

US EPA ARCHIVE DOCUMENT



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

December 14, 2009

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

VIA E-MAIL AND FEDERAL EXPRESS

Ms. Angelena Skinner
Managing Director
PacifiCorp Energy
Naughton Plant
P.O. Box 191
Kemmerer, Wyoming 83101

Dear Ms. Skinner,

On September 9-10, 2009 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Naughton 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 Naughton 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 Naughton 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 Naughton 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 January 15, 2010. 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 of 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

This request has been approved by the Office of Management and Budget under EPA ICR Number 2350.01.

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.

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,
/Matt Hale/, Director
Office of Resource Conservation and Recovery

Enclosures

4.2 Filling of Depressions, Erosion Rills, and Animal Burrows

We recommend depressions on the FGD #1 Pond dike such as those shown in Photo 3 be backfilled. Ongoing maintenance of backfilling erosion rills and animal burrows should be backfilled. Measures should be taken to discourage burrowing animals from inhabiting the embankment areas.

4.3 Vegetation Control

CHA understands that PacifiCorp is reluctant to mow the vegetation on the embankments because of the difficulty in establishing and maintaining vegetative growth. CHA understands that crested wheatgrass is appropriate for animal forage and haying, which would suggest it can be cut at least once a year. We recommend PacifiCorp discuss vegetation cutting options with the Wyoming office of the Natural Resources Conservation Service (NRCS) or co-op extension. Cutting of the grass will help deter burrowing animals and allow for better inspection of the embankments immediately after mowing.

Sage bushes were found growing on the embankments. These should be removed when observed, and not allowed to grow on the embankments because the deep root system could provide shortened paths for seepage, which can lead to instability in the embankments.

4.4 Cracking

CHA observed cracks in three locations; the northeast dike on FGD #1 Pond, the East Saddle Dike of the North Ash Pond, and on the Intermediate Dike of the North Ash Pond. These cracks appeared shallow, (two feet deep or less) and there were not signs of movement of the slopes around them. However, these cracks should be monitored closely for signs of increasing length, depth, or movement on the slopes.

4.5 Seepage Monitoring

CHA observed the areas of seepage that PacifiCorp described in the kick-off meeting. Two additional areas were observed that may be seepage or may be related to ponded water from high flows in the South Ash Pond discharge channel. CHA recommends that monitoring structures such as V-notch weirs be installed in the areas of known seepage so quantitative measurements can be made and compared over time.

CHA recommends that the areas of standing water and possible seepage to the northwest of the South Ash Pond outlet structure and to the southeast of the point where the discharge channel veers away from the dike, respectively, be evaluated to understand the source of constant moisture in these areas, and corrective actions be taken to reduce standing water in these areas.

4.6 Phreatic Surface Monitoring

There are no piezometers installed in the embankments. The stability analyses for the North and South Ash Pond embankments were performed with some assumed phreatic surface elevations. Monitoring of the actual phreatic surface is an approach to confirm that the embankments are performing as designed and CHA recommends installing piezometers for this evaluation. Because the FGD Ponds are lined, there should not be a phreatic surface in the embankments.

However, piezometric monitoring can confirm that this is the case and that therefore, the embankments and liner are performing as designed.

4.7 Hydrologic Design

Based on the EPA hazard classification, the FGD #2 Pond should be designed for a ½ PMF design storm and the FGD #1, North and South Ash Ponds should be designed for a full PMF. Because the Naughton Plant is in a region that is on the outer limits of the applicable region for the method for developing the PMP, and because the impoundments were designed for two back-to-back 100-years storms, which in this arid region may be similar in magnitude to a PMP, CHA recommends that PacifiCorp evaluate the PMP for this site, and compare the impacts of this design storm on the impoundments.