



Daniel C. McIntire
Vice President, Generation Operations

800 Cabin Hill Drive
Greensburg, PA 15601

CERTIFIED MAIL

March 24, 2009

Mr. Richard Kinch
US Environmental Protection Agency
Two Potomac Yard
2733 S. Crystal Yard
5th Floor: N-56
Arlington, VA 22202 2733

Dear Mr. Kinch:

**R. PAUL SMITH POWER STATION - LAGOON DAM #4
BERKELEY COUNTY, WV
ALLEGHENY ENERGY SUPPLY COMPANY, LLC
CERCLA 104(e) INFORMATION REQUEST LETTERS
COAL COMBUSTION BYPRODUCT MANAGEMENT UNITS**

Allegheny Energy Supply Company, LLC (AE Supply), as owner and operator of the R. Paul Smith Power Station, represented by its agent, Allegheny Energy Service Corporation, is responding to your information request letters relating to surface impoundments or similar diked material or bermed management unit(s) or management units designated as landfills which receive liquid-borne material from a surface impoundment used 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. Letters dated March 9, 2009 were sent to both the Plant Manager at R. Paul Smith and also to our Chief Executive Officer, Mr. Paul Evanson. For your reference, a copy of each letter is attached as Attachment 1 under the "Introduction" tab of the binder.

Located in Williamsport, Maryland, R. Paul Smith Power Station personnel maintain and operate the Lagoon Dam #3 across the Potomac River from the power station in Berkeley County, West Virginia. R. Paul Smith Power Station was on the facility list that was released by the United States Environmental Protection Agency (EPA). The R. Paul Smith Power Station personnel not only maintain Lagoon Dam #4, they also maintain Lagoon Dam #3. To reduce confusion, we have assembled two separate information binders for R. Paul Smith Power Station; one for each of the two Lagoon Dams. Please see the information contained in tabs 1 through 10 of the binder.

Allegheny Energy Service Corporation hereby responds to all questions from the "Enclosure" page (contained in the request letter to R. Paul Smith Power Station and to Mr. Evanson).

Should you have any questions or require any additional information, please contact Gary Haag, P.E. (724) 830-5459.

I certify that the information contained in this response to EPA's request for information and the accompanying documents is true, accurate, and complete. As to the identified portions of this response for which 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.

Sincerely,

A handwritten signature in cursive script that reads "Daniel C. McIntire".

Daniel C. McIntire
Vice President, Generation Operations

Attachments

c: Jim Roewer, USWAG Executive Director

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Each of the following EPA questions is responded to under the similar tab number

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, and what federal or state agency regulates the unit(s). If the unit(s) does not have a rating, please note that fact.
2. What year was each management unit commissioned and expanded?
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).
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?
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?
6. When did a State or 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.
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.

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Each of the following EPA questions is responded to under the similar tab number

8. What is the surface area (acres) and total storage capacity of each of the management units? What is the volume of the material currently stored in each of the management unit(s)? Please provide the date that the volume measurement was taken.
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 the land (do not include releases to groundwater).
10. Please identify all current legal owner(s) and operator(s) at the facility.

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, and what federal or state agency regulates the unit(s). If the unit(s) does not have a rating, please note that fact.*

RESPONSE 1:

The West Virginia Department of Environmental Protection determines the hazard potential classification as established in the Dam Safety Regulation (47CSR34). R. Paul Smith Power Station's Lagoon Dam #4 has a Class 2 (Significant) potential classification¹.

- **¹Classification of Dams. (47CSR34-3.5.b.1.)**
 - Class 2 (Significant Hazard) Dams - Class 2 dams are those dams located where failure may cause minor damage to dwellings, commercial or industrial buildings, important public utilities, main railroads, or cause major damage to unoccupied buildings, or where a low risk highway may be affected or damaged. The potential for loss of human life resulting from failure of a Class 2 dam must be unlikely.

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

RESPONSE 2:

The West Virginia Department of Natural Resources issued a Certificate of Approval for R. Paul Smith Power Station Lagoon Dam #4 in 1981. From review of previous records it appears this Certificate of Approval was granted in conjunction with an approved proposal to remove accumulated dry ash from Lagoon Dam #4 and place that material onto an extended area on the dry ash disposal site. From review of previous records, the original construction of Lagoon Dam #4 may have been constructed in the early 1960s. R. Paul Smith's Lagoon Dams #3 and #4 were and are used by the station to hold Coal Combustion Byproducts (CCBs).

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 #3:

The material sluiced to the two storage lagoons at R. Paul Smith Power Station (Lagoon Dam #3 and Lagoon Dam #4) consists of:

- (1) Fly ash,
- (2) Bottom ash
- (5) Other - At times, trace amounts of materials such as spent ion exchange resin, spent filter material and floor cleaning residue will also be in the sluiced stream. All of these materials are contained within the sluice water.

The lagoons are for storage purposes only, not disposal. Once the lagoon nears capacity it is allowed to dewater, the solids are then removed and placed in an adjacent landfill for 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 #4:

The West Virginia Department of Natural Resources issued a Certificate of Approval for R. Paul Smith Power Station Lagoon Dam #4 in 1981. The Design or Consulting Company was listed at that time as SRW Associates, Inc. (SRW) of Carnegie, PA. The application was signed by James Roberts, P.E. Design drawings and safety calculations that appeared in the submittal were from SRW Associates. The report presented conclusions regarding the existing lagoon embankment and foundations soils and presented the results of the design storm and stability analyses performed. In addition, recommendations regarding lagoon modifications were presented along with suggested lagoon levels for operation. These were presented in a report dated November 20, 1980. The Certificate of Approval was granted February 25, 1981.

