

**MEETING DATE:** May 5, 2010  
**DATE ISSUED:** DRAFT FOR REVIEW ONLY  
**LOCATION:** IEPA Springfield  
**PROJECT:** Midwest Generation Ash  
Pond Investigation Plans  
**PURPOSE:** Scope of Investigations

<b>ATTENDEES</b>	<b>REPRESENTING</b>	<b>PHONE/E-MAIL</b>
<u>Bill Constantelos</u>	<u>Midwest Generation</u>	<u>630-771-7829</u>
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**SUMMARY OF MEETING:** (meeting started at 10:30 with introductions)

1. Midwest Generation (MWG – Constantelos) opened the meeting by stressing the ash ponds on the 5 MWG plant sites contain only bottom ash. No fly ash is temporarily stored in the ponds. The bottom ash is sluiced into ponds and is temporarily stored until the ponds are dewatered and the ash is removed. The ash is reused in roadways and other beneficial projects. All MWG coal is Power River Basin coal, so it does not have the sulfur and other constituents normally found in Illinois coal. Typically the bottom ash is removed every 2 years. The ponds have liner systems with a sacrificial layer that serves to alert equipment operators they are near the liner so it is not damaged. During ash

- removal the liners are checked and repaired as necessary. No scrubber sludge is placed into the ponds.
2. MWG (Race) gave a PowerPoint presentation on history of the IEPA requests for information and MWG's responses to these requests. Information was also provided on the hydrogeology, ash pond locations, etc. for the five (5) MWG Plants.
  3. The IEPA asked several questions regarding the hydrogeology work done by MWG and the results of that work. The IEPA (Cobb) asked how river / water body fluctuations could impact groundwater flow. He questioned if flooding could cause any contamination to spread or move in a direction different than the steady state groundwater flow direction. Mr. Cobb also asked if consideration was given to flow in bedrock and the potential for downward gradient conditions to affect groundwater flow and seepage from the ponds, since the Silurian Aquifer is known to be de-pressurized in the Joliet area.
  4. MWG (Race) presented information on public well studies performed by MWG. Summarized that the majority of wells are deep and not in the geologic strata that the ponds directly overlie. In addition, most of the wells downgradient of the ponds are owned and used by MWG. These wells are deep (1500 feet deep) and testing has shown them to meet water quality requirements. The IEPA suggested that well integrity be monitored to verify that deteriorated casings or casing damage could not lead to interconnection with the surficial aquifer.
  5. MWG (Race) presented NPDES outfall test data from the ponds that show numerical values below class I groundwater standards. Demonstrates that water coming off of bottom ash does not impact water above the numerical standards provided in 620.410.
  6. MWG proposed proposed 2-3 wells down gradient of the ponds at each plant. Proposed using boron as a marker and remove wells after a reasonable period of time.
  7. The IEPA (Cobb) believes non-degradation applies (Subpart C) and that background needs to be established to determine if groundwater is degraded. The IEPA indicated that an upgradient well or wells are needed to establish background.
  8. Conceptually the IEPA will accept an upgradient well(s) at the property boundary to establish background concentrations. There is no intent to require monitoring beyond the property boundary.
  9. The IEPA would like interpretation of the groundwater flow direction and geology to assess the appropriate locations for monitoring wells. This information should be provided to justify well locations.
  10. If it is determined that the ponds are leaking but the constituents can be managed and kept on the site, then a GMZ would be appropriate to manage groundwater and remain in compliance.

11. After discussion the IEPA agreed that the purpose of the hydrogeologic investigation and monitoring is to determine if the ash ponds are leaking. There is no intent to investigate beyond the ash ponds; however, the IEPA cannot state that no other investigations will be required should the tests indicate groundwater is being impacted.
12. The IEPA stressed that the results of the Hudsonville project be reviewed to understand the groundwater investigation and monitoring process and what may be required for monitoring.
13. The IEPA indicated that monitoring can be limited to inorganics, and that select inorganics can be excluded. The list can be identified after meeting to discuss the monitoring program. The IEPA was receptive to using site-specific bottom ash leachate data to reduce the list of parameters required to be tested for. This again will be a discussion item at the next meeting.
14. MWG (Franzetti) asked if the monitoring program could be terminated once it is shown groundwater is not impacted. The IEPA indicated monitoring will be required as long as the ponds are operated and ash remains in the ponds. The IEPA is open to modified monitoring programs and referred to the Hudsonville decision for an example.
15. MWG (Franzetti) asked if the test results that MWG submits will be provided to 3<sup>rd</sup> parties. The IEPA responded that test data can be obtained by anyone using the FOIA process. The IEPA does not contact parties to inform them information is available.
16. Test data that is submitted can be obtained by FOIA – so there is no protection that data cannot be obtained by others
17. The IEPA (Cobb) indicated that geochemical balance needs to be assessed with the monitoring data. Check the balance between ions and anions.
18. The IEPA is receptive to meet in 3-4 weeks to discuss the proposed monitoring program for each of the 5 sites. The intent is to reach agreement before formal submittal of the groundwater monitoring programs.

The meeting ended at 12:25 pm

The above reflects a summary of the discussions and decisions made at this meeting. If you have any questions, additions or comments, please contact us at the above Patrick Engineering Inc. attendee at the referenced phone number. We will consider the minutes to be accurate unless written notice is received within 10 working days of the date issued.

Prepared by: Jeff Schuh

Date: 5/07/10

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