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

March 30, 2010

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. 22nd Floor, Bin 10221
Atlanta, GA 30308-3374

Dear Mr. Huling,

On November 23-24, 2009 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Plant Branch 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 Plant Branch 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 Plant Branch facility 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 Branch facility. 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 May 4, 2010. 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 of hand delivery mail, please use the following address:

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

You may also provide a response by e-mail to hoffman.stephen@epa.gov

This request has been approved by the Office of Management and Budget under EPA ICR Number 2350.01.

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,
/Matt Hale/, Director
Office of Resource Conservation and Recovery

Enclosures

Enclosure 2
Plant Branch Recommendations

The following recommendations are based upon observations and review of data provided to CHA. Recommendations provided by the state, utility company, and other consultants should also be implemented.

4.2.1 Ash Pond B

Visually, the downstream slope of the southwest dike at Ash Pond B was found to be in fair condition. Observations could not be made of the upstream slope due to the infilling of the pond with ash and subsequent soil cap. Should the Georgia DNR-EPD Dam Safety Program and/or the USEPA determine that the Ash Pond B dike cannot be decommissioned, a few areas were observed that warrant monitoring on a routine basis to confirm that changes are not occurring or if periodic maintenance is required. These areas are as follows:

- Brush and trees have grown in the downstream face of the embankment. CHA recommends that the trees should be cut. The resulting stumps should be monitored for decay.

4.2.2 Ash Pond C

Ash Pond C is impounded by three main dikes (west, south, and east dikes). Visually, the downstream and upstream slopes were found to be in satisfactory condition. A few areas were observed that warrant monitoring on a routine basis to confirm that changes are not occurring or if periodic maintenance is required. These areas are as follows:

- Grading along the west dike near the south central portion of the dike should be reviewed to promote positive drainage of storm water. Saturated soil conditions were also noted north of the recycle water pump station. We understand the Georgia Power has placed rock in this area previously and the wet conditions have continued. CHA recommends that Georgia Power consult with a geotechnical engineer to develop recommendations for this area.

- New drains installed in the wet areas observed on the south dike should continue to be monitored and included with the monthly routine data collection process.

- Non-uniform grading was observed on the upstream slope of the east dike which may be the result of erosion rills. This area should be closely monitored.

- Erosion due to water “lapping” the surface was observed on the upstream side of the south dike. CHA recommends improvements to the erosion protection along the water’s edge. Georgia Power has indicated that this has been completed since CHA’s site visit.

4.2.3 Ash Pond D

Ash Pond D is impounded by a dike along the southwest edge of the pond. Visually, the downstream and upstream slopes of the southeast dike were found to be in satisfactory condition. A few areas were observed that warrant monitoring on a routine basis to confirm that changes are not occurring or if periodic maintenance is required. These areas are as follows:

- Surface irregularities as a result of mowing activities on softened soils or possible long term creep activity should be graded and reseeded as needed. Mowing patterns can be

altered to avoid repeated rutting in the same areas and maintenance activities on the slope utilizing heavy equipment should be limited after periods of rain until the soil has had ample opportunity to dry.

4.2.4 Ash Pond E

Ash Pond E is impounded by a dike along the east edge of the pond. Visually, the downstream and upstream slopes of the dike were found to be in satisfactory condition. A few areas were observed that warrant monitoring on a routine basis to confirm that changes are not occurring or if periodic maintenance is required. These areas are as follows:

- Three soft areas have been identified by Southern Company east of the lower concrete lined drainage channel. CHA recommends continued monitoring of these locations for changes.

- Sloughing and surface irregularity due to recent rain was noted along the southern end of the downstream slope and sparse vegetation due to mowing activities was also observed. Measures should be implemented to reduce the potential for progressive erosion in these areas.

4.3 Animal Control

Evidence of animal burrows was observed on the upstream and downstream side of several of the dikes. CHA observed Southern Company personnel filling some of burrows during the site assessment period, and Southern Company has indicated that this repair activity has been completed. CHA recommends continued vigilance by Southern Company personnel to make note of areas disturbed by animal activity, trap the animals, and make repairs to areas to protect the integrity of the dikes.

4.4 Site Plan and Instrumentation

CHA recommends that survey plans with elevation contour information be prepared for each pond and dike area. The plans should include, at a minimum, the location of the constructed dikes, limits of existing ponds, water level in the ponds, location of instrumentation, and location and elevation of normal operation and emergency spillways. These plans should include stationing from the design documents to assist in a comparison of the design and as-built conditions.

4.5 Hydrologic and Hydraulic Recommendations

CHA recommends that a hydrologic and hydraulic analysis be performed for each of the active ponds. Ash Ponds B, C, and D are not regulated by Georgia Department of Natural Resources Environmental Protection Division, therefore there are no specific hydrologic and hydraulic design guidelines. CHA suggests the impoundment be evaluated for susceptibility to overtopping during a reasonable design storm.

CHA recommends that Georgia Power continue to evaluate the available flood storage as deposited ash elevations change within the pond.

4.6 Stability Recommendations

CHA was provided with slope stability analysis from the construction documents and recent analyses for Ash Ponds C, D, and E. A slope stability analysis was not available for Ash Pond B. Due to a historical development and present condition unique to each pond and its impounding dike, recommendations for additional study, if any, have been rendered as noted in the following sections.

4.6.1 Ash Pond B

Ash Pond B and the dike have changed significantly from the time they were completed, with a

large portion of the pond adjacent to the dike being filled and capped. Recent investigation in the capped areas has led Georgia Power to conclude that the Ash Pond B dike is no longer a liquid waste impounding structure. If the Georgia Department of Natural Resources Environmental Protection Division Safe Dams Program deems the available data sufficient and acceptable to officially declassify the dike as an impounding structure, then no further work is recommended. Should, however, the state elect not to de-classify the dike as an impounding structure, CHA recommends that at least a rudimentary geotechnical exploration program be undertaken and a corresponding slope stability analysis performed.

4.6.2 Ash Pond C

The original and updated analyses show that the Ash Pond C embankment was generally designed with the required factors of safety for the load cases considered at the time the particular analyses were performed. An exception is the Lake Sinclair shoreline below the toe of the dike, where it has been demonstrated that the minimum factor of safety is associated with a thin, superficial failure plane. Since the failure surface with the minimum factor of safety is below accepted standards, CHA suggests that this area be investigated to determine where the failure surface with an acceptable safety factor lies with respect to the dike geometry. In this way one can ascertain how such a failure would affect gross dike stability.

Load cases not examined for the Ash Pond C dike include rapid drawdown conditions for the downstream toe at the aforementioned Lake Sinclair shoreline and the upstream slope, and a surcharge pool or flood condition. CHA recommends that a stability analysis considering these loading conditions be performed so that the embankment performance under such loading cases can be anticipated and properly managed.

4.6.3 Ash Pond D

The original and updated analyses show that the Ash Pond D dike embankment was generally designed with the required factors of safety for the load cases considered at the time the particular analyses were performed. CHA recommends that a stability analysis be performed for rapid drawdown and a surcharge pool or flood condition.

4.6.4 Ash Pond E

No further analyses recommended.

4.7 Inspection Recommendations

CHA recommends that Georgia Power and Southern Company continue the piezometer monitoring and inspections that have been implemented for the Ash Ponds. This type of inspection allows for proactive responses to developing situations, which can reduce the risk of damaging releases or failures from occurring.