

US EPA ARCHIVE DOCUMENT



AEP Mountaineer Power Plant  
New Haven, Mason County, West Virginia  
US EPA Inspection  
Bottom Ash Pond Complex  
Action Plan based on Final Recommendations  
January 2010

## 6.1. Immediate/Urgent Repair Recommendations

### **Recommendation:**

No immediate or urgent repairs are recommended at this time.

### **Response:**

*AEP will continue its dam inspection and maintenance program, and perform any necessary repairs that are necessary to ensure a safe facility.*

## 6.2. Long Term Improvements

### **Recommendation:**

Erosion of the dike embankment crest and slope at the Turbine Room Sump Discharge into the West Bottom Ash Pond should be repaired, including measures to prevent runoff from accumulating on the crest and being channeled to this location.

### **Response:**

*Erosion repairs were completed in November 2009. The work consisted of placing and compacting cohesive soils in the eroded area and placing geotextile and rip-rap for slope protective cover. The crest of the dike was also regraded. No further action is required other than continued inspections.*

### **Recommendation:**

The connection of the Turbine Room Sump discharge header to the junction chamber should also be restored to prevent pond slope and bottom erosion around the junction chamber.

### **Response:**

*Rip-Rap was placed between the separated connection and the embankment to dissipate the flow surges. Repairs at the junction chamber will be completed during the next out of service cycle. No further action is required other than continued inspections.*

**Recommendation:**

Additional efforts should be taken to re-establish vegetation on the outboard embankment slope of the east dike where trees were recently removed.

**Response:**

*Additional soil was placed to smooth out the area and a winter seeding mix was placed over the disturbed area in October 2009. This area will be inspected after the spring vegetation germinates and evaluated related to the growth. Additional seeding will be applied if the vegetative cover is not adequate.*

**Recommendation:**

The abandoned pipe casing penetrating the west embankment should be sealed as recommended by WVDEP and AEP corporate engineering.

**Response:**

*The abandoned pipe casing penetration was sealed in October 2009. The work consisted of placing several inches of grout between the pipe and sleeve. No further action is required other than continued inspections.*

**Recommendation:**

The facility should consider more frequent maintenance of vegetation on the dike embankment slopes to facilitate inspection and promote a denser and more uniform vegetative cover.

**Response:**

*AEP fully understands that maintenance of the facilities is part of the actions required to ensure the integrity of the dam and dikes at the AEP facilities. Therefore, AEP will continue a proactive maintenance and monitoring program as established. As part of our annual maintenance program, mowing is performed at least twice a year. Mowing will be coordinated such that the visual inspections can be performed without hindrance.*

**6.3. Monitoring and Future Inspection Recommendations****Recommendation:**

Monitoring and future inspections should continue on their current schedule. The minor crest erosion and Turbine Room Sump Discharge chamber at the West Bottom Ash Pond should be closely monitored during the monthly plant inspections.

**Response:**

*AEP will continue to monitor this area as part of its Dam Inspection and Maintenance Program (DIMP). In particular, this area will be closely monitored during the monthly inspections of the facility that are performed by Plant personnel. If erosion areas are noted during the inspections, repairs will be performed and vegetated.*

#### 6.4. Time Frame for completion of Repairs/Improvements

**Recommendation:**

In the 2009 bi-annual report, AEP corporate engineering cited a November 1, 2009 completion date to seal the abandoned pipe casing penetrating the west embankment. The owner should continue toward completion of this project as planned.

**Response:**

*This project has been completed as noted above.*

**Recommendation:**

For repair of the erosion and Turbine Room Sump Discharge chamber in the West Bottom Ash Pond, the West Bottom Ash Pond could be allowed to finish its annual service cycle. The repair should be completed prior to reinstating the West Bottom Ash Pond into service for its next annual cycle. Should the condition of this area be observed to significantly worsen prior to the end of the annual service cycle, the area should be repaired immediately.

**Response:**

*This project has been partially completed while the west bottom ash pond has been in service. It will be monitored during monthly inspections. A permanent repair will be made during the next out of service cycle.*