

US EPA ARCHIVE DOCUMENT



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 June 11-12, 2009 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a site assessment of the Coal Ash Retention Impoundments (referred to as the East Dike and North Dike) at the Allen 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 Allen 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 Allen 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 Allen facility. These recommendations are found on pages 11-12 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  
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)

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,



Matt Hale, Director  
Office of Resource Conservation and Recovery

Enclosures

Enclosure 2  
Allen Recommendations

3.2 Studies and Analyses

1. A seismic stability and liquefaction analysis of the upstream and downstream embankment slopes and foundation should be conducted after surveying the actual configuration of the slopes.
2. Engineered maintenance repairs of the scarps should be undertaken and a monitoring program implemented to detect potential stability or seepage issues.
3. The piezometer data from all instruments should be collected, plotted, and evaluated. This includes piezometer and observation wells. An updated monitoring program should be developed based on conditions observed during this inspection and performance history of the dikes during and after construction.
4. Observations of the upper downstream toe of the East Dike should be made during periods of low rainfall to determine whether the standing water observed at the toe was due to surface water runoff or internal seepage. Seepage conditions should be monitored regularly
5. Since a portion of the North Dike is underlain with coal ash, slope stability analysis should be under taken if the site operator plans to proceed with land filling in Cells 1, 2 and 3.

3.3 Recurrent Maintenance Recommendations

GZA recommends no 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. Regrading of the ruts associated with the construction on the embankment near Cell 1 should be undertaken. The embankment should be revegetated after construction is complete.

3.5 Alternatives

There are no practical alternatives to the repairs itemized above.