

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. Michelle Freeark  
Manager of Environmental Services  
Arizona Electric Power Cooperative  
P.O. Box 670  
Benson, Arizona 85602

Dear Ms. Freeark,

On September 2-3, 2009 the United States Environmental Protection Agency ("EPA") and its engineering contractors conducted a coal combustion residual (CCR) site assessment at the Apache 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 Apache 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 Apache 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 Apache 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 or hand delivery mail, please use the following address:

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

You may also provide a response by e-mail to [hoffman.stephen@epa.gov](mailto: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

### **12.1 Corrective Measures for the Structures**

The locally sparse granular rock slope protection on the downstream slopes of several of the embankments should be repaired.

### **12.2 Corrective Measures Required for Maintenance and Surveillance Procedures**

None.

### **12.3 Corrective Measures Required for the Methods of Operation of the Project Works**

Prudent practice is to provide redundancy in the system operations, which could include an automatic shutoff control system for the pumps delivering slurried fly ash or slurried scrubber sludge to the impoundments to prevent overflowing of the ponds, or an automatic control system to start the recirculation pump system in case water levels in the impoundments exceed required operating levels. An alternative for this facility is to modify the existing outlets from the currently operated ash ponds and scrubber sludge ponds to discharge to adjacent empty ponds and serve as passive controls for the pond levels. This approach could be employed as long as the water levels in the adjacent ponds are below the water levels in the currently operated ponds.

### **12.4 Any New or Additional Monitoring Instruments, Periodic Observations, or Other Methods of Monitoring Project Works or Conditions That May Be Required**

Expand instrumentation to include staff gauges for each of the impoundments. The elevations of the staff gauges should be established by survey methods. The staff gauges should be used for estimating the pond surface elevations, which should be periodically compared to the surveyed elevations of the pond crest to maintain adequate freeboard.

No piezometers are currently installed at the facility and a modest level of instrumentation for water levels within the exterior dam embankment should be implemented to provide warning of changing conditions in addition to any warning currently provided by routine visual observation. Install observation well or piezometer instrumentation or other means of monitoring water levels consistent with standard engineering practice at locations near the maximum dam section and other potentially critical locations to enable measurement of water levels within the dam embankments and dam foundations should the HDPE lining become compromised. If seepage or liner leaks are observed in the future, piezometers should be installed to enable evaluation of the problem area.