

US EPA ARCHIVE DOCUMENT



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

January 12, 2012

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

VIA E-MAIL

Mr. James Landreth, Vice President
SCE&G
111 Research Park Drive
Columbia, South Carolina, 29203

Re: Request for Action Plan regarding South Carolina Electric & Gas Co - Canadys
Steam Power Station

Dear Mr. Landreth,

On February 15, 2011 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the South Carolina Electric & Gas Co - Canadys Steam Power Station facility. The purpose of this visit was to assess the structural stability of the impoundment 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 South Carolina Electric & Gas Co - Canadys Steam Power 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 South Carolina Electric & Gas Co - Canadys Steam Power 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 South Carolina Electric & Gas Co - Canadys Steam Power 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 unit(s) 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 February 13, 2012. Please send your response to:

Mr. Stephen Hoffman
U.S. 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
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, kohler.james@epa.gov, and 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 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

Enclosure

Enclosure 2
**South Carolina Electric & Gas Co - Canadys Steam Power Station
Recommendations (from the final assessment report)**

1.0 CONCLUSIONS AND RECOMMENDATIONS

1.1 CONCLUSIONS

Conclusions are based on visual observations from a one-day site visit on February 15, 2011, and review of technical documentation provided by South Carolina Electric & Gas (SCE&G).

1.1.1 Conclusions Regarding the Structural Soundness of the Management Unit(s)

The dike embankments and spillway appear to be structurally sound based on a review of the engineering data provided by the owner's technical staff and Dewberry engineers' observations during the site visit; however, factors of safety for seismic loading conditions do not meet required standards. SCE&G is aware of this concern and has reported that it is taking appropriate action. It should be noted that a deep-seated failure that would compromise the overall integrity of the dike during the design earthquake is not likely and that the dike will be capable of retaining the coal ash during and immediately following the design earthquake event.

1.1.2 Conclusions Regarding the Hydrologic/Hydraulic Safety of the Management Unit(s)

Adequate capacity and freeboard exists to safely pass the design storm.

1.1.3 Conclusions Regarding the Adequacy of Supporting Technical Documentation

Supporting technical documentation is adequate. Engineering documentation reviewed is referenced in Appendix A of the final report.

1.1.4 Conclusions Regarding the Description of the Management Unit(s)

The description of the management unit provided by the owner was an accurate representation of what Dewberry observed in the field.

1.1.5 Conclusions Regarding the Field Observations

The overall visual assessment of the ash pond embankment system was that it was in satisfactory condition; however, surficial sloughing was observed along the Ash Pond's downstream slope. Embankments visually appear structurally sound.

1.1.6 Conclusions Regarding the Adequacy of Maintenance and Methods of Operation

The current maintenance and methods of operation appear to be adequate for the ash management unit.

1.1.7 Conclusions Regarding the Adequacy of the Surveillance and Monitoring Program

The surveillance program appears to be adequate.

1.1.8 Classification Regarding Suitability for Continued Safe and Reliable Operation

The Active Ash Pond facility is rated **POOR** for continued safe and reliable operation due to the factors of safety for seismic loading conditions that do not meet required standards.

1.2 RECOMMENDATIONS

1.2.1 Recommendations Regarding the Structural Stability

As recommended by its own engineering studies, additional data are required on the dike and foundation soils to permit a more in-depth analysis of risks from seismic events. An action plan needs to be developed and implemented to take the necessary actions to increase factors of

safety, meet all applicable standards and requirements, and to address surficial sloughing. It is our understanding that the SCE&G is aware of this need and is taking appropriate action.

1.2.2 Recommendations Regarding Maintenance and Methods of Operation

The following issues need to be addressed with routine maintenance:

Re-vegetate embankment where necessary.

1.2.3 Recommendations Regarding Continued Safe and Reliable Operation

- Develop an action plan to increase the factors of safety for the ash pond embankments to meet or exceed the minimum requirement for factors of safety for seismic loading conditions.
- Develop an action plan to address surficial sloughing along downstream slope.
- Perform remediation along downstream slopes where surficial sloughing is occurring.