

US EPA ARCHIVE DOCUMENT



August 22, 2011

CERTIFIED MAIL: 7002 3150 0001 2354 9273

Mr. Stephen Hoffman  
US Environmental Protection Agency (5304P)  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

**Re: Ameren Missouri  
Rush Island Power Station  
Response to Dewberry & Davis Final Coal Combustion Waste Impoundment  
Round 7 – Dam Safety Assessment Report**

Dear Mr. Hoffman:

In the USEPA letter to Mr. Michael Menne dated July 26, 2011, the USEPA requested information on how Ameren intended to address recommendations found in the final report on the structural stability of the ash pond at Ameren Missouri's Rush Island Power Station. This report was prepared by your engineering consultant (Dewberry & Davis, LLC) based on a site visit and review of engineering documentation provided by Ameren. Your engineering consultant then provided their evaluation of the structural stability of the ash pond and provided recommendations in their final report dated June 2011.

In 2010 and citing investigation authority under CERCLA, USEPA instituted a review of coal ash impoundments at electric generating facilities located throughout the United States. Ameren Corporation and its operating companies cooperated fully with that investigation and provided a variety of engineering documentation and made its facilities available for site inspections performed by USEPA's engineering consultant. That limited review effort has culminated in USEPA's issuance of reports regarding the structural stability of impoundments located at our facilities. While many of the observations are routine, we do have some concerns as to the methodology and process employed in drafting the reports. As a preliminary matter, the language used by your consultant is not tied to a regulatory definition, engineering standard or protocol. As such, condition ratings such as "satisfactory", "fair", "poor", "unsatisfactory" or "unknown" lack regulatory or statutory definition. To the extent USEPA has created its own standard and/or grading system; such a process could create confusion and be misleading to members of the public who are unfamiliar with the regulatory and engineering standards applicable to these facilities.

In fact, USEPA's regulatory basis both its initial investigation, and most recent correspondence regarding structural assessments remains unclear. (As you are aware, USEPA has proposed revisions to RCRA which would allow for the direct regulation including the engineering and design of impoundments and landfills. That regulatory process, however, has not been finalized.) In fact, state regulatory authorities such as Missouri

Department of Natural Resources (MDNR) traditionally have authority over the structural integrity of such facilities through their dam safety programs. Accordingly, in responding to USEPA's reports regarding the structural stability of ash ponds at our facilities, Ameren reserves its right to object to a USEPA's assertion of jurisdiction in an area that appears to be outside of its regulatory purview. To the extent that Ameren has decided to implement a recommendation, such implementation is on a voluntary basis.

Subject to the above comments and objections, below are Ameren Missouri's responses to the conclusions and recommendations provided in the Dewberry & Associates final dam safety assessment of the coal combustion waste (CCW) impoundment at the Rush Island Power Station. The conclusions and recommendations from the report are presented in **bold print** and our responses are provided in regular print.

#### **1.1.8 Classification Regarding Suitability for Continued Safe and Reliable Operation**

**The facility is "SATISFACTORY" for continued safe and reliable operation. No existing or potential management unit safety deficiencies are recognized. Acceptable performance is expected under all applicable loading conditions (static, hydrologic, seismic) in accordance with the applicable criteria.**

Response: Ameren Missouri agrees that a "Satisfactory" rating is warranted for the ash pond at the Rush Island Power Station.

**1.2.1 Recommendations Regarding the Structural Stability: Frequent inspections should be performed at least once per month during optimal weather conditions to monitor and record pool elevations. Pool elevations should also be monitored periodically after significant rain events to ensure pool elevation increases higher than the allowable 403 feet are reduced to 403 feet or less within an adequate time frame.**

Response: Ameren Missouri performs weekly inspections of ash pond as prescribed by the dam safety program and the Operation and Maintenance Manual for the Rush Island Power Station. Pool elevations are monitored and recorded during these inspections and water level adjustments are made as necessary.

**1.2.2 Recommendations Regarding the Hydrologic/Hydraulic Safety: The permit report recommends the operating water surface elevation of the ash pond should be no higher than 398 feet, and a full 27 acres of water surface should be available. Periodic monitoring of water surface elevations, not to exceed 398 feet, as well as identification and removal of ash deltas above a 398 foot elevation (limiting water surface acreage) is recommended to ensure hydrologic/hydraulic safety of the ash pond. The development of an operating procedure to monitor water elevation and maintain waste elevations is recommended.**

Response: Ameren Missouri has developed an Operation and Maintenance Manual for the ash pond which requires monitoring of the embankments and water levels in the ash pond. Water level adjustments and ash removal are performed as required to adequately treat the water prior to discharge and to protect the embankment.

**1.2.3 Recommendations Regarding the Field Observations: It should be noted that although visual inspections of the ash pond embankment and outlet structure showed no visible signs of significant erosion, seepage, overstress, settlement, shear failure or other signs of instability, minor areas of**

concerns were noted. It is recommended that the utility monitor the erosion and seepage areas to ensure problems are not developing.

Response: Ameren Missouri agrees to continue weekly monitoring of the ash pond embankment for erosion and seepage and to make repairs as appropriate to ensure the safety of the embankment.

**1.2.4 Recommendations Regarding the Maintenance and Methods of Operation: a need for slope maintenance for the external embankment is necessary to limit the growth of vegetation and facilitate visual dam inspection. It should be noted that in 2006, the Corps of Engineers armored with rip-rap the entire length of the Isle du Boise Creek bank adjoining the ash pond. Careful consideration should be taken in monitoring signs of erosion of the ash pond external embankment due to flood waters of either the Isle du Bois Creek or the Mississippi River.**

Response: Ameren Missouri agrees to continue weekly monitoring of the exterior slopes of ash pond embankment and the riprap revetment installed on the Isle du Boise Creek bank for erosion and to make repairs as appropriate to facilitate dam inspections and ensure the safety of the ash pond embankment.

**1.2.5 Recommendations Regarding Continued Safe and Reliable Operation: No recommendations appear warranted at this time.**

Response: Ameren Missouri agrees with this recommendation.

#### **Business Confidentiality Claim**

We request the final Dam Safety Assessment Report for the Rush Island Power Station prepared by Dewberry & Davis as well as our responses to this report remain confidential. This request is made in accordance with the procedures described in 40 CFR, Part 2, Subpart B. We also request that engineering documents and reports submitted to Dewberry & Davis for preparation of their report be designated as Confidential Business Information.

If you need further information, please feel free to contact me at 314-554-2388.

Sincerely,



Paul R. Pike  
Environmental Science Executive  
Environmental Services  
T 314.554.2388  
F 314.554.4182  
[prpike@ameren.com](mailto:prpike@ameren.com)

Bcc: M.C. Birk  
D. V. Fox  
T. E. Lafser  
K. G. Dohle  
H. R. Fischer  
R. R. Meiners  
T. L. Hollenkamp  
M. K. Frerking  
S. B. Knowles  
M. L. Menne  
S. C. Whitworth  
S.S. Weiss  
D. K. Wenk  
WM 3.10.3