

US EPA ARCHIVE DOCUMENT



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

March 5, 2014

OFFICE OF  
SOLID WASTE AND  
EMERGENCY RESPONSE

VIA E-MAIL

Mr. Steve Rentfrow  
General Manager  
Crisp County Power Commission  
202 South 7<sup>th</sup> Street  
Cordele, Georgia 31015

Re: Request for Action Plan regarding Crisp County Power- Crisp Power Plant

Dear Mr. Rentfrow,

On August 30, 2012 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Crisp County Power- Crisp Power Plant 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 unit at the Crisp County Power- Crisp Power Plant 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 Crisp County Power- Crisp Power Plant facility is attached.

This report includes a specific condition rating for the CCR management unit and recommendations and actions that our engineering contractors believe should be undertaken to ensure the stability of the CCR impoundment located at the Crisp County Power- Crisp Power Plant facility. These recommendations are listed in Enclosure 1.

Since these recommendations relate to actions which could affect the structural stability of the CCR management unit 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 **April 7, 2014**. 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 or hand delivery mail, please use the following address:**

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

You may also provide a response by e-mail to [hoffman.stephen@epa.gov](mailto:hoffman.stephen@epa.gov),  
dufficy.craig@epa.gov, [kelly.patrickm@epa.gov](mailto:kelly.patrickm@epa.gov) and [englander.jana@epa.gov](mailto:englander.jana@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 unit, 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,  
/Barnes Johnson /, Director  
Office of Resource Conservation and Recovery

Enclosures

**Crisp County Power- Crisp Power Plant Recommendations (from the final assessment report)**

**CONCLUSIONS**

The following conclusions are based on our visual observations during the site assessment on August 30, 2012 and a review of the very limited documentation provided by the Crisp County Power Commission.

**Conclusions Regarding Structural Soundness of the CCW Impoundment.**

The CCW impoundment appears to be structurally sound based on our visual observations of the structural components (i.e. inlet structures, earth embankments and outlet structures). No documentation to evaluate and assess structural stability and soundness of the impoundment was provided.

**Conclusions Regarding the Hydrologic/Hydraulic Safety of CCW Impoundment.**

Supporting technical documentation was not provided. No probable maximum precipitation (PMP) analysis required under Federal Emergency Management Agency (FEMA) standards was provided.

**Conclusions Regarding Adequacy of Supporting Technical Documentation**

Supporting data and documentation have not been provided. Liquefaction potential analyses for embankment foundations have not been performed, and complete original record drawings for the Ash Pond were not provided.

**Conclusions Regarding Description of the CCW Impoundment.**

The description of the CCW impoundment provided by a Crisp County Power Commission representative was generally consistent with the visual observations by CDM Smith during our site assessment. However, only four (4) sheets of miscellaneous drawings and survey data were provided, making it difficult to assess discrepancies compared to the intended design of the CCW impoundment.

The drawings that were provided are included in **Appendix A** of the final report.

**Conclusions Regarding Field Observations**

During our visual observations and site assessment, signs of areas of erosion, erosion rills, and scarps were observed on the exterior and interior slopes of the embankments. There were no apparent unsafe conditions or conditions in need of immediate remedial repair observed.

**Conclusions Regarding Adequacy of Maintenance and Methods of Operation**

Current maintenance and operating procedures appear to be adequate. There was no evidence of previous spills or release of impounded coal ash slurry outside of the impoundment.

**Conclusions Regarding Adequacy of Surveillance and Monitoring Program**

The impoundment at Plant Crisp was permitted under the National Pollutant Discharge Elimination System (NPDES) Permit No. GA0025399 issued by the State of Georgia Department of Natural Resources, Environmental Protection Division, dated September 23, 2005. The permit authorized discharge into Lake Blackshear (Flint River Basin) in accordance with effluent limitations and monitoring requirements under the conditions set forth in the permit. Data to verify discharge and monitoring were not provided to CDM Smith. The permit expired on August 31, 2010. However, we were informed that the Crisp County Power Commission was in the process of getting it renewed.

**Conclusions Regarding Suitability for Continued Safe and Reliable Operation**

The embankments do not show evidence of unsafe conditions requiring immediate remedial efforts, although maintenance to correct the deficiencies noted above is required.

**RECOMMENDATIONS**

Based on CDM Smith visual assessment of the Ash Pond and a review of limited documentation provided by Crisp County Power Commission, the following recommendations are provided. A complete set of record drawings and/or as-built drawings should be developed or made readily available for future reference.

**Recommendations Regarding the Hydrologic/Hydraulic Safety**

It is recommended that a qualified professional engineer assist the Crisp County Power Commission to evaluate the hydrologic and hydraulic capacity of the CCW impoundment to withstand design storm events without overtopping.

**Recommendations Regarding the Technical Documentation for Structural Stability**

It is recommended that a qualified professional engineer assist Crisp County Power Commission in the evaluation of the Ash Pond's embankments stability, including liquefaction analyses.

**Recommendations Regarding Field Observations**

Erosion rills and scarps – Erosion rills and scarps were observed on the exterior and interior slopes of the west embankment. Structural fill should be placed and compacted in the rills and scarps and the repaired areas graded to meet the adjacent existing contours. After slope restoration, it is recommended that the exposed surface of the embankment be stabilized with sod or hydroseeded to restore vegetation cover on the slopes.

Animal burrows were not observed on the embankments exterior slopes. Although none were seen, the vegetation cover may have hidden animal burrows. Therefore it is recommended that vegetation be maintained at a height that allows potential animal burrows to be readily observed.

**Recommendations Regarding Surveillance and Monitoring Program**

Monitoring the embankment slopes and crests for erosion, movement, animal burrows, and seepage is recommended. Although no discharge into Lake Blackshear (Flint River Basin) was observed, surveillance and monitoring in accordance with effluent limitations set forth in the NPDES Permit is recommended.

**Recommendations Regarding Continued Safe and Reliable Operation**

Inspections should be made following periods of heavy and/or prolonged rainfall, and the occurrence of these events should be documented. Inspection records should be retained at the facility for a minimum of three years.

Major repairs and slope restoration should be designed by a registered professional engineer experienced with earthen dam design.

None of the conditions observed during our site visit require immediate attention or remediation. However, the recommendations in this report should be implemented in a reasonable time frame to maintain continued safe and reliable operation of the CCW impoundment.