

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. Mark Sizemore and Mr. Kris Singleton
Dayton Power & Light Company
9200 Chautaugua Road
Miamisburg, Ohio 45342

Re: Request for Action Plan regarding Dayton Power & Light Co's – Killen Generating Station

Dear Mr. Sizemore and Mr. Singleton,

On June 7, 2011 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Dayton Power & Light Co's – Killen 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 Dayton Power & Light Co's – Killen 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 Dayton Power & Light Co's – Killen 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/UVJqV282V3JPSHlybHNUQw>

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 Dayton Power & Light Co's – Killen 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:

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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

Dayton Power & Light Co's – Killen Generating Station Recommendations (from the final assessment report)

CONCLUSIONS

The Bottom Ash Pond was found to have the following deficiencies:

1. Portions of the outer embankment slopes had not been mowed recently;
2. No instrumentation (i.e., staff gauge) to observe the elevation of the water within the pond/impoundment;
3. Presence of undersized rip rap on portions of the interior embankment;
4. Presence of vegetation on the interior slope of the embankment;
5. Timber from recent vegetation clearing near Station 3+00 remains on the outer embankments slope;
6. DP&L personnel were unsure if the discharge pipes from the pump station inlet structure to the ash water pumps have been inspected internally since they were installed;
7. Limited freeboard in the vicinity of Station 3+00 to 5+00; and,
8. Reported crest and normal pool elevations indicate potential for non-compliance with state freeboard requirement of five feet for Class I dams.

The Fly Ash Pond was found to have the following deficiencies:

1. With the exception of the upper 20 to 30 feet, a majority of the outer embankment slopes had not been mowed recently;
2. Presence of undersized rip rap on portions of the interior embankment;
3. Apparent benching of the interior embankments slopes in the vicinity of Station 60+00;
4. Presence of vegetation on the interior slope of the embankment;
5. Presence of wet areas at or near the toe of the outer embankment slopes between Stations 36+00 to 39+00 and in the vicinity of Stations 80+00 and 88+00;
6. DP&L personnel were unsure if the discharge pipes from the decant structure to the outfall have been inspected internally since they were installed;
7. Reported crest and normal pool elevations indicate potential for non-compliance with state freeboard requirement of five feet for Class I dams; and,
9. Presence of established vegetation near the lower portion and toe of the outer embankment slopes near the outfall structure.

RECOMMENDATIONS

GZA recommends that the Owner arrange for the following to be performed:

Studies and Analyses:

1. Survey of the crest of both ponds by a licensed Professional Surveyor to evaluate the current elevation profile of the crest and confirm that survey monuments are not moving horizontally;
2. Install piezometers/observation wells in the noted wet areas (between Stations 36+00 to 39+00 and in the vicinity of Stations 80+00 and 88+00) to evaluate water levels, and possibly water chemistry, in these areas. This activity may require consultation and/or design by a licensed Professional Engineer;
3. Based on data from piezometers/observation wells, perform a seepage analysis and assess need for subsurface toe drainage in wet locations and make improvements as needed;
4. Resolve pending variance with ODNR regarding reducing the minimum freeboard requirement from five feet to three feet;
5. Provide or perform spillway analysis to demonstrate capacity of discharge structures to accommodate the regulatory Spillway Design Flood with the proposed normal pool freeboard; and,

6. Provide or perform a slope stability analysis for the embankments. Analysis should include assessment of upstream slope stability in light of observed movement of riprap. Analysis may require a subsurface exploration program to develop appropriate input data. Most recent inspection should be provided to the EPA for review.

Operation & Maintenance Activities:

1. Clear vegetation from the interior embankment slopes of both ponds;
2. Remove stumps that are 4-inches or more in diameter resulting from the removal of trees and brush on the outer embankment near Station 3+00;
3. Install a staff gauge on or near the pump station inlet structure in order to take periodic measurements of the Bottom Ash Pond water surface elevation;
4. Inspect each of the piezometers around the toe of the pond embankments and ensure each piezometer has a cap, lockable protective cover/casing and is visible during mowing operations;
5. Ensure each survey monument is protected and is visible during mowing operations;
6. If DP&L has the opportunity to stop discharging from the Bottom Ash Pond for a limited time period, inspect the discharge pipes from the pump station inlet structure to the ash water pumps to verify that they are operating correctly and are in good condition. This may be performed by video photography; and,
7. If DP&L has the opportunity to stop discharging from the Fly Ash Pond for a limited time period, inspect the discharge pipes from the decant structure to the outfall structure to verify that they are operating correctly and are in good condition. This may be performed by video photography.

Repair Recommendations:

1. Clear the area of established vegetation near the lower portion and toe of the outer embankment slopes near the outfall structure; and,
2. Restore riprap in sections where displacement has occurred.