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

SEP 15 2009

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

VIA E-MAIL AND FEDERAL EXPRESS

Mr. John Voyles, Jr.
Vice President, Transmission and Generation Services
Louisville Gas & Electric
220 West Main Street,
P.O. box 32020
Louisville, Kentucky 40232

Dear Mr. Voyles,

On June 1-2, 2009 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a site assessment of the Bottom Ash Pond at the Trimble County 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 Trimble County 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 Trimble County 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 Trimble County facility. These recommendations are found on pages 13-14 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 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

Matt Hale, Director
Office of Resource Conservation and Recovery

Enclosures

Enclosure 2
Trimble County Recommendations

## 6.1. Urgent Action Items

None of the recommendations are considered to be urgent, since the issues noted above do not appear to threaten the structural integrity of the dam in the near term. However, it is recommended that all of the maintenance items be undertaken during construction of the embankment extension project, given the need to correct these issues prior to placing additional fill on the embankments.

## 6.2. Long Term Improvement/Maintenance Items

All of the deficient conditions observed during the inspection are considered to be maintenance items that do not require immediate attention; however, we recommend that these issues be corrected prior to raising the embankments during the vertical extension project. This recommendation is made considering that it is the most logical time to complete the minor repairs during the course of a major earthwork project. Furthermore, access to the areas requiring repair will be difficult after the embankments are raised, and neglected erosion or slope sloughing conditions may eventually impact the stability of the newly modified embankments with increased loading. As such, the repairs should be treated as preparation measures for the new embankment extension. The needed repairs are listed below:

1. Upstream slope – repair eroded and sloughed areas near the top of the east and south embankments. Repairs should be completed in accordance with an engineered design. Consider armoring of upper portion of interior eastern and southern slopes to protect against wave action erosion.

2. Embankment Crest -- regrade crest to divert runoff into pond, fill low areas to establish a uniform crest elevation and to avoid concentrated channeling of runoff. Grade crest to promote sheet flow. Stabilize areas of crest where vehicle or equipment will travel or in material laydown areas to avoid rutting of soft surface soils and creation of poorly drained areas.

3. Downstream slopes – fill erosion gullies on the downstream slopes of the north, east, and west embankments. Repair sloughs, and re-grade irregular areas of slopes to avoid concentrated runoff channels or saturation of portions of slope. Repairs should be performed in accordance with an engineered design. Avoid mowing during wet conditions to reduce rutting by heavy tractor, which may be causing some minor slope sloughing. Place turf reinforcement erosion control matting over repaired areas to reduce the potential for future erosion gullies.

### 6.5. Monitoring and Future Inspection

O'Brien & Gere recommends continued participation in state bi-annual inspections. Consideration should also be given to independent inspections, such as the one conducted by ATC Associates, Inc., by licensed dam safety engineers on at least a bi-annual basis. Consideration should be given to development of an O&M Plan that would establish a firm schedule for operations, maintenance, and inspection activities.

Although the minor seepage/wetness at the downstream toe of the south embankment is believed to be the result of controlled discharge from an engineered toe drain, this seepage area should be monitored for increased seepage volume, transport of fine-grained soils, or other changed conditions that may indicate a potential problem. Installation of a small gravel blanket drain in the area with an outlet channel or pipe would help to alleviate the poor drainage conditions in the area and provide a means to measure seepage flow rate at a convenient discharge point.

Consideration should also be given to installing permanent piezometers at critical sections within each embankment. These piezometers can serve to monitor the phreatic surface and pore water pressure during and after the embankment extension project, and help to evaluate the performance of the clay liner under the higher hydraulic loading that will be applied with the raised normal pool elevation after completion of the embankment extension. Considering that the level of the phreatic surface, or pore water pressure, within the downstream embankment soils can have a significant effect on slope stability, the piezometers would help to ensure engineers that pore water pressures remain below the levels assumed in the design slope stability analyses. The engineer of record for the embankment extension project should be consulted regarding the location, depths, and types of piezometer instrumentation to be installed and the frequency of monitoring.