

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

Mr. Philip Pack
Northern Indiana PSC
801 East 68th Avenue
Merrillville, Indiana 46410

Re: Request for Action Plan regarding Northern Indiana Pub Serv Co's –Michigan City
Generating Station

Dear Mr. Pack,

On May 23, 2011 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Northern Indiana Pub Serv Co's –Michigan City 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 Northern Indiana Pub Serv Co's –Michigan City 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 Northern Indiana Pub Serv Co's –Michigan City 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/UVJqV295Tk16NExMbjhUQw>

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 Northern Indiana Pub Serv Co's –Michigan City 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 hoffman.stephen@epa.gov, dufficy.craig@epa.gov, kelly.patrickm@epa.gov 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

Enclosure 1

**Northern Indiana Pub Serv Co's –Michigan City Generating Station
Recommendations (from the final assessment report)**

CONCLUSIONS

The impoundments were found to have the following deficiencies:

1. Piezometers of unknown depth or construction were located throughout the impoundments (*NIPSCO provided comments to EPA regarding the Draft Report in a letter dated July 31, 2012. The letter indicates the unused and undocumented piezometers were abandoned as recommended*);
2. No formal operation and maintenance plan or inspection checklist in place to observe and document the structural condition of the impoundments (*NIPSCO provided comments to EPA regarding the Draft Report in a letter dated July 31, 2012. The letter indicates NIPSCO is developing an O&M plan for the Site*);
3. The discharge pipes within the impoundments have not been inspected internally since they were installed (*NIPSCO provided comments to EPA regarding the Draft Report in a letter dated July 31, 2012. The letter indicates NIPSCO has completed a survey of the impoundment structures and video survey of the pipes was 90% complete*);
4. There was an obstruction at the decant inlet and lack of a trash rack in Secondary No. 2;
5. The trash rack in Primary No. 2 was bent;
6. There was a pipe of unknown use observed near the overflow pipes at the FSP; and,
7. No design information available for the steel sheet piling used to support the northwestern sides/ends of the impoundments (*NIPSCO provided EPA with a geotechnical investigation and embankment stability analyses of the Site impoundments that was completed by Golder. The embankment stability analyses included evaluation of the steel sheet piling*).

RECOMMENDATIONS

The following recommendations and remedial measures generally describe the recommended approach to address current deficiencies at the impoundments. Prior to undertaking recommended maintenance, repairs, or remedial measures, the applicability of environmental permits needs to be determined for activities that may occur within resource areas under the jurisdiction of the appropriate regulatory agencies.

Studies and Analyses

GZA recommends the following studies and analyses:

1. If an analysis of the structural capacity of the steel sheet piling has not been performed previously or is not available, this type of analysis should be performed to verify that the installed sheet piling has sufficient strength to support the loading applied by the impoundments (*NIPSCO provided EPA with a geotechnical investigation and embankment stability analyses of the Site impoundments that was completed by Golder. The embankment stability analyses included evaluation of the steel sheet piling*);
2. Perform a seepage and stability analysis to evaluate the embankment slopes (*As indicated above, NIPSCO provided EPA with a geotechnical investigation and embankment stability analyses of the Site impoundments that was completed by Golder. The embankment stability analyses results indicated “acceptable factors of safety for all cases considered when evaluated with respect to U.S. Army Corps of Engineers criteria for the types of analyses and loading conditions evaluated”*); and,
3. Perform a hydrologic and hydraulic analyses of the individual impoundments to determine the adequacy of intake/discharge features and adequacy of current operating water levels (*NIPSCO provided EPA with a hydrologic and hydraulic evaluation of the impoundments that was completed by Golder. The evaluation results indicated that... “All impounds are shown to safely pass up to the 100-year return period event which is the minimum for a low hazard dam as specified by the State of Indiana DNR Division of Water. The Primary and Secondary Impoundments, the southwest Bottom Ash Area, and the Final Settling Pond safely pass up to 50% of the 6-hour, PMP rainfall depth without overtopping.”*)

Operation & Maintenance Recommendations

GZA recommends the following operation and maintenance level activities:

1. If they are not necessary for the operation of the impoundments, abandon the piezometers that are located near the impoundments since their purpose, depth and construction are unknown;
2. Clear the obstruction from the decant inlet in Secondary No. 2 and install a trash rack;
3. Exercise stops logs and related water level control mechanisms at exiting decant structures;
4. Increase/adjust the frequency of vegetative maintenance activity such that overgrowth is minimized;
5. Perform a video camera survey of the intake and discharge pipe network within the Impoundments to verify that they are operating correctly and are in suitable condition; and,
6. Create a formal checklist for visual inspections of the impoundments and associated appurtenances and maintain the inspection records on file.

NIPSCO provided comments to EPA regarding the Draft Report in a letter dated July 31, 2012. The letter indicates the unused and undocumented piezometers were abandoned as recommended, a video survey of pipes within the impoundments was being completed, and an operation and maintenance (O&M) plan was being developed to address these O&M issues.

Minor Repair Recommendations

GZA recommends the following repairs which may improve the overall condition of the impoundments and water storage system, but do not alter the current design of the embankment. The recommendations may require design by a professional engineer and construction contractor experienced in embankment construction.

1. Repair the bent trash rack in Primary No. 2 before this impoundment is put back in service;

2. Repair sloughs and scarps on the embankments and provide future erosion protection as necessary and,
3. Evaluate the function and necessity of the unknown pipe found on the northeast side of the FSP and remove the pipe if it is not needed.

Remedial Measures Recommendations

1. In conjunction with the results of the seepage and stability analyses make provisions to address inadequate factors of safety as applicable; and,
2. In conjunction with the results of the hydrologic and hydraulic analyses, make provisions for an emergency overflow spillway, if necessary.

NIPSCO completed a geotechnical investigation and embankment stability analyses of the Site impoundments, as well as a hydrologic and hydraulic evaluation. These analyses were completed by Golder Associates, Inc. with reports provided to EPA dated August 27, 2012. Based on the results of these analyses, it is GZA's opinion that the remedial measure recommendations summarized above and provided in the Draft Report have been satisfied and no longer apply.