

US EPA ARCHIVE DOCUMENT



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

June 13, 2013

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

VIA E-MAIL

Ms. Cynthia Anderson, Senior Manager, Water and Waste Compliance
Fossil Generation Development & Construction
Tennessee Valley Authority
1101 Market Street, BR 4A
Chattanooga, TN 37402-2801

Re: Request for Action Plan regarding Tennessee Valley Authority - Watts Bar Fossil Plant

Dear Ms. Anderson,

On September 19, 2011 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Tennessee Valley Authority - Watts Bar Fossil Plant facility. The purpose of this visit was to assess the structural stability of the impoundment 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 unit at the Tennessee Valley Authority - Watts Bar Fossil 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 Tennessee Valley Authority - Watts Bar Fossil Plant facility can be accessed at the secured link below. The secured link will expire on July 31, 2013.

Here is the link: <http://www.yousendit.com/download/UVJnT0NkOW5veE43czhUQw>

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 Tennessee Valley Authority - Watts Bar Fossil 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 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 **July 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

Tennessee Valley Authority - Watts Bar Fossil Plant Recommendations (from the final assessment report)

CONCLUSIONS

Conclusions are based on visual observations from a one-day site visit, September 15, 2011, and review of technical documentation provided by the Tennessee Valley Authority (TVA).

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

Based upon the Dewberry site visit the facility's embankments appear to be structurally sound. Supporting technical documentation demonstrate the management unit is structurally sound.

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

A hydrologic and hydraulic analysis was not provided to Dewberry. A conclusion regarding the hydrologic/hydraulic safety of the management unit cannot be made at this time.

Conclusions Regarding the Adequacy of Supporting Technical Documentation

The supporting technical documentation is inadequate due to the lack of a hydraulic/hydrologic analysis. Engineering documentation reviewed is referenced in Appendix A.

Conclusions Regarding the Description of the Management Unit(s)

The description of the management unit(s) provided by the owner was an accurate representation of what Dewberry observed in the field.

Conclusions Regarding the Field Observations

Dewberry staff was provided access to all areas in the vicinity of the management unit required 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. The pond embankment appears structurally sound. There are no apparent indications of unsafe conditions.

Conclusions Regarding the Adequacy of Maintenance and Methods of Operation

The current maintenance and methods of operation appear to be adequate for the old fly ash management unit because the power plant is no longer functional. The field inspection revealed no evidence of significant embankment repairs or prior releases. There are a few areas of tree growth and excessive vegetation on the embankment.

Conclusions Regarding the Adequacy of the Surveillance and Monitoring Program

The surveillance and monitoring program that is in place is adequate since the power plant has been inactive for over 25 years.

Classification Regarding Suitability for Continued Safe and Reliable Operation

The facility is rated FAIR for continued safe and reliable operation based on visual assessment and the pertinent technical documentation provided. Implementation of the two recommendations described below would help improve the rating.

RECOMMENDATIONS

Recommendations Regarding the Structural Stability

It is recommended that the banks of the Tennessee River which are adjacent to the ash pond be laid back and lined with rip-rap to prevent future erosion due to wear action along the banks. It is also recommended that frequent inspections of the management unit embankment be completed until final closure is complete to visibly assess whether existing conditions are altered, helping to ensure structural stability.

Recommendations Regarding the Hydrologic/Hydraulic Safety

TVA is currently modifying the spillway and ash pond volume to reduce the potential for ash release from major precipitation events.

Recommendations Regarding the Maintenance and Methods of Operation

In response to Dewberry's draft report, TVA undertook the removal of three trees with a maximum diameter of 3-4 inches, as well as maintaining excess vegetation along the pond's embankment as stated in Stantec's memo to TVA dated October 3, 2012, excess vegetation will continue to be removed and maintained as deemed necessary.