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

Ms. Lisa Messinger
Senior Environmental Scientist
Vectren
P.O. Box 209,
Evansville, Indiana 47702

Dear Ms. Messinger,

On June 3-4, 2009 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a site assessment of the Upper pond and Lower Ash Pond at the AB Brown 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 AB Brown 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 AB Brown 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 AB Brown facility. These recommendations are found on pages 11-13 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
AB Brown Recommendations

Lower Ash Pond:

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 further investigation of the seepage issues be undertaken within the next six (6) months.

6.2. Long Term Improvement/Maintenance Items

Several further evaluations should be performed and, depending on the results of the evaluations, consideration should be given to long-term dam safety improvements. The issues to be evaluated are as follows:

1. The records should be reviewed for documentation of the seepage mitigation measures implemented in the Coal Hopper area and any monitoring of the effectiveness of these measures. If adequate documentation does not exist, the chronology of these events should be recorded in the next inspection report or in a separate report.
2. Depending on the results of the seepage investigation described above, a drain outlet system should be designed to allow free drainage from the Seepage Collection Zone and collection/conveyance of the seepage flow. The berm surface should also be regraded as necessary to promote drainage of rainfall runoff and to minimize infiltration of surface water into the Seepage Collection Zone.
3. Evaluation of alternate methods for removal of the reed-like vegetation and phragmites growing from the upstream slope of the embankment and in the emergency spillway outlet channel should be conducted. Consideration should also be given to removal of the trees growing from the lower downstream slope of the embankment, to the left (south) of the principal spillway outlet channel.
4. The methodology for computation of the SDF should be reviewed and verified with IDNR Dam Safety (if necessary). A hydraulic evaluation should also be performed to confirm the capability of the Lower Dam spillway system to safely pass the flow that would result from a failure of the Upper Dam.
5. The purpose of the utility pole on the downstream slope and the riprap pile around it should be investigated and, if not serving any purpose, consideration should be given to removing these features that disturb the uniformity of the slope.

6.3. Monitoring and Future Inspection

In conjunction with the seepage investigation recommended above, piezometers should be installed at various stations to allow for measurement of the phreatic surface and for future monitoring of pore pressures within the embankment. One row of piezometers should be located in the vicinity of the saturated downstream slope to evaluate if any seepage through the embankment is occurring in this area. Soil samples should also be obtained and compared to previous boring logs to assess the existence of any pervious zones that would be conducive to seepage and to establish the need for any updated slope stability analyses.

A regular dam safety inspection program should be established and consideration should be given to development of an O&M Plan that would establish a firm schedule for operations, maintenance and inspection activities.

6.4. Recommended Schedule for Completion of Action Items

As noted above, the seepage investigation should be initiated within the next six (6) months, if possible. The other recommended evaluations should be completed within the next twelve (12) to eighteen (18) months, with resulting improvements implemented within the next two (2) to three (3) years

Upper Pond:

6.1. Urgent Action Items

None of the recommended evaluations and/or improvements are considered to be urgent, since the issues identified above do not appear to threaten the integrity of the dam in the short term.

6.2. Long Term Improvement/Maintenance Items

Several further studies should be performed and, depending on the results of the studies, consideration should be given to long-term dam safety improvements. The issues to be addressed are as follows:

1. The effectiveness of the erosion repairs along the downstream slope of the dam should be evaluated once the grass vegetation has become adequately established in these areas. If the erosion persists, consideration should be given to use of better topsoil, placement of more erosion-resistant vegetation, regrading of the crest to promote more uniform runoff, use of turf reinforcement matting and/or placement of stone/rock along the lower portion of the slope.
2. The potential liquefaction issue should be investigated to establish a procedure for monitoring and/or protection against the consequences of foundation liquefaction during a seismic event. The procedure may be as simple as inspection of the earth embankment during or immediately after any measurable earthquake, but some measures should be implemented to address this issue.
3. The vegetation in the emergency spillway outlet channel should be removed to prevent further overgrowth and possible future blockage of the outflow path.

6.3. Monitoring and Future Inspection

The survey point data obtained by Three I Engineering should be reviewed to determine if the results are relevant to embankment settlement and if further monitoring should be undertaken. Such monitoring may already be part of an existing inspection and maintenance plan, but the available documentation is not clear on this issue.

The erosion along the edge of the scrubber blowdown outlet channel should be monitored during future inspections to verify that the erosion does not impact the downstream toe of the Upper Dam.

6.4. Recommended Schedule for Completion of Action Items

As noted above, the erosion repair effectiveness should be evaluated after the new grass cover has become established, which will probably not be until at least October. The other issues should be addressed within the next 12 to 18 months, with recommended improvements to be implemented within the next 2 to 3 years.