

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

Ms. Cathy Woollums, Senior Vice President Environmental Services
Mid American Energy Company
P.O. Box 657
Des Moines, IA 50306-0657

Dear Ms. Woollums,

On September 15, 2010 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Walter Scott Junior Energy Center 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 Walter Scott Junior Energy Center 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 Walter Scott Junior Energy Center 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 Walter Scott Junior Energy Center 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

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

Walter Scott Junior Energy Center Recommendations (from the final assessment report)

1.2.1 Recommendations Regarding the Structural Stability

No recommendations regarding structural stability appear to be warranted at this time.

1.2.2 Recommendations Regarding the Hydrologic/Hydraulic Safety

Perform hydrologic calculations to provide formal documentation of internal hydrologic safety of the ash basins and update the calculations as necessary to account for changes in internal drainage patterns and reduction in available flood surcharge storage as the basins fill with more ash.

1.2.3 Recommendations Regarding the Supporting Technical Documentation

Maintain current documentation of all relevant appropriate stability analyses and hydrologic analyses in MidAmerican files, including copies of the current analyses conducted under the charge of the levee districts and/or the USACE. The utility should ask the levee districts and the USACE for updates of the analyses whenever they are made.

1.2.4 Recommendations Regarding the Description of the Management Unit(s)

Update project documents to include or note current features of the ash basins and modify or supplement the documents as needed when changes are made in the future. For example, the recently completed crest elevation profiles around both ash ponds surveyed by HGM Associates, Inc. (Appendix D - Item 2 of the final report) serves to provide documentation of current crest elevations, which should be referenced on official project plans.

1.2.5 Recommendations Regarding the Field Observations

A number of field observations relate to maintenance issues. Recommendations regarding maintenance issues are included in the following Subsection 1.2.6.

The draft report identified issues concerning the slump on the levee (outside slope of dike on north side of South Ash Pond) and damaged end of outlet pipe from the North Ash Pond. Subsequent repairs have been made, so no action is required by MidAmerican, other than visual monitoring.

Raising the low section of the South Ash Pond dike does not appear to be necessary at this time, but may need to be considered if there is continuing settlement due to unusually large secondary compression effects or if more formal calculations of hydrologic safety show a need for more freeboard at the low dike section.

1.2.6 Recommendations Regarding the Maintenance and Methods of Operation

It is recommended that MidAmerican develop and implement a written plan or operating procedure for removing water from the ponds or limiting water build-up in the ponds during times of unusually wet weather, in order to be assured of maintaining pond water surface elevations at or below elevations that provide seepage exit gradients at or below 0.5. No other recommendations regarding methods of operation appear to be warranted at this time.

Maintenance recommendations are as follows:

- Eradicate sunflowers and other tall, stalky vegetation on the dike embankment slopes or control this type of vegetation by cutting three times during the growing season. Continue to mow the crests and shoulder areas of the dike embankments, also three times during the growing season.

- If possible through an agreement with the adjacent land owner, remove the small trees and bushes on the outside slope of the dike on the north side of the North Ash Pond before they become large.
- Subsequent to the draft report, MidAmerican has provided follow-up documentation showing that the riprap repairs at the South Ash Pond have been completed. MidAmerican has further indicated that the wave erosion at the northeast corner of the North Ash Pond is being monitored and an assessment on placement of riprap for wave erosion protection will be made in late spring 2011.
- Clean sediment out of the overflow structure at the inlet end of the outlet structure in the North Ash Pond and maintain the structure clear of sediment in the future, to assure that the opening under the skimmer wall is not blocked, when (or if) discharge through the outlet structure is needed.

1.2.7 Recommendations Regarding the Surveillance and Monitoring Program

It is recommended that, at a minimum, an engineer experienced with dams accompany the inspection personnel at least once annually and prepare a separate report or checklist of his/her observations and include assessment of the impounding dikes along with recommendations, as needed. In addition, if the normal operating water level in the North Ash Pond is raised and discharges through the outlet structure become routine, it is recommended that conducting interior inspections every 5 years with a remote video camera or by personnel using confined-space entry procedures begin soon after raising the water level or allowing discharge through outlet structure. The results should be documented with a written inspection report.

During future inspections, it is recommended that inspectors closely observe the dike embankment on the north side of the North Ash Pond where the inside slope is particularly steep just above waterline, to check for tension cracks, slide scarps or other signs of mass soil movement.

No recommendations for permanent performance monitoring instruments appear to be warranted at this time. However, frequent visual monitoring of the temporary steel pins behind the slough on the outside slope of the dike on the north side of the South Ash Pond should continue as planned and frequent visual monitoring of the damaged end of the outlet pipe should be done, until both are repaired by the USACE.

1.2.8 Recommendations Regarding Continued Safe and Reliable Operation

No additional recommendations for continued safe and reliable operation appear warranted at this time.