**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

Mr. John R. Denman
Senior Vice President Fossil
Arizona Public Service
Mail Station 9046
P.O. Box 53999
Phoenix, Arizona 85072-3999

Dear Mr. Denman,

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 Cholla 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 Cholla 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 Cholla 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 Cholla 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

**12.1 Corrective Measures for the Structures**

***12.1.1 Fly Ash Pond***

1. The seepage totalizer at Geronimo Seep should be repaired or replaced so reliable readings of flow rates at this location, and at the Hunt Seep location, can be obtained.

2. Flow rates at the Geronimo Seep should be monitored closely when the totalizer is fixed. If flows at this location continue to be much higher than has typically been measured at other seepage totalizers around the dams (above about 20 gpm), action should be taken to examine possible causes of seepage and investigate whether this seepage could be compromising dam stability.

3. Piezometers F-81 and F-35, which measure water levels in the Shinarump formation at the right abutment, have both had water levels equal to that of the reservoir since the dam was constructed. These results indicate that there is seepage from the reservoir into the Shinarump formation in this area. Analyses should be performed to evaluate potential effects of seepage in this area on dam stability.

4. The cause of readings above the water level in piezometers F-123, F-128 and F-132 should be investigated. The piezometers should be repaired if necessary.

5. A detailed hydrologic analysis of the Fly Ash Pond should be completed taking into account the current surveyed crest height of the dam. If necessary, the maximum storage pool should be revised to take into account the lower crest height.

6. The potential increase in dam failure consequences due to the larger storage capacity of the Fly Ash Pond compared to the Bottom Ash Pond should be considered to determine whether a separate dam break analysis and inundation map should be completed for the Fly Ash Pond Dam.

7. Vegetation that exceeds the FEMA-534-Impact-of-Plants-on-Earthen-Dams definition of woody plants on both dam slopes and on the crest should be removed during routine maintenance.

***12.1.2 Bottom Ash Pond***

1. Survey monuments indicate that portions of the Bottom Ash Pond Dam are slightly lower than the design crest elevation of 5123.3. Though the settlement is minor and the current freeboard appears to be sufficient based on our preliminary calculations, the survey points should continue to be monitored to determine if a reduction in the maximum storage pool is required in the future.

2. The Bottom Ash Pond should be surveyed regularly in order to determine its flood storage capacity. The storage volume should be calculated each time the geometry of the cells are reconfigured, when operations change, or at a minimum every five years. If the storage is found to be insufficient to store the PMF with the required freeboard, then operations should be modified to attain the required storage capacity as quickly as possible. In addition, the flood pool in the main reservoir resulting from failures of one or both intermediate dikes should be computed regularly to determine whether freeboard is adequate. The invert elevation of the 36-inch CMP carrying the siphon pipes (El. 5120.5) should be taken into consideration when determining flood storage capacity and freeboard, as this culvert provides a potential discharge pathway through

the dam if the seal provided by the 4-inch concrete plug is compromised. The condition of the concrete plug should be inspected regularly.

3. Vegetation that exceeds the FEMA-534-Impact-of-Plants-on-Earthen-Dams definition of woody plants on both dam slopes and on the crest should be removed during routine maintenance.

**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**
None.

**12.4 Any New or Additional Monitoring Instruments, Periodic Observations, or Other Methods of Monitoring Project Works or Conditions That May Be Required**
None.