

US EPA ARCHIVE DOCUMENT

EPA Comments and Notes on Draft Report Ameren – Meredosia

Contractor recommendations-

1. Prepare an Emergency Action Plan (EAP) for the facility.
2. Perform a hydrologic and hydraulic study.
3. Establish a seepage and groundwater monitoring program.
4. Perform embankment and structural stability analyses.
5. Perform video assessments of culvert piping.
6. Control vegetation on the upstream and downstream slopes. Remove the trees from the embankment including the large tree at the overflow outlet discharge point.
7. Develop an Operation and Maintenance (O&M) manual for the impoundments and the facility.
8. During the assessment, documents such as hydrologic studies, hydraulic design calculations and assumptions, and impoundment break analyses were not available for our review. As a result, the design inflow, design freeboard and other important components of the impoundment designs are unknown at this time.\
9. Large mature trees exist on the toe and slopes of both the Bottom Ash Pond and Fly Ash Pond and stumps remain in some areas where trees were recently cut down. These stumps can decompose over time and eventually create preferential paths for uncontrolled seepage.

**Ameren Response to Ameren Energy's Coal Ash Impoundment
Site Assessment Draft Reports**

Meredosia Site Assessment

Page 7, Section 2.1 Attendees - Please correct spelling of AmerenEnergy employee name from "Schnelter" to "Schnelten" and add "Mitch White – AmerenEnergy" to the list of attendees.

Page 9 – Revise the last paragraph on this page to be consistent with the AmerenEnergy Generating Company Response in Appendix C, Meredosia Power Station, Paragraph 9.

Appendix C - AmerenEnergy Generating Company Responses to USEPA request for information includes all plants. Request that you include only the Meredosia response for this site assessment report.

Edwards Site Assessment

Page 8, Section 2.1 Attendees - Please correct AmerenEnergy employee name "Mike Davis" to read "Mark Davis".

Page 8, Section 2.2 Impoundments Assessed - General Note: The impoundment is a single pond divided into 3 cells, not individual ponds as indicated in the report. All interior dikes are of ash construction. This configuration has evolved based on operational requirements for removal of bottom ash and fly ash from the impoundment.

Page 10, third paragraph: Revise sentence "Prior to the current layout, trains delivering coal to the site had to stop, disconnect and single car, unload the car at the coal stockpile..." to read "Prior to the current layout, trains delivering coal to the site had to stop, break the train into groups of cars, unload the cars at the dumper house, then move the cars and dump the next group."

Page 11, Paragraph D - Capacity of the entire impoundment (all three cells) is approximately 1800 acre-ft.

Page 12, Paragraph F, Outlet Works, Clarification Pond, 5. Outlet Structure – Revise "36-inch CMP connected to a flap gate" to read "36-inch CMP connected to a slide gate and flap gate."

Page 12 – Paragraph F, Outlet Works, Clarification Pond, 5. Outlet Structure, a. Outlet Invert Elevation – Revise "unknown" to read "447.1'."

Page 21, Section 4.4, Second paragraph – Revise sentence "Currently, there is not an EAP for the site" to read "Currently, there is not an EAP for the impoundment."

Page 24, Section 6.2.4 – It should be noted that the movement of the west slope is due to a shallow slide on the face of the embankment. The topsoil and ash fill that has been constructed over the original embankment became saturated. The pond level in that area has been lowered to alleviate this problem.

Page 24, Sections 6.2 and 6.3 – Priority 1 and 2 recommendations show completion dates; some of which have already passed. Please omit.

Appendix C – AmerenEnergy Generating Company Responses to USEPA request for information includes all plants. Request that you include only the Edwards response.

Newton Site Assessment

Page 8, 3.2.A.10. and Page 13, 3.8 Hazard Classification – We propose that the Secondary Ash pond be classified as Low Hazard Classification. The volume of the pond and its location adjacent to the lake do not warrant a Significant Hazard Classification.

Page 9, Paragraph C. Drainage Basin – Area of the Ash Pond Drainage Basin is equal to the area of the pond(s).

Page 11 – “The extents of the drainage area for the Primary Ash Pond cannot be determined without an updated survey of the impoundments...” The impoundment is a perched pond and has no stormwater inflow from adjacent areas.

Figure 2 – It should be noted that there are 2 discharge locations from the plant at the north end of the ash pond. The east discharge (Unit 2) is a bottom ash sluice pipe and the west discharge (Unit 1) is bottom ash and fly ash sluice pipe.

Duck Creek Site Assessment

Page 8 – It should be noted that the Recycle Pond has gone thru a Clean Closure since the inspection on August 11th. Ash Pond 1 and Ash Pond 2 are continuing to be dewatered and are slated for closure in 2013/2014.

Coffeen Site Assessment

Page 8 – The decommissioned ash pond was capped circa 1981.

Page 9, C. Drainage Basin – The recycle pond and reclaim pond are both perched ponds, therefore the drainage basin is the area of the pond itself.

Page 11 – The water level in the recycle pond is checked by plant operations personnel on a daily basis. If the water level in the recycle pond rises, flow is diverted from the

looped system into the coal pile settling basin, which is a permitted discharge per Illinois Department of Natural Resources. Water in the coal pile settling basin is then discharged to Coffeen Lake thru the NPDES outlet.

Page 11 – The water level in the recycle pond is checked by plant operations personnel on a daily basis. If the water level in the recycle pond rises, flow is diverted from the looped system into the coal pile settling basin, which is a permitted discharge per Illinois **EPA** Department of Natural Resources. Water in the coal pile settling basin is then discharged to Coffeen Lake thru the NPDES outlet.

Page 12, First Paragraph, last sentence – delete “and will be equipped with a stop log structure to control the overflow” as the structure was omitted from the plans due to the “gypsum stack” being revised to a non-stacking “gypsum impoundment”.