

US EPA ARCHIVE DOCUMENT



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

January 7, 2011

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

VIA E-MAIL AND FEDERAL EXPRESS

Ms. Pamela Faggert
Vice President & Chief Environmental Officer
Dominion Resources services
5000 Dominion Blvd.,
Glen Allen, Va. 23060

Dear Mr. Faggert,

On April 29, 2010 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Bremono Bluff Power 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 Bremono Bluff Power 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 Bremono Bluff Power Station facility is enclosed. This report includes a specific 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 Bremono Bluff Power Station facility. These recommendations are listed in Enclosure 2.

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 explain why. Please provide a response to this request by February 7, 2011. Please send your response to:

Mr. Stephen Hoffman
US 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
US Environmental Protection Agency
Two Potomac Yard
2733 S. Crystal Drive
5th Floor, N-237
Arlington, VA 22202-2733

You may also provide a response by e-mail to hoffman.stephen@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 ongoing efforts to ensure protection of human health and the environment.

Sincerely,
/Suzanne Rudzinski/, Director
Office of Resource Conservation and Recovery

Enclosures

Enclosure 2
Bremo Bluff Power Station Recommendations

6.1. URGENT ACTION ITEMS

None of the recommendations are considered to be urgent, since the issues noted above do not appear to threaten the structural integrity of either the West Ash Pond or North Ash Pond in the near term.

6.2. LONG TERM IMPROVEMENT

West Ash Pond

All of the deficient conditions observed during the inspection are considered to be maintenance items that do not require immediate attention, but should be implemented in the near future as part of a regular maintenance plan. The recommended maintenance actions are provided below:

- Inboard slopes –Inspect and repair erosion that is present on exposed portions of all inboard slopes from wave action on a regular basis. Remove or control vegetation at least twice annually.
- Outboard slopes –Mow vegetation at least twice annually. Perform follow-up inspection of outboard slopes after vegetation is mowed to check for adverse conditions such as sloughs, erosion, and seepage. Trap burrowing rodents and fill animal burrows.
- Drainage Ditches – Eliminate standing water by regrading perimeter ditches to drain water away from the toe of the embankments. Perform follow-up inspection of drainage ditches after vegetation is mowed/removed in drainage ditches to check for adverse conditions such as seepage.
- Storm Water Discharge Piping – Replace below-grade piping in eastern embankment with above-grade piping on supports; abandon existing pipe in place by filling with concrete or flowable fill.

North Ash Pond

All of the deficient conditions observed during the inspection are considered to be maintenance items that do not require immediate attention, but should be implemented in the near future as part of a regular maintenance plan. The recommended maintenance actions are provided below:

- Inboard slopes –Inspect and repair erosion that is present on exposed portions of all inboard slopes from wave action on a regular basis. Repair areas with minor sloughing. Remove or control vegetation at least twice annually.
- Outboard slopes –Mow vegetation at least twice annually. Perform follow-up inspection of outboard slopes after vegetation is mowed to check for adverse conditions such as sloughs, erosion, and seepage. Eliminate encroachment of trees into groin drains at the abutments. Trap burrowing rodents and fill animal burrows. Monitor toe berm for presence of standing water and regrade if condition is not abated.
- Emergency Spillway – Inspect annually at crest and downstream for a distance of 100 feet for presence of trees, brush, debris, or other obstructions that could restrict flows. Any such obstructions should be removed.
- Drains/ Drainage Ditches – Clear vegetation at least twice annually from headwall areas and downstream swales to diversion ditch. Perform follow-up inspection to check for adverse conditions such as water backing up into toe drains.
- Stilling Basin/Overflow – Remove vegetation and sediments from basin as required. Repair grouted-inplace riprap as required.

6.3. MONITORING AND FUTURE INSPECTION

O'Brien & Gere recommends continued annual inspections by Dominion's engineer with experience in performance of dam safety inspections. An O&M Plan for the North Ash Pond was developed in 2009 which established a firm schedule for operations, maintenance, and inspection activities. A similar O&M Plan should be developed for the West Ash Pond. Long term improvements noted above should be incorporated into plans as appropriate.

The monitoring of the observation wells or piezometers at the North Ash Pond should continue on a periodic basis so that phreatic surfaces in the embankments can be monitored during future inspections. Annual inspections should include recording water levels in wells/piezometers and corresponding ash pond water levels. In addition, estimated flow rate and turbidity of drainage from toe drains should be documented during the annual inspections.

The crest elevation of the West Ash Pond should be surveyed to assess whether the integrity of this Pond could be affected if overtopped by the 100 year flood.

6.4. TIME FRAME FOR COMPLETION OF REPAIRS/IMPROVEMENTS

Removal of trees and mowing of vegetation on the slopes should be completed this fall and a follow-up inspection of these slopes should be performed shortly after completion of this task as Dominion has conducted in the past for the North Ash Pond. Removal of trees, brush and obstructions from the emergency spillway should be completed this fall. Continuing to perform this task during the fall months after the vegetation has gone dormant may help to simplify the work. This effort should be extended to the West Ash Pond.

After the mowing is completed, the follow-up inspection should also focus on identification of any animal burrows, which should be filled as soon as practical.

Mowing should be repeated in late spring/early summer to control vegetation.