R. Paul Smith's Lagoon #4 is inspected on a biennial basis. The dam was last inspected on February 9, 2009 by PBS&J (consultants), Allegheny Energy Supply Company, LLC (AE Supply) personnel as well as two representatives from West Virginia Dam Safety. The inspection report performed by PBS&J is signed by a Registered Professional Engineer (P.E) with certification in West Virginia. During many of the inspections, West Virginia Department of Environmental Protection, Dam Safety inspector also does an inspection and will issue an independent report. The West Virginia Dam Safety inspectors are also Professional Engineers in West Virginia.

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 #5:

R Paul Smith's Power Station's Lagoon Dam #4 held its last biennial inspection on February 9, 2009. Attendees included representatives from AE Supply (Gary Haag, P.E, Ralph Borsani, P.E., Jennifer McCloskey, P.E. and Erik Johnsson), Delbert Shriver, P.E. and Conrad Baston, P.E. (WVDEP-Dam Safety), and Greg Banner, P.E. (PBS&J).

Mr. Shriver, Mr. Baston and Mr. Banner are Professional Engineers (P.E.) in West Virginia.

Mr. Banner (PBS&J) is AE Supply's consultant that has been involved in the annual inspections for many years at Lagoon Dam #4. Based on the visual inspection of the principal spillway, upstream and downstream slopes, and crest did not reveal any significant deficiencies requiring immediate attention. There were no conditions observed that would prevent proper operation of the dam during either normal or maximum reservoir level conditions. The report was signed and sealed by Greg W, Banner, P.E. Group Manager, PBS&J. Please see the attached 2009 Inspection Report marked as Attachment 1.

AE Supply also requested GAI Consultants Inc. (GAI) to respond to a West Virginia DEP Dam Safety Order of Compliance to determine the current minimum upstream and downstream embankment slope factors of safety for existing conditions and loading conditions and earthquake loading conditions. The determination utilized current embankment slopes, reservoir elevations, phreatic surface elevations, and seepage zones observed by inspection. The determination results in accordance with West Virginia Dam Safety Rule Provisions (47CSR34-7.4.b.1.D.4) demonstrating adequate factors of safety. Based upon the review of the existing background data, reports, inspections, documented site visits, existing geometry, usage, previous repair work, and previous analyses of the slopes, GAI has concluded that the stability requirements of 47CSR34 are met by the downstream slopes of the Lagoon Dam #4 embankment. There appears to be inadequate documentation demonstrating that the upstream slopes meet these stability requirements. The report was signed and sealed by F. Barry Newman, P.E. Vice President and Geotechnical/Structures Group Manager, GAI. Please see the attached 2009 Stability Analyses Report marked as Attachment 2.

AE Supply will conduct further investigations to determine if the upstream slopes meet the requirements of WV 47CSR34. These investigations will be completed

by July 1, 2009 and the results will be submitted to Mr. Brian Long, WVDEP, Dam Safety Section Manager for his review.

6. *When did a State or 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.*

REPOSE # 6:

R. Paul Smith's Power Station's Lagoon Dam #4 held its last biennial inspection on February 9, 2009. Attendees included Delbert Shriver, P.E. and Conrad Baston, P.E. (WVDEP-Dam Safety), Greg Banner, P.E. (PBS&J) and representatives from AE Supply included Gary Haag, P.E, Ralph Borsani, P.E., Jennifer McCloskey, P.E. and Erik Johnsson).

Mr. Conrad Baston, P.E. WVDEP Dam Safety, issued the written inspection report of Lagoon Dam #4 on February 27, 2009. Please see the attached 2009 Inspection Report marked as Attachment 1.

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 # 7:

Mr. Conrad Baston, P.E. WVDEP Dam Safety, issued the written inspection report of Lagoon Dam #4 on February 27, 2009. The actual inspection was performed on February 9, 2009. There were no major recommendations requiring immediate action. The only maintenance problems observed were mainly animal burrows (groundhogs) and some small woody vegetation on the dam. No significant unstable areas were observed during the inspection. During the inspection, only two holes were observed in the hypalon liner. Maintenance personnel were present during the inspection and made note of the areas where the small holes were and questionable animal burrows were flagged or otherwise recorded for repair or monitoring. Also observed were a couple of places where there was some erosion/slipping of material on the downstream slope near the left or western end of the front dike of the dam.

AE Supply will cut the few small woody areas when the subcontractor mows the dams in the spring as part of the normal maintenance schedule. Removal/fill of the animal burrows will be completed and is an ongoing process on earthen dams. R. Paul Smith Power Station personnel will need to continue to monitor the area described in the report for additional movement.

8. *What is the surface area (acres) and total storage capacity of each of the management units? What is the volume of the material currently stored in each of the management unit(s)? Please provide the date that the volume measurement was taken.*

REPONSE # 8:

R. Paul Smith Lagoon Dam #4 is approximately 12.9 acres with a storage capacity of 260,000 Cubic Yards (CY). As of January 27, 2009 Lagoon Dam #4 was considered to be at its maximum storage capacity of 260,000 CY.

The maximum height of the dam is approximately 40'.

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 the land (do not include releases to groundwater).*

RESPONSE # 9:

Review of the previous ten years records for Lagoon Dam #4 does not indicate there were any known spills or unpermitted releases from the unit.

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

REPONSE # 10:

R. Paul Smith Power Station is 100% owned and operated by Allegheny Energy Supply Company, LLC.