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VIA E-MAIL AND FEDERAL EXPRESS

January 13, 2010

Mr. Stephen Hoffman
US Environmental Protection Agency
Two Potomac Yard
2733 South Crystal Drive
5th Floor, N-5237
Arlington, VA 22202-2733

Re: Response to the final report and engineering contractor recommendations to ensure the stability of the Coal Combustion Residuals (CCR) impoundment located at the Salt River Project, Coronado facility under the Comprehensive Environmental Response, Compensation, and Liability Act, 42 U.S.C. §§ 9601-9675.

Mr. Stephen Hoffman:

Thank you for providing an opportunity for Salt River Project (SRP) to provide a response to the recommendations from GZA GeoEnvironmental, Inc. (GZA) relative to actions which could affect the structural stability the Coronado Generating Station (CGS) Evaporation Pond Dam based on the investigation conducted September 9-10, 2009.

Attachment A contains SRP responses including the plan and schedule that addresses each recommendation. The response document includes the text of each of the recommendation immediately followed by SRP response and planned schedule.

If you have any questions regarding the SRP responses please do not hesitate to call Prabhat Bhargava of my staff at (928) 337-5506.

Sincerely,

William D. Beck, Plant Manager
SRP / Coronado Generating Station

Attachments

cc: Glen Reeves
Daniel Casiraro
Prabhat Bhargava
Kent Liesemeyer
Karilee Ramaley
File: LOC 5-2-7.1

ATTACHMENT A

Response to engineering contractor's recommendations included in "Enclosure 2 Coronado Recommendations" from EPA request letter dated December 14, 2009.

ATTACHMENT A

Salt River Project, Coronado Generating Station Responses

The following recommendations and remedial measures generally describe the recommended approach to address current deficiencies at the dam. Prior to undertaking recommended maintenance, repairs, or remedial measures, the applicability of environmental permits needs to be determined for activities that may occur within resource areas under the jurisdiction of the appropriate regulatory agencies.

3.2 Studies and Analyses

GZA recommends the following studies and analyses:

1. Confirm and update the hydrologic and hydraulic analysis for the dam using updated methodology and the as-built configuration of the dam. The analysis should consider flooding up to the Probable Maximum Flood (PMF), and should verify the maximum operating pool for the Pond with respect to the regulatory Spillway Design Flood (SDF), which is currently defined as the ½ PMF using U.S Army Corps of Engineers criteria. The analysis should also consider the construction of a fixed weir in the spillway channel and the armoring of the spillway side slopes.

SRP Response: A hydrologic and hydraulic analysis of the as-built configuration of the dam and spillway using updated methodology will be conducted. Construction of a fixed weir in the spillway channel and the armoring of the spillway side slopes will be considered.

Schedule: Complete by March 15, 2010.

2. Evaluate the surface crack on top of the left slope of the emergency spillway channel (along the dam axis by surface settlement monument #10). Monitor the surface crack for signs of additional movement or enlargement.

SRP Response: Movement of settlement monument #10 will be analyzed as part of annual settlement monument survey. The crack will be monitored for visible movement or enlargement at least annually.

Schedule: Next annual survey will be conducted by SRP in October 2010.

3. Conduct a camera survey of the interior of the left and right toe drain seepage collection pipes to evaluate the condition of the pipe section alignment, joints, and any potential blockage.

SRP Response: A camera survey to evaluate pipe section alignment, joints, and any potential blockage of both toe drain collection pipes has been completed. No misalignment or blockage was encountered.

Schedule: Completed December 15, 2009.

4. Investigate operability of the six embankment piezometers. If the piezometers are found to be operable, then make baseline readings and implement an annual monitoring program. If the piezometers are found to be inoperable, then attempt to make repairs. If repairs are not possible, GZA recommends decommissioning and abandoning the piezometers and installing new open tube piezometers in the embankment.

SRP Response: Operability of the six embankment piezometers will be investigated and any necessary repairs will be performed if possible. New open tube piezometers will be installed if repairs to existing piezometers are not possible. For the monitoring program, measurements will be conducted as part of the O&M plan.

Schedule: Investigation of operability will be completed by March 1, 2010. Repairs or replacement of piezometers (if needed) will be completed during 2010.

5. Monitor toe drain seepage clarity at the toe drain manhole (rather than sump), including visual observations of water clarity and monthly measurements of turbidity. A contingency plan should also be prepared if high flow rates or increased turbidity is observed in the seepage water.

SRP Response: Monitoring toe drain seepage clarity at the manhole as well as monthly measurements of turbidity will be conducted as part of the O&M plan. The Emergency Action Plan (EAP) will be revised to include a contingency plan in the case that high flow rates or increased turbidity is observed in the seepage water.

Schedule: Monthly monitoring beginning January 2010. The EAP revision will be completed during February 2010.

6. Evaluate the impacts of the new flue gas desulfurization system (under construction) on SO_2 slurry discharge rates to the Evaporation Pond, including an evaluation of the long term filling rate of the Evaporation Pond and the potential for future Stage 2 dam construction.

SRP Response: Sargent & Lundy, the design contractor for the new flue gas desulfurization (FGD) systems at CGS, has assured SRP that SO_2 slurry discharge rates from new FGD systems will not increase (assuming fuel and water sources do not change appreciably). The water level in the evaporation pond has been declining over the last few years, and as described below, SRP will continue to monitor water level trends. A future Stage 2 dam is not likely in the near future.

