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Daniel C. McIntire Vice President, Generation Operations

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 #3 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 #3, they also maintain Lagoon Dam #4. 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.

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Daniel C. McIntire Vice President, Generation Operations

Attachments c: Jim

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 then 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 #3 has a Class 2 (Significant) potential classification¹.

• ¹Classification of Dams. (47CSR34-3.5.b.1.)

o 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 #3 in June 1996. From review of previous records, the original construction of Lagoon Dam #3 may have been constructed in the 1960s and in 1981, a rock buttress was constructed on the outer slope and the embankment crest was raised. R. Paul Smith's Lagoon Dams #3 and #4 were and are used by the station to hold Coal Combustion Byproducts (CCBs).

EPA ARCHIVE DOCUMENT

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)

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 #3 in 1996. (Lagoon Dam #3 was in existence prior to 1996 but there appears there was not a Certificate of Approval from West Virginia). Subsequently, SE Technologies of Bridgeville, PA was retained by Allegheny to prepare an application for a Certificate of Approval for Lagoon Dam #3. The report addressed the requirements of West Virginia Dam Safety Regulations and included items such as hydrologic/hydraulic analyses, geotechnical analysis, inspection and maintenance procedures. The application was signed by Greg W. Banner, P.E. of SE Technologies. From review of records, the Certificate of Approval was issued June 26, 1996.

Prior to 1996, GAI Consultants Inc. (GAI) prepared in 1978 a "Subsurface Investigation and Dike Repair" scheme for the Lagoon Dam #3 which was subsequently performed (final date and construction supervisory information was not found).

In 1999 a modification was required to the Certificate of Approval following repairs that were performed between February 1999 and May 1999 on replacement of a corrugated metal outlet pipe on Lagoon Dam #3 that failed in November 1998. This work was performed under the direct supervision of GAI. James Snodgrass, P.E. (GAI) was the certifying engineer. Work included installation of a new HDPE outlet pipe, fabrication and installation of a new HDPE riser structure, restoration of the interior embankment slope in the vicinity of the new riser structure, constructions of fabric form lined channel from the discharge outlet pipe to the river and restoration of a section of the interior slope of the south embankment. The Certificate of Approval was approved March 2, 1999.

R. Paul Smith's Lagoon #3 is currently inspected on a biennial basis. The dam was last inspected on February 9, 2009 by PBS&J (consultants), Allegheny Energy 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?

REPONSE # 5:

R Paul Smith's Power Station's Lagoon Dam #3 held its last biennial inspection on February 9, 2009. Attendees included representatives from Allegheny Energy Supply Company, LLC (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 #3. Based on the inspection information gathered, PBS&J has concluded that the lagoon is functioning as designed. No conditions were observed by PBS&J, which would indicate the facility will not operate properly during 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 current conditions versus stability analyses, GAI has concluded that the current condition at the R. Paul Smith Lagoon #3 Dam satisfies the Factor of Safety requirements of the Order of Compliance dated January 30, 2009. 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. 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.

REPONSE # 6:

R. Paul Smith's Power Station's Lagoon Dam #3 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 #3 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.

REPONSE # 7:

Mr. Conrad Baston, P.E. WVDEP Dam Safety, issued the written inspection report of Lagoon Dam #3 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. Maintenance personnel were present during the inspection and made note of the areas where animal burrows were found.

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.

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:

Lagoon Dam #3 is approximately 7.2 acres with a storage capacity of 130,000 Cubic Yards. As of January 27, 2009 Lagoon No. 3 was considered to be empty. The maximum height of the dam is approximately 50'. 9. Please provide a brief history of known spills or unpermitted releases from the unit within the last then 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).

<u>**REPONSE # 9:**</u>

Even though a release occurred more than 10 years ago (November 1998), we are reporting this information because repairs to lagoon Dam #3 were not completed until May 1999. Please see **RESPONSE #4** for additional information.

On November 5, 1998 station personnel observed the water level in Lagoon Dam #3 had dropped approximately 2 feet and the discharge flow at Outfall 002 was substantially greater than usual. The Maryland Department of the Environment MMDE) was immediately notified of the situation. On November 5, 2009 all wastewater from the station had been diverted to Lagoon Dam #4. Two portable floating pumps were placed in Lagoon Dam #3 and began pumping the stored wastewater to Lagoon Dam #4.On November 6, 1998 station personnel determined the location of the leak was in the horizontal section of the discharge pip approximately four feet form the standpipe. On November 6 and 7, 2009 material was placed over the suspected pipe leak area. Discharge flow continued but was dramatically slowed. On November 9 station personnel inspected the shoreline from Outfall 002 to the Interstate 81 Bridge for evidence of ash. There was no discernable evidence of ash in the river, or on the shoreline. A third pump was placed in service to de-water Lagoon Dam #3. Please see the attached report marked as Attachment 1.

Plans were developed and approved for the outlet works reconstruction as well as for stability improvements for the interior slope of Lagoon Dam #3. Construction was completed approximately mid-year 1999.

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

RESPONSE #10:

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