and only affect areas within the Georgia Power facility. Due to the proximity of the roads and businesses, as well as an apartment complex further downstream, it is AMEC's opinion that it is possible that a failure of the dike could cause damage outside of Georgia Power's property. However, AMEC is not aware of applicable analyses or modeling techniques that may be used to determine the extent of disturbance due to such a failure.

#### **4.4 Monitoring Instrumentation**

AMEC has reviewed provided information and instrumentation records for the ash ponds and determined that Georgia Power has adequate monitoring practices. AMEC recommends that the current monitoring program and practices be continued for these ash ponds.

#### **4.5 Inspection Recommendations**

AMEC has reviewed provided information and inspection records and determined that Georgia Power has adequate inspection practices. We recommend that Plant McDonough continue the current inspection program and practices.