Schedule: Discharge flow rates and water levels in the evaporation pond will be monitored monthly starting January 2010 as part of the O&M plan.

7. Collect/develop documentation of the "As-Built" configuration of the two settling pond embankments and appurtenant structures.

SRP Response: The "As-Built" configuration of the two settling pond embankments and appurtenant structures will be documented.

Schedule: Complete by June 1, 2010.

8. Investigate the potential impacts of an embankment failure of the two settling pond embankments, including an evaluation of the resulting flood wave impact to the Evaporation Pond Dam.

SRP Response: SRP proposes to fill the settling ponds with fly ash (approximately 3 feet depth) and cap with native soil (6 inches minimum), pending ADEQ approval. The potential impact of embankment failure will be negligible as the two embankments will be holding back only solid materials.

Schedule: Complete by June 1, 2010.

3.3 Recurrent Operation & Maintenance Recommendations

GZA recommends the following operation and maintenance level activities:

1. Develop a formal, written Operations and Maintenance Plan. The Plan should combine ADEQ APP, ADWR, and other regulatory requirements with routine operations and maintenance procedures and record-keeping activities for the Dam.

SRP Response: A formal, written Operations and Maintenance (O&M) plan that combines ADEQ APP, ADWR, and other regulatory requirements with routine operations and maintenance procedures and record-keeping activities for the Dam is being written.

Schedule: An amended ADEQ APP permit is expected to be finalized by the end of January 2010. A draft O&M plan will be completed in February 2010 and final plan implemented by June 1, 2010.

2. Make monthly measurements of Pond water surface elevation and wastewater/slurry flow to Pond.

SRP Response: Monthly measurements of Pond water surface elevation and wastewater/slurry flow to Pond will be conducted as part of the O&M plan.

Schedule: Monthly measurements beginning January 2010.

3. If operable, take annual readings at the embankment piezometers.

SRP Response: Annual measurements of embankment piezometers will be conducted as part of the O&M plan.

Schedule: Baseline readings to be taken if existing piezometers are operable. Otherwise annual measurements will be taken beginning January 2011.

4. Monitor left toe drain discharge channel and downstream secondary containment area for presence of wet, soggy soil or unusual vegetative growth.

SRP Response: Monitoring for the presence of wet, soggy soil or unusual vegetative growth will be conducted as part of the O&M plan.

Schedule: Monthly monitoring beginning January 2010.

5. Clear vegetation from emergency spillway approach channel area, and remove sediment as it accumulates.

SRP Response: Annual maintenance to address vegetation and sediment will be conducted as part of the O&M plan.

Schedule: Approach channel to be cleared by March 1, 2010. Annual maintenance will be conducted on an on-going basis.

6. Repair/replace staff gage markers so that Pond water surface elevation can be easily read from the upstream slope of the dam. A distinct marking should be provided at the maximum operating level.

SRP Response: The staff gage marker will be renewed so that Pond water surface elevation can be easily read and a distinct marking will be provided at the maximum operating level.

Schedule: Completion by June 1, 2010.

7. Investigate operability of the meteorological instruments on top of the dam. Remove instruments if inoperable.

SRP Response: The meteorological instruments are not operable and will be removed.

Schedule: Removal by February 1, 2010.

3.4 Repair Recommendations

GZA recommends the following minor repairs which may improve the overall condition of the dam, but do not alter the current design of the dam. The recommendations may require design by a professional engineer and construction contractor experienced in dam construction.

1. Repair erosion gullies along the left and right downstream abutment groins, the left upstream abutment groin, and near the downstream toe of the dam at the secondary containment structure. Repair eroded upstream slope at the left abutment and reset any displaced riprap stones. Implement erosion control

measures (riprap lining, check dams, vegetative barriers, etc.) to prevent further channel erosion and headcutting.

SRP Response: Current plans are to repair erosion and add check dams as erosion control measures. The rip rap at the left upstream abutment groin will be replaced and runoff diverted from the left upstream abutment area.

Schedule: Complete by March 1, 2010.

2. Remove roots from left toe drain manhole and repair any damage from shrub growth and/or root penetration.

SRP Response: Roots and shrub growth have been removed from the left West toe drain manhole. The roots entered through the discharge pipe and there is no damage to be repaired.

Schedule: Completed December 15, 2009.

3. Repair/replace leaking PVC piping connecting left toe drain manhole to sump. Minimizing leakage from this pipe will help eliminate a potential source of saturated soil in downstream secondary containment area.

SRP Response: The PVC piping from the manhole to sump will be repaired or replaced.

Schedule: Complete by March 1, 2010.

3.5 Remedial Modifications Recommendations

GZA recommends the following major repairs which may improve the overall condition of the dam, and may alter the current design of the dam. The recommendations may require design by a professional engineer and construction contractor experienced in dam construction.

1. In conjunction with the results of the updated hydrologic and hydraulic analyses, repair the emergency spillway side slopes along the length of the channel. Provide grading and/or other means to direct surface runoff away from the channel slopes, especially along the axis of the dam. Repairs must address the area along the dam axis where a longitudinal crack at the top of the left spillway side slope was observed. Consider improvements, as needed, to stabilize the spillway side slopes and invert control elevation.

SRP Response: Current plans are to direct surface runoff away from spillway slope by adding parallel ditches to intercept or divert runoff from the slopes as much as possible and a weir structure to control spillway invert elevation. Ongoing maintenance will include periodic erosion repair of the spillway side slopes.

Schedule: Implementation will depend upon results of hydrologic and hydraulic analysis of the dam and spillway.