

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. Gary Roulet
Chief Executive Officer
Western Farmers Electric Cooperative
P.O. Box 429
Anadarko, Oklahoma 73005-0429

Dear Mr. Roulet,

On October 18 and 19, 2010 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Hugo 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 Hugo 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 Hugo 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 Hugo 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

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
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

Hugo Power Station Recommendations (from the final assessment report)**4.2 Acknowledgement of CCW Impoundment Condition**

CDM acknowledges that the management units referenced herein were assessed by Michael L. Schumaker and Janet A. Connor, and appear to be in good condition based on site observations. However, there is a lack of documentation relative to the design and construction of these facilities. It is not known if critical studies or investigations (stability, hydrologic, hydraulic, seismic) have been performed to confirm that potential safety deficiencies do not exist. Therefore, the Bottom and Fly Ash Ponds are judged to be in **POOR** condition based on the lack of design information. Additional documentation and studies performed to confirm the condition and performance of these impoundments may be sufficient to substantiate an improved condition assessment.

As described in the following sections, further studies, maintenance and monitoring will further improve the condition of these impoundments.

4.3 Maintaining and Controlling Vegetation Growth

In general, vegetation on the embankments was well maintained. No large trees were observed on the embankments. Some small brush was observed. Grassy vegetation and small brush was being mowed at the time of our site visit. It is our understanding that vegetation is mowed and baled twice per year.

CDM recommends that vegetation continue to be cut on a regular basis to ensure that adequate visual observations can be made by WFEF's personnel during routine inspections and by the ODEQ during their annual inspection.

4.4 Erosion Protection and Repair

Surface erosion, loss of ground cover, over-steepened slopes, rodent holes, minor sloughing, and vehicle ruts were observed in isolated areas on multiple embankment slopes as discussed in Section 2 of the final report. In general, the observed conditions do not present an immediate concern provided that they are properly maintained a timely manner. CDM recommends filling over-steepened slopes to the original grades, backfilling rodent holes, repairing sloughs, and filling vehicle ruts with compacted fill. All areas where vegetation is not established and all areas disturbed as part of filling operations should be seeded.

WFEF identified that internal maintenance requests were prepared to address the eroded areas. It is our understanding that the repairs were scheduled to be implemented within three months of April 21, 2011 weather permitting.

4.5 Seepage

Wet areas and seepage were observed at the locations identified in Section 2 of the final report. Seepage and wet areas should be documented as part of routine inspections, and be observed for changes. Changes in size and coloration of seepage discharge should be documented and reviewed by a qualified professional engineer familiar with earth dam design and construction. WFEF indicated that the seepage area will be marked and monitored, and that maintenance will be performed as necessary.

4.6 Impoundment Hydraulic and Stability Analysis

WFEF was not able to provide CDM with a hydraulic analysis showing the ability of the ash ponds to safely pass or store the 25% of the PMP event. However, a preliminary evaluation performed by CDM suggests there is enough storage capacity at the current operating pool levels

to safely store precipitation from this rainfall event. CDM recommends WFEC perform a complete study to confirm this conclusion and update the study if operating levels of the pond change in the future.

CDM was not provided with information regarding stability analyses performed prior to or following construction of the ponds or information regarding engineering properties of the embankment soils. It is recommended that detailed stability analyses be performed for one cross section through southeast corner of the South Fly Ash Pond embankments. The stability analysis should include an evaluation of subsurface conditions to identify existing soil parameters in the embankments and foundation soils as well as the phreatic surface. Stability analyses should consider all appropriate operating and loading conditions including rapid drawdown if applicable, and seismic events.

4.7 Inspection Recommendations

Based on the information reviewed by CDM, it does not appear that WFEC has adequate inspection practices with respect to documentation. Currently no inspection documentation is prepared. CDM recommends that plant personnel develop detailed inspection documentation procedures, such as a check list, to aid in ensuring that they are performing adequate inspections and adequately documenting observations over time. Documentation should include a sketch of relevant features observed, and the documentation should be periodically reviewed to identify if conditions are worsening and/or if significant changes are occurring which could lead to additional maintenance issues or safety concerns.

Inspection procedures should include the recording of data from the existing piezometers around the ponds. A staff gage should be installed at outlet structures to record water levels in the impoundments, if applicable. In addition, inspections should be made following heavy rainfall, and the occurrence of these events should be documented. It is recommended that inspection records be retained at the facility for a minimum of three years.

WFEC has indicated that their inspection procedures will be updated to ensure better inspection documentation.