

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. David Sogard
Vice President Legal & Governmental Affairs
Minnkota Power Cooperative
1822 Mill Road
P.O. Box 13200
Grand Forks, North Dakota 58208-3200

Dear Mr. Sogard,

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 Milton R. Young 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 Milton R. Young 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 Milton R. Young 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 Milton R. Young 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

US EPA ARCHIVE DOCUMENT

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

Milton R. Young Power Station Recommendations (from the final assessment report)

12.1 Corrective Measures and Analyses for the Structures

1. Continue to monitor the erosion channel located near the west embankment downstream toe of Cell 1 to ensure the erosion does not affect the west embankment downstream slope.
2. Perform a slope stability analysis for the Alternate Bottom Ash Pond.
3. Perform a hydrologic analysis of the Milton R. Young Station site and the three CCW impoundments to verify the adequacy of the pond volumes to store the direct precipitation from the inflow design flood. A dam break analysis should be performed for Cell 1 and Cell 2 to evaluate whether significant erosion damage to Nelson Lake Dam would result in the event of dam breach of Cell 1 or Cell 2.

12.2 Corrective Measures Required for Instrumentation and Monitoring Procedures

No corrective measures are required. We do recommend installing staff gages at Cell 2 and the Alternate Bottom Ash Pond to accurately measure water levels and to develop and implement an instrumentation and monitoring program that would include, at a minimum, recorded daily water levels and flow measurements.

12.3 Corrective Measures Required for Maintenance and Surveillance Procedures

Currently, the three CCW impoundments are visually inspected at least once a year by the North Dakota Department of Health. Develop and document formal inspections of the ash ponds, and include an inspection at a minimum of every 5 years by a third-party professional engineer with experience in dam safety evaluations. Perform a daily check inspection of the facilities with documentation on an inspection form.

12.4 Corrective Measures Required for the Methods of Operation of the Project Works

None.

12.5 Basis of Assessment

12.5.1 Cell 1

The following factors were the main considerations in determining the final rating of the Cell 1 impoundment as SATISFACTORY.

- The dikes at Cell 1 are Significant Hazard structures based on federal and state classifications.
- Cell 1 was generally observed to be in good condition in the field assessment.
- Slope stability analyses resulted in calculated factors of safety above the recommended minimums.
- No hydraulic and hydrology studies have been performed for Cell 1; however, a check analysis indicates the impoundment has adequate capacity to store the appropriate inflow flood. A dam break analysis has not been performed for Cell 1 to evaluate whether significant erosion damage to Nelson Lake Dam would result in the event of dam breach of Cell 1.
- Consideration should be given to installing survey monuments to monitor for settlement of the embankments at Cell 1.
- Operational procedures are considered adequate.

12.5.2 Cell 2

The following factors were the main considerations in determining the final rating of the Cell 2 impoundment as SATISFACTORY.

- The dikes at Cell 2 are Significant Hazard structures based on federal and state classifications.
- Cell 2 was generally observed to be in good condition in the field assessment.
- Slope stability analyses resulted in calculated factors of safety above the recommended minimums.
- No hydraulic and hydrology studies have been performed for Cell 2; however, a check analysis indicates the impoundment has adequate capacity to store the appropriate inflow flood. A dam break analysis has not been performed for Cell 2 to evaluate whether significant erosion damage to Nelson Lake Dam would result in the event of dam breach of Cell 2.
- Consideration should be given to installing survey monuments to monitor for settlement of the embankments at Cell 2.
- Operational procedures are considered adequate.

12.5.3 Alternate Bottom Ash Pond

The following factors were the main considerations in determining the final rating of the Alternate Bottom Ash Pond as FAIR.

- The dikes at the Alternate Bottom Ash Pond are Low Hazard structures based on federal and state classifications.
- The Alternate Bottom Ash Pond generally observed to be in good condition in the field assessment except for some minor erosion of the upstream slope.
- No slope stability analyses have been performed for the Alternate Bottom Ash Pond.
- Operational procedures are considered adequate.