

US EPA ARCHIVE DOCUMENT

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March 26, 2009

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

RE: Request for Information Under Section 104 (e) of the Comprehensive
Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9604(e)

Dear Mr. Kinch:

PPL Generation LLC's Martins Creek Power Station received the EPA's Information Collection Request regarding coal combustion residue surface impoundments on March 12, 2009. Attached is PPL Generation's response to the ICR and the associated signed certification statement.

In September 2007 PPL Martins Creek's only coal fired units were permanently shut down and are in the process of being demolished. As a result, no coal combustion by-products are being produced and no impoundment is receiving coal combustion by-products. However, one impoundment, Martins Creek Ash Basin No. 4 does still contain some limited free liquid as of March 2009. Also, one other impoundment receives filtered water from the Ash Basin No. 4 dewatering/closure project.

If you have any questions or need additional information, please contact Craig Shamory from our Environmental Management Department at 610-774-5653 or csshamory@pplweb.com.

Sincerely,

Dennis J. Murphy

CC:

Craig Shamory PPL, EMD
Martins Creek Plant

ICR Letter Certification Statement:

I certify that the information contained in this response to EPA's request for information and any 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.

Signature: 

Name: Dennis J. Murphy

Title: VP/COO-Eastern Fossil & Hydro, PPL Generation LLC

PPL response to ICR

Plant Name: Martins Creek SES

Impoundment Name: Ash Basin 4

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. This includes units that no longer receive coal combustion or by-products, but still contain free liquid.

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.

In September 2007 PPL Martins Creek's only coal fired units were permanently shut down and are in the process of being demolished. As a result, no coal combustion by-products are being produced and no impoundment is receiving coal combustion by-products. However, one impoundment, Martins Creek Ash Basin No. 4 does still contain some limited free liquid as of March 2009.

Martins Creek Ash Basin No. 4 is currently being dewatered and closed under Pennsylvania Department of Environmental Protection (DEP) oversight and regulations. While about 98% of the standing water was removed from the impoundment, storm water still collects in the impoundment. The stormwater is periodically pumped from the impoundment and discharged under the facility's NPDES permit. The basin is lined with a Hypalon geomembrane liner.

The impoundment currently is rated as a B-2 dam by the Pennsylvania Division of Dam Safety under the Pennsylvania Dam Safety Regulations. A B-2 dam is a medium-sized, medium hazard dam with a few habitable structures downstream. Pennsylvania has extensive guidelines on what measures must be taken and what conditions must exist before a waste disposal basin can be declassified. PPL will pursue declassification once final closure has been achieved.

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

The impoundment was placed in service in 1989 and was not 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).

The impoundment holds predominantly fly ash with incidental amounts of soils, rocks, concrete, and plant residual waste.

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?

Yes, yes, and yes.

5. When did the company last assess or evaluate the safety (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?

The impoundment is inspected quarterly by a PPL Professional Engineer. The impoundment is inspected annually by an outside consulting firm, most recently Devine, Tarbell & Associates in 2008. A structural analysis of the dikes has not been completed since the original design. As mentioned above, the impoundment is being dewatered and closed.

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.

The impoundment was last inspected by representatives of the DEP on January 15, 2009. No additional inspections are planned at this time. The attached inspection report was prepared by the Pennsylvania Bureau of Waste Management, which cites no violations or concerns.

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.

No.

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

The surface area of the impoundment is 37 acres. The total storage capacity is estimated at 12.75 million gallons above grade. The volume of waste in the impoundment is 1,038,727 tons in accordance with the last submittal to DEP on June 30, 2008. The maximum height of the impoundment dike is 43 feet while the total depth of the impoundment is 65 feet (22 feet below grade).

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).

On August 23, 2005, one of the wooden stop logs failed in the discharge structure of the impoundment. As the result of this failure, approximately 100 million gallons of water and fly ash flowed out through the discharge piping and from various associated manholes. It flowed over about 10 acres of surrounding fields and into the Oughoughton Creek and Delaware River. The release was completely stopped on August 27, 2005, and PPL began an immediate cleanup effort including removal of the fly ash from the fields, Oughoughton Creek, and the Delaware River. The emergency response actions were completed in March 2006, while the follow-up river assessment work continued through September 2006. In June 2007, PPL submitted the Phase IV Completion Report to PA DEP summarizing the emergency response actions and follow-up river assessment work.

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

PPL Martins Creek, LLC is the legal owner of this impoundment.

PPL response to ICR

Plant Name: Martins Creek SES

Impoundment Name: Industrial Waste Treatment Basin (IWTB)

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. This includes units that no longer receive coal combustion or by-products, but still contain free liquid.

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.

In September 2007 PPL Martins Creek's only coal fired units were permanently shut down and are in the process of being demolished. As a result, no coal combustion by-products are being produced and no impoundment is receiving coal combustion by-products. However, one impoundment, Martins Creek Ash Basin No. 4 does still contain some limited free liquid as of March 2009.

The IWTB is regulated by the Pennsylvania Department of Environmental Protection (DEP), Bureau of Water Quality. The impoundment operates as a residual waste storage impoundment under the Pennsylvania Residual Waste Regulations. The impoundment is too small to be regulated by Pennsylvania's Dam Safety regulations. The impoundment does not have a rating.

Based on the EPA rating the impoundment is Less than Low Hazard Potential

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

In service in 1974 and was not 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).

The impoundment was dredged and relined in 2008. The impoundment receives stormwater and wash waters from the Plant area and currently receives pumped and filtered water from the Ash Basin 4 dewatering/closure project. Very little sediment or solids reach the basin since the plant no longer has a coal pile or ash production.

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?

Yes, yes, and yes.

5. When did the company last assess or evaluate the safety (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?

The impoundment is inspected quarterly by a PPL Professional Engineer. Any items that need attention (for example, a tear in the liner) are corrected promptly by the plant. No structural assessments have been done or are planned.

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.

The impoundment does not receive structural integrity inspections by a State or Federal Agency.

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.

No – see Answer to No. 6.

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

The surface area of the impoundment is 15 acres. The total storage capacity for the impoundment is 300 acre-feet. The maximum height of the dikes is 10 feet. The impoundment depth is close to 30 feet with most of that below grade. Currently, only minor amounts of solids are stored in the impoundment.

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).

No know spills or unpermitted releases.

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

PPL Martins Creek, LLC is the legal owner of this impoundment.