

US EPA ARCHIVE DOCUMENT



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

June 2, 2014

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

VIA E-MAIL

Mr. Bruce Bruzina, Assistant Vice President
Energy Supply & Operations
Wisconsin Public Service
2501 Morrison Avenue
Rothschild, Wisconsin 54474

Re: Request for Action Plan regarding Wisconsin Public Service – Weston Power Plant

Dear Mr. Bruzina,

On August 21, 2012 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Wisconsin Public Service – Weston Power Plant 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 Wisconsin Public Service – Weston Power Plant 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 Wisconsin Public Service – Weston Power Plant facility is attached.

This report includes a specific condition rating for the CCR management units and recommendations and actions that our engineering contractors believe should be undertaken to ensure the stability of the CCR impoundments located at the Wisconsin Public Service – Weston Power Plant facility. These recommendations are listed in Enclosure 1.

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 **July 2, 2014**. Please send your response to:

Mr. Stephen Hoffman
U.S. Environmental Protection Agency (5304P)
1200 Pennsylvania Avenue, NW

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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 this report 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,
/Barnes Johnson /, Director
Office of Resource Conservation and Recovery

Enclosures

Wisconsin Public Service – Weston Power Plant Recommendations (from the final assessment report)

CONCLUSIONS

Conclusions are based on visual observations from a one-day site visit, Tuesday, August 21, 2012, and review of technical documentation provided by Wisconsin Public Service.

Conclusions Regarding the Structural Soundness of the Management Unit(s)

The dike embankments around the four impoundments did not exhibit obvious structural stability issues of concern based on the visual inspection. In May 2014 Wisconsin Public Service Corporation (WPSC, the Utility) provided relevant engineering analyses that allowed Dewberry engineers to determine the structural stability of the dikes surrounding the management units (Appendix D, Doc 22 of the final report). The ponds are rated SATISFACTORY for structural stability.

Conclusions Regarding the Hydrologic/Hydraulic Safety of the Management Unit(s)

No hydrologic or hydraulic analyses were provided to Dewberry by the utility. Dewberry determined the ring dikes receive no drainage other than the surface area of the ponds. It is noted that the impoundments are not immediately adjacent to a water body.

As part of its comments on the draft report the utility performed an informal hydrologic evaluation of the management units. The utility provided a flood inundation map (Appendix D, Doc 21 of the final report) and showed the management units are removed from and above the river, even under the 500-year flood conditions. The 19-foot freeboard is more than adequate to hold direct precipitation in the impoundments. Therefore the units are rated Satisfactory for hydrologic/hydraulic safety.

There have been two overtopping events of the northeastern secondary pond due to operational failures. In response to the overtopping events, WPSC raised the grade in low areas along the embankment and installed level meters to monitor water elevations in the management units.

Conclusions Regarding the Adequacy of Supporting Technical Documentation

The supporting technical documentation is not complete since the design report for the original management units (constructed in 1981, designed by Sargent & Lundy, Chicago, IL) has not been provided by the utility, nor did Dewberry receive any relevant design analysis information on these units. Construction specifications and liner permeability related to the original design was provided by the utility. An engineering report related to embankment construction for the new embankments constructed in 2005 when a railroad loop was constructed was provided by WPSC.

Conclusions Regarding the Description of the Management Unit(s)

The description of the management units provided by the owner was an accurate representation of what Dewberry engineers observed in the field.

Conclusions Regarding the Field Observations

Dewberry staff was provided access to all areas in the vicinity of the management units and was able to conduct a thorough field observation.

The visible parts of the embankment dikes and outlet structure were observed to have no signs of overstress, significant settlement, shear failure, or other signs of instability. Embankments appear structurally sound. There are no apparent indications of unsafe conditions or conditions needing remedial action.

Conclusions Regarding the Adequacy of Maintenance and Methods of Operation

The current maintenance and methods of operation appear to be adequate for all four bottom ash management units observed.

Conclusions Regarding the Adequacy of the Surveillance and Monitoring Program

The Weston Generating Station does not have a formal surveillance program. The informal monitoring program in place currently appears to be appropriate. The bottom ash basins have water level sensors. An alarm will sound in the plant if the ponds begin to approach an overflowing situation.

Classification Regarding Suitability for Continued Safe and Reliable Operation
The four CCR management units are each rated SATISFACTORY.

RECOMMENDATIONS

Recommendations Regarding the Structural Stability

No additional recommendations are warranted at this time.

Recommendations Regarding the Hydrologic/Hydraulic Safety

No additional recommendations are warranted at this time.

Recommendations Regarding the Supporting Technical Documentation

No additional recommendations are warranted at this time.

Recommendations Regarding Continued Safe and Reliable Operation

No recommendations appear warranted at this time.