

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

March 13, 2013

OFFICE OF  
SOLID WASTE AND  
EMERGENCY RESPONSE

VIA E-MAIL

Ms. Jenna Wischmeyer, Attorney  
Alliant Energy Corporate Services Legal Department  
200 First Street SE  
PO Box 351  
Cedar Rapids, IA 52406-0351

Re: Request for Action Plan regarding Alliant Energy - Interstate Power & Light Co -  
Sixth Street Generating Station

Dear Ms. Wischmeyer,

On May 24, 2011 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Alliant Energy - Interstate Power & Light Co - Sixth Street 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 Alliant Energy - Interstate Power & Light Co - Sixth Street 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 Alliant Energy - Interstate Power & Light Co - Sixth Street 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/UVJqV280QTZPSHlybHNUQw>

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 Alliant Energy - Interstate Power & Light Co - Sixth Street 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  
5<sup>th</sup> Floor, N-5838  
Arlington, VA 22202-2733

You may also provide a response by e-mail to [hoffman.stephen@epa.gov](mailto:hoffman.stephen@epa.gov), [dufficy.craig@epa.gov](mailto:dufficy.craig@epa.gov), [kelly.patrickm@epa.gov](mailto:kelly.patrickm@epa.gov) and [englander.jana@epa.gov](mailto: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

**Alliant Energy - Interstate Power & Light Co - Sixth Street Generating Station  
Recommendations (from the final assessment report)**

**ANALYSIS AND CONCLUSIONS**

Regarding maintenance and methods of operation, Kleinfelder has noted two items, as follows, that present some concern in this regard:

- Trees exist at some locations on embankment slopes.
- An Emergency Action Plan (EAP) is not currently in place at the site to mitigate damage in the event of an emergency related to failure of the impoundment(s).

The primary changes in design of the impoundments involved construction of Interstate 380, as well as the construction of interior cells to form four individual ash ponds out of the original diked embankment. Construction of I-380 involved constructing foundations to an unknown depth within Ash Ponds 3 and 4 as well as discharging stormwater runoff from the interstate into the Ash Ponds via downspouts that terminate in the impoundments. Construction of the internal berms to create the four ash ponds reduced the original capacity of the pond.

Without design documents to verify the design standards, practices or requirements that were set forth in the original design, it is not possible to determine if the modifications made to the impoundment would have a significant impact on its functionality and overall safety.

The present monitoring program primarily involves visual assessments by plant personnel. These visual assessments seem to be adequate to address issues, such as surface erosion and general condition of the impoundments. However, a more detailed monitoring program is recommended to be established to quantify various important factors associated with embankment stability. Those factors include, but are not limited to, seepage quantities through the embankment, the amount of sediments carried by the seepage water, and the fluctuation of ground water levels.

**RECOMMENDATIONS****PRIORITY 1 RECOMMENDATIONS**

Based on observations during the site assessment, it is recommended that the following actions be taken at the 6th Street Power Generating Station.

- 1. Prepare an EAP for the facility by August 31, 2013.** An Emergency Action Plan (EAP) should be prepared for all of the impoundments. The EAP should be added to current O&M Manuals for the site but should also function as a stand-alone document.
- 2. Monitor potential seepage through embankments starting by August 31, 2013.** Anomalies within the embankment fill such as concrete rubble suggest some potential for uncontrolled seepage that should be evaluated during periodic assessments of the impoundments.
- 3. Monitor potential erosion in drainage ditch and creek starting by August 31, 2013.** Significant erosion caused by the creek on the southeastern embankment of Ash Pond 4, as well as the drainage ditch on the northwest embankment of Ash Ponds 1, 2 and 3, could impact the slope stability of the embankments.
- 4. Control vegetation on the upstream slopes, crest and downstream slopes and remove trees from the embankments. Follow Interstate IPL Site Specific Operations and Maintenance Plan and review by third Party PE for specific guidance regarding which trees to remove and the timing of their removal as well as the timing of vegetation control.** Reference can also be made to FEMA Manual 534, Impact of Plants on Earthen Impoundments for guidance on vegetation removal. This manual is available on the FEMA website.

## **PRIORITY 2 RECOMMENDATIONS**

- 1. Repair erosion of embankments by August 31, 2013 if the repairs are required by the Interstate Power and Light IPL Site Specific Operations and Maintenance Plan and review by third Party PE.** Minor erosion was noticed on various slopes of all the impoundments. Slopes and areas where erosion has occurred should be filled in with the appropriate material, re-dressed, and reseeded to keep erosion from cutting into and compromising the embankment further.
- 2. Maintain a log of maintenance and other activities at the bottom ash impoundments and supporting facilities as described in the IPL Site Specific Operations and Maintenance Plan by August 31, 2013.**