

US EPA ARCHIVE DOCUMENT



associated electric cooperative, inc.

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March 24, 2009

Mr. Richard Kinch  
US Environmental Protection Agency  
Two Potomac Yard  
2733 S. Crystal Dr.  
5<sup>th</sup> Floor; N-5783  
Arlington, VA 22202 2733

Dear Mr. Kinch,

Enclosed is the response to the Request for Information under Section 104(e) of the Comprehensive Environmental Response, Compensation, and Liability Act dated March 13, 2009, and received on March 17, 2009, for Associated Electric Cooperative, Inc.'s Thomas Hill and New Madrid Power Plants.

I certify that the information contained in this response to EPA's request for information and the accompanying documents are true, accurate, and complete. As to the identified portions of this response, I cannot personally verify their accuracy,

I certify under penalty of law that this response and all attachments were prepared in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

Based on my inquiry of the person or persons who manage the system, those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge, true, accurate, and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Signature: \_\_\_\_\_

A handwritten signature in black ink, appearing to read "D. Highley", is written over a horizontal line.

Name: Duane Highley, PE

Title: Director, Power Production

Date: \_\_\_\_\_

3/24/09

bm  
Enclosures  
Federal Express

## Thomas Hill Energy Center Enclosure

Please provide the information requested below for each surface impoundment or similar diked or bermed management unit(s) or management units designated as landfills which receive liquid-borne material for the storage or disposal of residuals or by-products from the combustion of coal, including, but not limited to, fly ash, bottom ash, boiler slag, or flue gas emission control residuals.

1. Relative to the National Inventory of Dams criteria for High, Significant, Low, or Less-than-Low, please provide the potential hazard rating for each management unit and indicate who established the rating, what the basis of the rating is and what federal or state agency regulates the unit(s). If the unit(s) does not have a rating, please note that fact.

**Response:** No State or federal regulatory agency has assigned a rating to the ash and slag management units, and no State or federal regulatory agency regulates the units relative to the National Inventory of Dams criteria.

2. What year was each management unit commissioned and expanded?

Management Unit Name		Commission Date	Expansion Date
Ash Pond	Slag Dewatering	1984	
Ash Pond	Cell 1 (upper)	Prior to 1980	Upgraded - 1980
Ash Pond	Cell 2 (middle)	Prior to 1980	Upgraded - 1980
Ash Pond	Cell 3 (lowest)	1980	Completed new berm -1984
Landfill-			
Fly ash disposal cell	ASH-2	1998	
Bottom ash / Slag disposal cell	ASH-3	2005	

3. What materials are temporarily or permanently contained in the unit? Use the following categories to respond to this question: (1) fly ash; (2) bottom ash; (3) boiler slag; (4) flue gas emission control residuals; (5) other. If the management unit contains more than one type of material, please identify all that apply. Also, if you identify "other," please specify the other types of materials that are temporarily or permanently contained in the unit(s).

**Response:**

Management Unit Name		Materials Contained in Cells	
Ash Pond	Slag Dewatering	2, 3	
Ash Pond	Cell 1 (upper)	1, 2, 3, 4	5- sediment, coal pile runoff
Ash Pond	Cell 2 (middle)	1, 2, 3	5- sediment, coal pile runoff
Ash Pond	Cell 3 (lowest)	(polishing)	5- small quantities of upstream materials
Landfill-			
Fly ash disposal cell	ASH-2	1, 2, 3	5- coal processing wastes, coal pile runoff
Bottom ash/Slag disposal cell	**ASH-3	2, 3	

\*\* Cell-3 has not directly received any coal combustion wastes for storage or disposal.

4. Was the management unit(s) designed by a Professional Engineer? Is or was the construction of the waste management unit(s) under the supervision of a Professional Engineer? Is inspection and monitoring of the safety of the waste management unit(s) under the supervision of a Professional Engineer?

