

US EPA ARCHIVE DOCUMENT



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

July 28, 2011

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

VIA E-MAIL

Mr. Gary Slanina
Managing Director
PacifiCorp Energy
Dave Johnson Power Station
1591 Tank Farm Road
Glenrock, Wyoming 82637

Dear Mr. Slanina,

On October 27, 2010 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Dave Johnston 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 Dave Johnston 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 Dave Johnston Power Station facility is enclosed. 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 Dave Johnston 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 provide a rationale. Please provide a response to this request by August 29, 2011. 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

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

Enclosures

Dave Johnston Power Station Recommendations (from the final assessment report)

11.1 Corrective Measures and Analyses for the Structures

1. A geotechnical exploration program should be performed to classify the embankment and foundation soils of the following impoundment features (See Figure 2 of the final report):

- a. 1A/1B Clear Pond south dam
- b. 4 Clear Pond south embankment dam.

The exploration program should include subsurface drilling and geotechnical soils testing. Soil testing should include index property and strength tests. The exploration program should provide the necessary information to perform the slope stability analyses described below.

2. Slope stability analyses should be performed on the following impoundment features:

- a. 1A/1B Clear Pond south dam
- b. 4 Clear Pond south embankment dam.

Slope stability analyses should be performed on the maximum embankment section with a phreatic surface representative of steady seepage under normal operating conditions. Stability analyses should be performed for the full range of expected loading conditions, including appropriate application of surcharge loads from equipment operating on the embankment crests.

3. Hydrologic analyses should be performed to evaluate the IDF and accurately assess the ability of the Ash Ponds to store the IDF. Consistent with the results of the hydrologic analyses, the Ash Pond structures and/or operations should be modified to allow safe storage and/or passage of the IDF.

11.2 Corrective Measures Required for Instrumentation and Monitoring Procedures

See Section 11.3.

11.3 Corrective Measures Required for Maintenance and Surveillance Procedures

Implement early warning measures to more closely monitor water levels in the Ash Ponds and reduce the potential for overtopping failure of the embankments. Early warning measures could include enhanced visual surveillance and/or automated water level and alarm systems.

Automated water level and alarm systems, if included in the early warning measures, should be installed at the 1A and 1B Clear Ponds and the 4 Clear Pond.

11.4 Corrective Measures Required for the Methods of Operation of the Project Works

None.

11.5 Final Condition Rating

The following factors were the main considerations in determining the final rating of the CCW impoundments at the Dave Johnston Power Plant.

- The CCW impoundments were observed to be in generally good condition at the time of the field assessment.
- Hazard potential classifications for the CCW impoundment structures:
 - o 4A/4B Ash Ponds East Embankment Dam: Low Hazard
 - o 4 Clear Pond South Embankment Dam: Low Hazard
 - o 1A/1B Clear Ponds South Dam: Significant Hazard
 - o 1A/1B Ash Ponds and Blowdown Canal: No hazard potential classification assigned
- The 1A/1B Clear Pond embankments may not meet stability criteria for expected hydraulic loading conditions. The embankment slopes are over-steepened and are at increased risk for localized, surficial slope failures, resulting in slumps, sloughing and other forms of slope instability. A shallow surficial slump was observed during the October 27 inspection, but is not judged to present an immediate dam safety concern.

- There is the potential for an overtopping failure from the recommended IDF.
- There are no hydrology/hydraulic analyses on record for any of the CCW impoundments.
- There are no stability analyses on record for the critical impoundment embankments (4A / 4B Ash Pond East Embankment Dam, 4 Clear Pond South Embankment Dam, and 1A/1B Clear Pond South Dam) identified in this Report.
- The 1A/1B Ash Ponds and Blowdown Canal are completely incised (subsurface) and are therefore not given a condition rating.