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

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

VIA E-MAIL AND FEDERAL EXPRESS

Mr. Ed M. Sullivan
Consulting Engineer
Duke Energy Corporation
526 South Church Street
Charlotte, North Carolina 28202

Dear Mr. Sullivan,

On May 27-28, 2009 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a site assessment of the Coal Ash Retention Pond at the Marshall Steam facility. The purpose of this visit was to assess the structural stability of the impoundments or other similar management units that contain "wet" handled coal combustion residuals (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 Marshall Steam 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 Marshall Steam 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 Marshall Steam facility. These recommendations are found on page 11 in the final assessment report and 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 within 14 calendar days of receipt of this letter. 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 non-CBI portions of 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.

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,

Marie P. Pickens for

Matt Hale, Director
Office of Resource Conservation and Recovery

Enclosures

Enclosure 2
Marshall Steam Recommendations

3.2 Studies and Analyses

1. An updated stability analysis of the upstream and downstream embankment slopes including an analysis of shallow slope failure (especially for the as built upper downstream slopes, which appear steeper than 2H:1V) should be conducted after surveying the actual configuration of the slopes.

2. Duke Energy has retained an outside consultant to provide an engineered repair of the scarps, but rather than approach this issue as an isolated repair, GZA recommends investigating the cause of the scarps more thoroughly (including but not necessarily limited to item 1 above).

3. Observations of the upper downstream toe should be made during periods of low rainfall to determine whether the wet and spongy conditions observed at the toe were due to surface water runoff or internal seepage. Further study should be conducted to correct the migration of dam core material that is being deposited on the berm.

4. Surface grading and the extent and condition of the drainage system (including video camera survey of pipe interiors and related drainage infrastructure where appropriate) at and adjacent to the dam should be evaluated.

3.3 Recurrent Maintenance Recommendations

GZA recommends no additional recurrent maintenance level activities that should be undertaken by the dam owner at this time.

3.4 Repair Recommendations

GZA recommends the following minor repairs which may improve the overall condition of the dam, but do not alter the current design of the dam. The recommendations may require design by a professional engineer and construction contractor experienced in dam construction.

1. Repair of surface drainage system and grading including minor depressions found on the crest.

2. Investigate seeps at the downstream toe in dry weather, with repairs designed by a professional engineer and construction by a contractor experienced in dam repair.

3.5 Remedial Modifications Recommendations

These recommendations will require design by a professional engineer and construction by a contractor experienced in dam repair. A Dam Safety Permit will likely be required.

1. Investigation and repair of the scarps and potential improvements required to meet required factors of safety for embankment stability if found necessary by the analysis recommended above.
2. Trees and their root system and undergrowth within approximately 10 feet of the toe of the downstream slope (north of the boat ramp adjacent to the outlet channel) and along the southern upstream slope should be removed. The trees and root systems growing along the downstream slope of the berm are not considered to be a major dam safety issue

given the [redacted] foot wide berm. However, erosion and vegetation along the downstream slope of the berm should be maintained.

3.6 Alternatives

There are no practical alternatives to the repairs itemized above.