

US EPA ARCHIVE DOCUMENT



AEP Picway Plant
Lockbourne, Ohio
US EPA Inspection – June 2011
Action Plan based on Final Recommendations – April 10, 2013

AEP has reviewed the recommendations provided by GZA GeoEnvironmental, Inc. in the Final Report of the USEPA inspection dated August 17, 2012. This report was written from the field inspection that was completed by GZA GeoEnvironmental in June 2011. During the 2012 construction season, after the field inspection, AEP capped and closed the North Pond portion of the facility. This portion of the pond was closed with the approval of the ODNR Dam Safety program. The responses to the recommendations below reflect the closure of the North Pond. AEP's responses are denoted in italic print after GZA GeoEnvironmental's recommendation.

3.2 Studies and Analysis

Comment: 1. Survey of the crest of both ponds by a licensed Professional Surveyor to evaluate the current elevation profile of the crest and confirm that survey monuments are not moving horizontally;

Response: AEP will continue to inspect the crest for any signs of movement as part of the regular maintenance and operations of the pond. Historically there has been no significant settlement of the dikes. AEP will conduct a survey of the South Pond crest by August 2013.

Comment: 2. Evaluate freeboard conditions based on maximum pool elevation and more recent topographical data;

Response: The freeboard condition and maximum pool elevation of the pond will be evaluated based on the survey noted above. The pond will be operated with proper freeboard based on the ODNR requirements. A revised OMI plan will be issued to reflect these requirements.

Comment: 3. Camera survey of the CMP outfall should be performed.

Response: A camera inspection of the CMP outfall pipe was performed on December 3, 2012. The results of the inspection found that there is no infiltration or structural defects of the pipe.

3.3 Recurrent Operation & Maintenance Recommendations

Comment: 1. Frequent monitoring of steep slopes for evidence of sloughing or erosion that could lead to instability, movement or failure of the embankments;

Response: AEP will continue its dam inspection and maintenance program and perform any repairs that are necessary to ensure a safe facility. Any sloughing or erosion discovered during these inspections will be repaired.

Comment: 2. Review emergency action plan annually per OAC Rule 1501:21-21-04 and update as applicable

Response: As part of AEP's maintenance and operations program, the emergency action plan will be reviewed annually and updated as necessary.

Comment: 3. Clear vegetation from the interior embankment slopes.

Response: AEP will continue its maintenance program, and perform mowing activities of the interior embankment slopes as part of that maintenance program.

Comment: 4. Remove trees and resulting stumps on or near the exterior slopes of the embankment, particularly near the west embankment of the south pond, Outfall 601 and the northern end of the clearwater pond.

Response: All trees along the exterior slopes of the embankments including west embankment of the south pond and the northern end of the clearwater pond were cut in April 2012. Because of the number of trees in this area they were not grubbed so to prevent any instability of the dike. This area will continue to be closely monitored.

Comment: 5. Continue to monitor and control rodent activities and repair burrows as they are discovered. Keeping the embankments mowed can help reduce populations of certain species.

Response: AEP will continue to monitor for animal burrows as part of its maintenance and monitoring program. As standard practice they are backfilled as they are observed.

Comment: 6. Maintain interior slopes of at least 2H:1V during ash excavation as recommended by BBC&M.

Response: As part of the operations of the pond, the interior slopes of the ponds will be maintained to a minimum of 2H:1V during ash excavation. The OMI plan will be revised to reflect this requirement.

Comment: 7. Install a staff gauge on or near the outlet structure in Cell S3 and on or near the concrete discharge structure in the clearwater pond in order to take periodic measurements of the Ash Pond water surface elevation.

Response: Staff gauges will be installed at the three cells of the South Pond and Clearwater pond by December 30, 2013.

Comment: 8. Inspect each of the monitoring wells installed in 2009 and ensure each well has a cap, lockable protective cover, casing and is visible during mowing operations.

Response: Each well has been inspected and is equipped with cap and locking cover. Each well is protected by highly visible yellow bollards. The well casings will be painted with yellow paint when outside weather conditions allow.

Comment: 9. Perform periodic water level measurements in the monitoring wells to evaluate water levels below the crest and the toe of the embankments.

Response: Measurements of these wells are taken quarterly.

Comment: 10. If AEP has the opportunity to stop discharging from the clearwater pond for a limited time period, inspect the discharge pipe from the concrete discharge structure to the duckbill flap gate to verify that the pipe is operating correctly and is in good condition. This may be performed by video photography.

Response: A camera inspection of the CMP outfall pipe was performed on December 3, 2012. The results of the inspection found that there is no infiltration or structural defects of the pipe.

3.4 Repair Recommendations

Comment: 1. Minor concrete repair work on the concrete discharge structure in the clearwater pond.

Response: The areas of spawling have been patched. The condition of the concrete discharge structure will continue to be monitored and repaired if condition worsens.

Comment: 2. Re-seed and/or over-seed bare areas of the embankments and crest to establish healthy grass cover.

Response: AEP will re-seed any bare areas of the embankment and crest. These areas will continue to be monitored as part of the operations and inspection of the facility.

Comment: 3. Clear the area of established vegetation near the lower portion and toe of the outer embankment slopes near the outfall structure.

Response: The area of the outer embankment slopes near the outfall structure was cleared of vegetation and trees in April 2012.

Comment: 4. Regrade the areas near the toe of exterior slopes to facilitate proper drainage away from the embankments.

Response: AEP has looked into the cause of the water near the toe of the dike. With the close proximity of the facility to the Scioto River, during heavy rains, water backs up within the channel from the Scioto River and therefore regrading this area will not improve the drainage of this area. AEP will continue to monitor the condition of the toe during regular inspections.