

US EPA ARCHIVE DOCUMENT

Ronald Shipman
Vice President
Environmental Affairs

241 Ralph McGill Boulevard NE
Atlanta, Georgia 30308-3374

Tel 404.506.7777
Fax 404.506.7066
rshipman@southernco.com



February 7, 2011

CERTIFIED MAIL AND ELECTRONIC MAIL

Mr. Stephen Hoffman
Office of Resource Conservation and Recovery
U. S. Environmental Protection Agency (5304P)
1200 Pennsylvania Avenue, NW
Washington, DC 20460
hoffman.stephen@epa.gov

**Re: "Report of Safety Assessment Coal Combustion Surface Impoundments,
Georgia Power, Plant McDonough, Smyrna, Georgia", December 2010**

Dear Mr. Hoffman:

On January 7, 2011, the U. S. Environmental Protection Agency ("EPA") provided Georgia Power with a final report regarding certain facilities for the management of coal combustion byproducts at Georgia Power's Plant McDonough ("Final Report"). The Final Report was prepared by AMEC Earth & Environmental, Inc. ("AMEC") and dated December 2010. EPA stated that Georgia Power's comments were considered in preparation of the Final Report. Georgia Power appreciated the opportunity to provide comments. EPA also requested Georgia Power's response to the Final Report's recommendations, including specific plans and schedules for implementing the recommendations. This letter provides Georgia Power's response to the recommendations in the Final Report and additional comments on the Final Report. With this submittal, Georgia Power has addressed all recommendations identified in the Final Report and EPA's transmittal letter dated January 7, 2011. EPA's recommendations are shown in italics below, and Georgia Power's responses follow each recommendation. The Georgia Power comments on the Final Report are shown at the end of the letter.

Acknowledgement of Management Unit Condition and Potential Hazard Rating

Georgia Power is committed to the management of coal combustion byproducts in a safe manner that is protective of human health and the environment. Georgia Power has had a robust ash pond dike inspection and maintenance program in place for many years. We are pleased that EPA's on-site inspection and document review have confirmed that Georgia Power's facilities are well constructed and managed effectively.

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 Power concluded, and AMEC agrees, that the storm water capacities of Ash Ponds 1, 2, 3, and 4 are adequate.

No further recommendation was provided so no response is necessary. Note: "Southern Power" should be "Georgia Power" or "Southern Company".

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 analyzes include slip surface optimization to allow for noncircular failure surfaces. Results for stability analyses for Ash Pond 1, cross section API-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

Mr. Stephen Hoffman
February 7, 2011
Page 3

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.

No further recommendation was provided so no response is necessary.

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.

Georgia Power will continue its monitoring program and practices.

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.

Georgia Power will continue its inspection program and practices.

Additional Georgia Power comments on the Final Report

Page 22: Table: The title of the table should be changed to Table 13.

Page 23: Table: The title of the table should be changed to Table 14.

Page 24: Table: The title of the table should be changed to Table 16.

Checklists for AP1, 2, & 3 – At time of inspection, piezometers were present in the dikes for AP1, 2, and 3. The Checklists are marked “No”. These should be changed.

With this response, Georgia Power has addressed all recommendations in the Final Report and EPA's letter dated January 7, 2011. Please direct any future correspondence to my attention.

Sincerely,



Ron Shipman