**Response:** Each of the structures in the ash pond series was designed by a Professional Engineer.

The structures within the landfill were developed through the surface coal mining process, which was directed until late 2002 by onsite, professional engineers.

Inspection and monitoring of the safety of the waste management units is not under the supervision of a professional engineer.

5. When did the company last assess or evaluate the safety (i.e., structural integrity) of the management unit(s)? Briefly describe the credentials of those conducting the structural integrity assessments/evaluations. Identify actions taken or planned by facility personnel as a result of these assessments or evaluations. If corrective actions were taken, briefly describe the credentials of those performing the corrective actions, whether they were company employees or contractors. If the company plans an assessment or evaluation in the future, when is it expected to occur?

**Response:** Within the ash pond series, visual observations of the dams are conducted by plant personnel who travel to the ponds on a daily basis. These personnel are not credentialed to perform structural integrity assessments or evaluations. General maintenance actions have been taken and are planned as routine care for the dams, such as placing fresh gravel atop or rip rap at pool elevation, cutting trees, or mowing.

The Solid Waste Landfill is below the natural grade of the land, therefore, it contains no containment berms that can be evaluated.

6. When did a State or a Federal regulatory official last inspect or evaluate the safety (structural integrity) of the management unit(s)? If you are aware of a planned state or federal inspection or evaluation in the future, when is it expected to occur? Please identify the Federal or State regulatory agency or department which conducted or is planning the inspection or evaluation. Please provide a copy of the most recent official inspection report or evaluation.

**Response:** No such inspections have occurred with the ash pond series and AECI is not aware of plans for any future inspections or evaluations. The landfill is inspected by the Missouri Department of Natural Resources. The last inspection was June 2008, but addressed operational issues. The inspector marked "not applicable" on the safety portion of the checklist, since the cells are below grade.

7. Have assessments or evaluations, or inspections conducted by State or Federal regulatory officials conducted within the past year uncovered a safety issue(s) with the management unit(s), and, if so, describe the actions that have been or are being taken to deal with the issue or issues. Please provide any documentation that you have for these actions.

**Response:** No issues were identified in the landfill inspection.

8. What is the surface area (acres) and total storage capacity of each of the management units? What is the volume of material currently stored in each of the management unit(s)? Please provide the date that the volume measurement was taken. Please provide the maximum height of the management unit(s). The basis for determining maximum height is explained later in this enclosure.

Management Unit Name		Surface Area (Acres)	Height (Feet)	Total Storage Capacity (Cubic Yards)	Volume of Material Stored (Cubic Yards)	Date of Vol. Estimate
Ash Pond	Slag Dewatering	3	0	16,000	5,000 - 10,000	Mar-09
Ash Pond	Cell 1 (upper)	7	< 32	undetermined	600,000 - 680,000	Mar-09
Ash Pond	Cell 2 (middle)	12	25	50,000	15,000 - 25,000	Mar-09
**Ash Pond	Cell 3 (lowest)	10	22.3	80,000	0	Mar-09
Landfill-						
Fly ash disposal cell	ASH-2	44	0 (below grade)	2,332,777	1,694,615	2008
Bottom ash / Slag disposal cell	ASH-3	24	0 (below grade)	1,693,611	729,295	2008

\*\* Cell-3 has not directly received any coal combustion wastes for storage or disposal.

9. Please provide a brief history of known spills or unpermitted releases from the unit within the last ten years, whether or not these were reported to State or federal regulatory agencies. For purposes of this question, please include only releases to surface water or to the land (do not include releases to groundwater).

**Response:** No spills or releases have occurred from any of the ash and slag management units described in this document within the last 10 years.

10. Please identify all current legal owner(s) and operator(s) at the facility.

**Response:** Associated Electric Cooperative, Inc. (AECI); headquartered in Springfield, MO.  
Mailing Address: 2814 South Golden, PO Box 754, Springfield, MO 65801-0754  
Phone Number: (417) 881-1204