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

April 21, 2010

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE

VIA E-MAIL AND FEDERAL EXPRESS

Mr. Gary Haag
Manager, Environmental Support
Allegheny Energy
800 Cabin Hill Drive
Greensburg, Pa. 15601

Dear Mr. Haag,

On October 13, 2009 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Pleasants 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 Pleasants 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 Pleasants 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 Pleasants 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 May 21, 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.

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,
/Maria Parisi Vickers/, Director
Office of Resource Conservation and Recovery

Enclosures

4.2 Surface Degradation

In general, the embankment slopes were in acceptable condition. However, several areas of thin vegetation, erosion rills and animal burrows were observed on both the upstream and downstream slopes of the dam. Continued vigilance to these types of issues is always warranted on an earthen embankment. CHA understands that the weekly inspections by Plant personnel include evaluating the surface condition and addressing conditions where necessary.
In addition, we recommend best management practices be implemented on the active work bench areas to minimize concentrated stormwater run-off when work ceases for more than a couple of days or when heavy rain is expected.

4.3 McElroy's Run Dam Hydrologic and Hydraulic Analysis

We recommend that confirmation of stormwater drawdown times be made. Currently there is conflicting statements in various reports reviewed by CHA as to what rate the primary spillway and siphon outlet can drain storm surcharges from the reservoir.

4.4 McElroy's Run Dam Recommendations for Additional Stability Analyses

Allegheny Energy's consultant, GAI, concluded that storm surcharges could not be removed from the reservoir quickly enough for a rapid drawdown condition to develop. As mentioned in Section 4.3, there is conflicting information on the rate of drawdown possible at this site. In addition, while CHA understands that rapid drawdown via pumping or other discharge methods may be undesirable for a waste disposal impoundment, CHA suggests that in the event of an emergency at the facility, rapid drawdown may be more desirable to reduce hydrostatic pressures on the dam, thereby preventing a more catastrophic collapse. There have also been documented case histories where other types of failure (such as a gate failure) have resulted in rapid drawdown conditions developing which have led to a domino effect and made the situation worse. For these reasons, CHA recommends that a rapid drawdown analysis be performed.
CHA was also not provided with a Flood Pool loading condition stability analysis, which while not specifically required under WVDEP regulations, US Army Corps of Engineers guidelines in EM-1110-2-1902 suggest a factor of safety under flood pool conditions of 1.4 is appropriate. Again, since there is the possibility that slow drainage of storm surcharge will occur, confirmation of drainage of the storm surcharge in the required time, and a stability analysis showing that the embankment is stable at the raised flood pool should be made.

4.5 McElroy's Run Dam Recommendations for Additional Soil Behavior Analyses

CHA was not provided with an evaluation of liquefaction susceptibility of the foundation or dam embankment soils.

The majority of the dam is constructed from fly ash. While reports suggest the fly ash was compacted during construction, soil properties used in stability analyses were reportedly based on the engineer of record's experience with no site specific backup of these properties. In addition, some of the soil strata defined in the slope stability analyses (as summarized in Table 4) were also reported to be assumed values. CHA recommends that soil strata having an impact on the overall stability of McElroy's Run Dam have site specific verification of in situ soil properties determined, and stability subsequently verified if properties vary from those used in previous analyses.

4.6 McElroy's Run Dam Movement and Piezometer Data Changes

The recent instrumentation reports suggest that a couple of piezometers that formerly were dry have seen as much as 10 feet of water in them. During this same period the apparent movement of the dam has shifted from a trend of the instruments reading southwesterly movement (i.e., upstream toward the left abutment), to a trend suggesting downstream northeasterly movement. CHA recommends that in light of changing piezometer level readings, a further evaluation of the water levels and survey data be performed to confirm that these data are not indicating a change in the behavior of the embankment.

We understand that some instruments have become inactive because of ongoing landfill operations but that in February 2009 previously non-functional piezometers (CP-2, CP-6, and CP-10) were replaced. An additional piezometer has become inactive at the time of this report, but replacement is planned.

4.7 McElroy's Run Dam Routine Inspection Procedures

West Virginia regulation require inspections be made following a storm event equal to or greater than a 50-year, 6-hour rainfall. The *Monitoring and Emergency Action Plan and Operations Plan* for McElroy's Run Dam indicates inspections are made following storm events equal to a 25-year, 24-hour storm event. Because these storm events are of different durations, it is difficult to directly compare which would have a greater likelihood of causing erosion or sloughing from saturation. CHA recommends the inspection procedures for McElroy's Run Dam be clarified to be consistent with West Virginia regulation, and include storm events as required now as well if deemed appropriate by Allegheny Energy and/or their consultant.