

US EPA ARCHIVE DOCUMENT



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

July 28, 2011

OFFICE OF  
SOLID WASTE AND  
EMERGENCY RESPONSE

VIA E-MAIL

Mr. Steve Carter, Vice President Regulated Generation  
Cleco Corporation  
2030 Donahue Ferry road  
P.O. Box 5000  
Pineville, Louisiana 71361-5000

Dear Mr. Carter,

On October 20, 2010 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Dolet Hills Power 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 Dolet Hills 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 Dolet Hills 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 Dolet Hills 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 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 29, 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 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)

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

**Dolet Hills Power Station Recommendations (from the final assessment report)**

All of the ponds were rated Poor in the Draft report due to missing hydrologic, hydraulic or stability documentation. However, additional review of originally provided documentation resulted in improvement of some of the ponds' condition ratings. The lack of additional documentation resulted in other ponds' condition ratings remaining unchanged from the Draft Report.

**4.2.1 Hydrologic and Hydraulic***Draft Report*

AMEC recommends that an appropriate design storm rainfall and freeboard depth in accordance with MSHA guidelines be applied to each impoundment's watershed to assess whether the dam and decant system can safely store, control, and discharge the design flow. Based on the size and rating for the ponds, the design storm would be the 100-year, 24-hour event. Hydraulic calculations should also be completed to determine the rate at which the discharge system could pass the design storm, if necessary, or draw down elevated water surfaces following such an event. The analysis should consider all critical stages over the life of the pond including full pond conditions.

*Final Report*

Further review of the originally provided hydrologic documentation for the Ash Ponds (1, 2, and Secondary) showed that Ash Ponds 1 and 2 appear to be able to contain runoff from the 50- year 24-hour rainfall events and send excess runoff from larger rainfall events into the Secondary Pond. Reference to maintenance of a two foot freeboard with the capacity to pass the 100-year 24-hour rainfall event was also described for these two ponds. Therefore, those ponds were given a Fair rating. The Fair rating is defined as *no existing dam safety deficiencies are recognized for normal loading conditions. Rare or extreme hydrologic and/or seismic events may result in a dam safety deficiency. Risk may be in the range to take further action.* AMEC recommends that detailed calculations be completed to provide documentation in support of the "Specifications" described above as well as in Table 5 of the final Assessment report.

The Secondary Pond received a condition rating of Poor because too little information was provided to draw solid conclusions as to its capacity to handle discharge from both Ash Pond 1 and Ash Pond 2 during large rainfall events. Information concerning discharge pump capacity was not provided. It was noted that the Secondary Ash Pond operates at a much lower elevation than either Ash Pond 1 or 2; however, no calculations were provided to support the relationship between the ponds that was described in provided documentation. AMEC recommends that detailed calculations be completed to provide clear and concise documentation in support of the relationship between all three Ash Ponds and the "Specifications" described in Table 6 of the final Assessment report for the Secondary Ash Pond.

No hydrologic or hydraulic information was provided for Surge Ponds 1 and 2. The information originally provided for the Fly Ash/FGD Landfill Pond was not clarified with any additional information or calculations. As such, conclusions regarding the ability of these ponds to operate under normal loading conditions could not be determined and their condition ratings remained Poor. The Auxiliary Surge Pond is completely incised, therefore, hydrologic and hydraulic information is not required in support or embankment stability conditions. This pond received a satisfactory condition rating.

#### **4.2.2 Geotechnical and Stability Recommendations**

##### *Draft Report*

Based on the stability analyses provided to AMEC, Ash Ponds 1 and 2 and the Secondary Ash Pond meet minimum factors of safety. Additional studies would be required to assess and document the geotechnical stability of the remainder of the management units.

##### *Final Report*

Geotechnical information and stability analyses were not provided for Surge Ponds 1 and 2 or the Fly Ash/FGD Landfill Pond. The condition rating of these ponds remains Poor. AMEC recommends that complete geotechnical and stability studies be completed for these ponds.

#### **4.2.3 Monitoring and Instrumentation Recommendations**

Any environmental sampling of the monitoring wells within the zone of influence of the impoundment structures should include groundwater elevation readings. These readings should be reviewed at least annually by a Professional Engineer.

#### **4.2.4 Inspection Recommendations**

Annual visual inspections of each management unit should be performed by a Professional Engineer. Inspection reports should be maintained by the facility. Additionally, daily inspections performed by facility O&M personnel should be supported by an inspection checklist that could also serve as documentation of the inspection.

Vegetation on the impoundments should continue to be aggressively managed. We further recommend that vegetation be managed based on guidance in (a) Corps of Engineers EM 1110-2-301, Guidelines for Landscape Planting and Vegetation Management at Floodwalls, Levees, and Embankment Dams and (b) FEMA 534, Technical Manual for Dam Owners: Impacts of Plants on Earthen Dams. Additionally, animal impact should be mitigated based on guidance in FEMA 473, Technical Manual for Dam Owners: Impacts of Animals on Earthen Dams.