



March 13, 2013

OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

VIA E-MAIL

Mr. Terry Coss Environmental Director Xcel Energy 414 Nicollet Mall Minneapolis, MN 55401-1993

Re: Request for Action Plan regarding Xcel Energy's – Bay Front Generating Station

Dear Mr. Coss,

On June 14, 2011 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Xcel Energy's – Bay Front Generating 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 Xcel Energy's – Bay Front Generating 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 Xcel Energy's – Bay Front Generating Station facility can be accessed at the secured link below. The secured link will expire in 60 days.

Here is the link: http://www.yousendit.com/download/UVJqV28wNXZPSHo0WjhUQw

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 Xcel Energy's – Bay Front Generating Station facility. These recommendations are listed in Enclosure 1.

Since these recommendations relate to actions which could affect the structural stability of the CCR management unit(s) 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 **April 15, 2013**. 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 <u>hoffman.stephen@epa.gov</u>, dufficy.craig@epa.gov, <u>kelly.patrickm@epa.gov</u> and englander.jana@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

Enclosure 1 Xcel Energy's – Bay Front Generating Station Recommendations (from the final assessment report)

CONCLUSIONS

In general, the Surge Basin was found to have the following deficiencies:

1. Localized (small-diameter) animal burrows along the upstream slope;

Minor to moderate erosion on portions of the upstream slope (presumably due to wave action);
Minor erosion at the downstream toe;

Information reported by Xcel and provided to GZA after issuance of the DRAFT report indicates that the above three items have been addressed which satisfies our recommendation. No further action is recommended at this time.

4. Incomplete documentation for the hydrologic/hydraulic analysis; and, no stability analysis for seismic loading conditions.

Additional analysis was completed for this recommendation and provided to GZA after issuance of the DRAFT report that satisfies our recommendation. No further analysis is recommended at this time.

In general, the Polishing Basin found to have the following deficiencies:

1. Localized (small diameter) animal burrows along the crest;

2. Minor to moderate erosion along portions of the upstream slope (presumably due to wave action);

Information reported by Xcel and provided to GZA after issuance of the DRAFT report indicates that the above two items have been addressed which satisfies our recommendation. No further action is recommended at this time.

3. Incomplete documentation for the hydrologic/hydraulic analysis; and, no stability analysis for seismic loading conditions.

Additional analysis was completed for this recommendation and provided to GZA after issuance of the DRAFT report that satisfies our recommendation. No further analysis is recommended at this time.

RECOMMENDATIONS

The following sections describe the recommended approach to address current deficiencies. Prior to undertaking recommended maintenance, repairs, or remedial measures, the applicability of permits needs to be determined for activities that may occur within the jurisdiction of the appropriate regulatory agencies.

Studies and Analyses

GZA recommends the following studies and analyses:

1. Perform a stability analysis of the impoundments under seismic loading; and,

2. Update the hydrologic/hydraulic analysis for the impoundments to document the adequacy of the impoundments to accommodate the 100-year, 24-hour event.

Additional analysis was completed for the above items and provided to GZA after issuance of the DRAFT report that satisfies our recommendation. No further analysis is recommended at this time.

Recurrent Operation & Maintenance Recommendations

GZA recommends the following operation and maintenance level activities:

1. Repair erosion on the downstream slope of the Surge Basin;

2. Fill currently observed animal burrows by injecting grout under low to moderate pressures to ensure the entire limits of the respective burrow is adequately filled;

3. Repair observed erosion on the upstream slopes of the Surge and Polishing Basins;

4. Monitor decant outflow structures and clear silt or debris which may block or impede outflow; and,

5. Take measures as necessary so as to maintain operability and function of the various impoundment water level control mechanisms.

Information reported by Xcel and provided to GZA after issuance of the DRAFT report indicates that the above five items have been addressed which satisfies our recommendation. No further action is recommended at this time.

Remedial Measures Recommendations

1. In conjunction with the results of the hydrologic and hydraulic analyses, make provisions for an emergency overflow spillway(s) if required; and,

2. In conjunction with the results of the stability analyses, make provisions to address deficiencies if required/as necessary.

Additional analysis was completed for the above items and provided to GZA after issuance of the DRAFT report that satisfies our recommendation. No further analysis is recommended at this time.