

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 16, 2010 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the George Neal North 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 George Neal North 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 George Neal North 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 George Neal North 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

George Neal North Energy Center Recommendations (from the final assessment report)**1.2.1 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 stability analyses conducted by HWS. Perform hydrologic calculations to provide formal documentation of internal hydrologic safety of the ash, taking into consideration changes in internal drainage patterns and reduction in available surcharge storage for storm water as the basins fill with ash (see Subsection 1.1.3 of the final report).

1.2.2 Recommendations Regarding the Field Observations

Two field observations relate to repair issues that MidAmerican already has plans to address. One concerns reconstruction of the embankment where apparent seepage erosion has occurred in the outside face of the perimeter dike on the northeast side near east corner of Pond 3B North. It is recommended that Pond 3B North not be filled with water or contain water to an elevation that exceeds about elevation 1076 feet until the embankment is reconstructed to replace erodible soils in that section of the dike (see Subsection 1.1.5 of the final report).

The other repair issue concerns raising the low dike section around much of Pond 3B South. It is recommended that the need for raising the low dike be reconsidered with HWS' assistance, to review and evaluate: the cause of the dike being low in this section, whether settlement or subsidence is currently taking place, whether adding fill to the embankment section will rejuvenate or initiate additional settlement or subsidence, whether the outlet pipe would be impacted by additional settlement or subsidence in the deeper part of the embankment section, and whether the additional freeboard gained by raising the low dike is actually needed for hydrologic safety (see Subsection 1.1.5 of the final report).

One field observation relates to a maintenance issue. Recommendations regarding maintenance issues are included in the following Subsection 1.2.3.

1.2.3 Recommendations Regarding the Maintenance and Methods of Operation

No recommendations appear to be warranted at this time with respect to methods of operation, other than to work within the ash pond operating conditions (constraints) recommended by HWS for maximum operating pool elevations and minimum pond floor elevations (see Table 7.5 of the final report).

One maintenance recommendation is as follows:

- Establish a grass cover or other erosion protection on the bare outside slope of the perimeter dike at the offset near the south corner of Pond 3A (see Subsection 1.1.6 of the final report).

1.2.4 Recommendations Regarding the Surveillance and Monitoring Program

With regard to record keeping in the recently developed inspection program, it is recommended that the retention time for inspection records, etc. be 5 years (rather than 3), or as needed to be available for review during the 5-year engineering inspections.

No recommendations for permanent performance monitoring instruments appear to be warranted at this time. However, after raising the low dike section at Pond 3B South, install at least two temporary elevation monuments, one on the crest and one at the outside toe of the section where the lowest crest elevation occurred (near outlet structure), and take elevations on the monuments

monthly for 6 months after the initial elevation measurements; the monument at the toe will serve to check for heave in the unlikely event of rotational shear failure. After 6 months, review and evaluate the monitoring data to determine if monitoring should continue for further evaluation or be terminated.