US ERA ARCHIVE DOCUMENT



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

April 21, 2010

OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

#### VIA E-MAIL AND FEDERAL EXPRESS

Mr. John Voyles, Jr., Vice President, Transmission and Generation Services E.ON/Kentucky Utilities 220 West Main Street, P.O. box 32020 Louisville, Kentucky 40232

Dear Mr. Voyles,

On October 28, 2009 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Cane Rune 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 Cane Rune 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 Cane Rune 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 Cane Rune 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 21, 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 5<sup>th</sup> Floor, N-237 Arlington, VA 22202-2733

You may also provide a response by e-mail to <a href="mailto:hoffman.stephen@epa.gov">hoffman.stephen@epa.gov</a>

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, /Maria Parisi Vickers/, Acting Director Office of Resource Conservation and Recovery

**Enclosures** 

# Enclosure 2 Cane Rune Recommendations

## 4.2 ATB General Condition Monitoring and Maintenance

Visually, a majority of the ATB dikes 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. These areas are as follows:

Re-grade and/or stabilize the south dike section adjacent to the E-Pond.

Fill the shallow erosion rills and rodent borrows on the downstream slope along the north side of the dike, and monitor for the development of similar features.

Monitor the irregularity in the north downstream slope grading to assess if the irregularity is the result of an overfill repair or signs of slope creep. Tire ruts from mowing operations should be monitored to ensure they are not worsening or resulting in localized surficial sloughing or erosion. Periodic maintenance may be warranted.

Continue efforts to improve drainage at the bottom of the downstream slope of the north dike. [We understand from LG&E's correspondence that additional drainage improvements were completed in November 2009.]

The 1972 construction drawing indicates that the twin 24-inch-diameter drainage pipes extend below the ATB dike at the eastern corner. We recommend that the condition of these pipes below the dike be assessed and the pipe outlet be located.

# 4.3 Basin/Dead Storage Ponds

Visually the upstream and downstream slopes of the Basin / Dead Storage Ponds were found to be in poor condition. As discussed in Section 3.6, E.ON U.S. has undertaken remedial measures at these ponds following their March 19, 2009 inspection. The following areas were observed that warrant additional corrective measures or periodic maintenance, and monitoring on a routine basis to confirm that changes are not occurring. These areas are as follows:

Establish routine moving to promote growth of grass ground cover.

Stump where woody brush and trees were cut monitored for decay. If depressions develop from stump decay, remove and backfill with compacted fill under the supervision of a Professional Engineer.

Fill the shallow erosion rills on the upstream and downstream slopes along the east dike.

Monitor the irregularity in the grading on the downstream side of the east and north dikes to assess if the irregularity is the result of slope creep. Irregularities include surface slumps, erosion rills and tire ruts.

Improve grading along crest road surface to prevent water ponding.

### 4.4 Engineering Analysis

Since CHA's site visit and Draft report submission, LG&E has contracted MACTEC to perform a geotechnical investigation and stability analyses of the ATB/E-Pond and the Dead Storage/Basin Pond Complexes. The final report was not available at the time of this submission, and CHA has the following recommendations related to these investigations and analyses:

Update the ATB Operation and Maintenance Plan with maximum dredge elevations where the "buttress" effect of deposited fly ash on the upstream slope is a key component of maintaining adequate factors of safety under all loading conditions.

Evaluate the potential impact of soft clay/CCW fill that appeared to be in place below portions of the Dead Storage/Basin Pond Dike.

Additional information is required to clarify the Stantec hydrologic and hydraulic analysis for the ATB regarding their analysis parameters and how they relate to the Kentucky regulations. Hydrologic and hydraulic analysis for the Basin/Dead Storage Ponds should be performed.