

US EPA ARCHIVE DOCUMENT



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

July 26, 2011

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

VIA E-MAIL

Mr. Daniel Siegfried, Managing Attorney
Alliant Energy Corporate Services
Legal Department
200 First Street SE
PO Box 351
Cedar Rapids, IA 52406-0351

Dear Mr. Siegfried,

On September 28, 2010 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Columbia Generating Station 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 Columbia Generating Station 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 Columbia Generating Station facility is enclosed. This report includes a specific condition 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 Columbia Generating Station 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 provide a rationale. Please provide a response to this request by August 23, 2011. Please send your response to:

Mr. Stephen Hoffman
U.S. Environmental Protection Agency (5304P)
1200 Pennsylvania Avenue, NW
Washington, DC 20460

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If you are using overnight of hand delivery mail, please use the following address:

Mr. Stephen Hoffman
U.S. Environmental Protection Agency
Two Potomac Yard
2733 S. Crystal Drive
5th Floor, N-5838
Arlington, VA 22202-2733

You may also provide a response by e-mail to hoffman.stephen@epa.gov

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.

Please be advised that providing false, fictitious, or fraudulent statements of representation may subject you to criminal penalties under 18 U.S.C. § 1001.

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 efforts to ensure protection of human health and the environment.

Sincerely,
/Suzanne Rudzinski/, Director
Office of Resource Conservation and Recovery

Enclosures

Columbia Generating Station Recommendations (from the final assessment report)

3.1 Assessments

In general, the overall condition of the PAP was judged to be **SATISFACTORY**. The impoundment was found to have the following deficiencies:

1. Minor erosion due to wave action along the upstream slope;
2. Minor erosion due to wave action along the downstream slope of the eastern embankment that also forms the upstream embankment of the SAP;
3. Large erosion ditch on the downstream slope near the southeast corner of the impoundment; and,
4. Tree stumps and roots on the downstream slope near the northwest corner of the embankment.

In general, the overall condition of SAP was judged to be **SATISFACTORY**. The impoundment was found to have the following deficiencies:

1. Minor erosion due to wave action along the upstream slope;
2. Minor erosion due to wave action along the upstream slope of the western embankment that also forms the downstream embankment of the PAP; and,
3. Large erosion ditch on the upstream slope near the southwest corner of the impoundment (same erosion ditch noted in Item 3 for the PAP).

In general, the overall condition of PP was judged to be **SATISFACTORY**. The impoundment was found to have the following deficiencies:

1. No routine maintenance plan.

In general, the overall condition of LSP was judged to be **FAIR**. The impoundment was found to have the following deficiencies:

1. Erosion ditches on the eastern and western embankment;
2. Sparse vegetation in select areas of the upstream slope;
3. Trees up to 15 inches in diameter located on the upstream slope and crest;
4. Animal burrows on the northern and southern embankments; and,
5. Water level above the maximum allowable level of 794.85 feet.

The following recommendations and remedial measures generally describe the recommended approach to address current deficiencies at the impoundments. Prior to undertaking recommended maintenance, repairs, or remedial measures, the applicability of environmental permits needs to be determined for activities that may occur within resource areas under the jurisdiction of the appropriate regulatory agencies.

3.2 Studies and Analyses

GZA recommends the following studies and analyses:

1. Evaluate the extent of wave action erosion on the upstream slopes of the PAP;
2. Perform a hydrologic/hydraulic analysis of the PP to determine the adequacy of the current and designed operating conditions and design to accommodate the appropriate precipitation event;
3. Evaluate the slope and seepage stability of the LSP based on current operating conditions and methodologies;
4. Confirm the soil and seepage parameters assumed in stability analysis of the PAP and SAP; and,
5. Develop an EAP for the impoundments.

3.3 Recurrent Operation & Maintenance Recommendations

GZA recommends the following operation and maintenance level activities:

1. Documentation of the periodic visual observations of the PAP, SAP and LSP;
2. Maintain copies of the impoundment design and construction documentation on Site.
3. Semi-annual inspection of the PP and LSP in addition to the inspections being completed on the PAP and SAP;
4. Clear deep rooted vegetation stumps from the PAP embankment;
5. Clear deep rooted vegetation from the embankments and crest of the LSP;
6. Add topsoil and reseed areas of sparse vegetation in the LSP; and,
7. Remove excess water from LSP and relocate marker stake to accommodate current maximum water level of 794.85 feet.

3.4 Repair Recommendations

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

1. Repair erosion ditches present in the PAP, SAP and LSP.

3.5 Alternatives

There are no practical alternatives to the repairs itemized above.