

US EPA ARCHIVE DOCUMENT



Dunkirk Power, LLC
Dunkirk Generating Station
106 Point Drive North
Dunkirk, NY 14048

Via CERTIFIED MAIL/RETURN RECEIPT REQUESTED

May 11, 2009

Mr. Richard Kinch
United States Environmental Protection Agency (5306P)
1200 Pennsylvania Avenue, NW
Washington, DC 20460

SUBJECT: Request for Information Under Section 104(e) of the Comprehensive
Environmental Response, Compensation, and Liability Act, 42 U.S.C. 9604(e)
Dunkirk Electric Generating Station
Dunkirk, New York

Dear Mr. Kinch:

Dunkirk Power, LLC (DPL) hereby provides to the United States Environmental Protection Agency (EPA) information and documentation in response to the above-referenced Request for Information (ROI) regarding the Dunkirk Electric Generating Station (Dunkirk Station). Dunkirk Station received the ROI on May 1, 2009. As requested, DPL is submitting this response to the ROI to EPA within ten (10) business days of receipt. Enclosed as an attachment to this letter are NRG's responses to the ROI regarding each of the coal combustion by-product waste management units at Dunkirk Station. Each individual information request is set forth in italics followed by NRG's response.

I hereby certify that the information contained in this response to the ROI 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 gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, and of those persons directly responsible for gathering the information, to the best of my knowledge, the information submitted is 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.

If you have questions regarding the submittal information, please contact me at (716) 673-6395.

Sincerely,

A handwritten signature in dark ink, appearing to read "Thomas M. Kilburn". The signature is fluid and cursive, with the first name "Thomas" and last name "Kilburn" clearly distinguishable.

Thomas M. Kilburn
Plant Manager

ATTACHMENT A

Equalization Basin Dunkirk Electric Generating Station

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 residues or by-products, but still contain free liquids.

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 does not have a rating, please note that fact.

The equalization unit is a below grade concrete basin, and therefore it has no rating because it is not large enough to meet the criteria of the New York State Dam Safety Program. DPL's self assessment rates this as an extremely low hazard in-ground concrete basin. The equalization basin is regulated by the New York State Department of Environmental Conservation (NYSDEC) as part of the State Pollutant Discharge Elimination System (SPDES).

The equalization construction consists of a concrete base slab and concrete walls 18' high with 3' above grade.

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

The equalization unit was commissioned in 1986 and has not been 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 unit is a two acre-foot below-grade concrete basin that is used to temporarily collect coal pile runoff, boiler and air preheater wash water containing coal fines and flyash before being treated by the waste water treatment system. The washes are performed periodically and any collected coal fines or fly ash are removed from the basin with a small loader and eventually transported to Dunkirk Station's off-site ash landfill.

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?

The equalization unit was designed by a Professional Engineer (PE) and the drawings have a PE stamp. Typically, the previous owner's construction services group supervised all onsite construction projects. DPL does not have detailed records on the construction of this unit. This below-grade concrete basin only contains boiler wash water for a limited period of time; it is inspected by Dunkirk Station's operations department during use but is not under the supervision of a PE.

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?

The condition of the equalization unit is assessed by the wastewater facility operator on a daily basis with regard to operational safety. If problems of a severe nature are observed, such as concrete wall failure, DPL would consult with DPL engineers experienced in this area or with external geotechnical engineers. No significant safety issues have been observed with respect to the basin during recent inspections. Plans are to continue with the daily inspection conducted by Dunkirk Station staff and perform assessments by a company civil engineer as needed.

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.

The last inspection and walkthrough of equalization basin was performed on March 25, 2009 by a NYSDEC Water Division engineer during a SPDES inspection, at which time no problems were observed for the system. At this time, DPL is not aware of any additional planned state or federal inspection or evaluation in the future.

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 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.

Surface area: 0.153 acres (222'x30'); Capacity: 2.0 acre ft
Approximately 650,000 gallons total.

The equalization unit is below grade but the concrete enclosure basin walls extend approximately 3 feet above grade. The liquid volume varies depending on coal pile runoff which is related to precipitation events in the Dunkirk Station area. A very nominal amount of ash related solids are present after boiler/precipitator washes but solids are primarily coal fines.. At present DPL estimates that the basin has approximately 100,000 gallons of liquid; DPL also estimates that approximately 20 cubic yards of solids are removed annually.

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).

There have been no known spills or unpermitted releases from the unit in the last ten years.

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

The legal owner and operator is DPL Dunkirk Power, LLC.

ATTACHMENT B
Northwest Pump House
Dunkirk Electric Generating Station

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 residues or by-products, but still contain free liquids.

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 does not have a rating, please note that fact.

The pump house unit is a below grade concrete basin, and has no rating because it is not large enough to meet the criteria of the Dam Safety Program. DPL's self assessment rates this is an extremely low hazard, in-ground concrete pump basin. The Northwest Pump House unit is regulated by the NYSDEC as part of the SPDES permit.

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

The pump house unit was commissioned in 1986 and has not been 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 pump house unit is a below-grade concrete basin that is used to collect coal pile runoff and occasional boiler and air preheater wash water which is transferred to the equalization basin by pump and may contain some coal fines and flyash before being treated by the waste water treatment system. The washes are performed periodically and any collected coal fines or fly ash transferred to the equalization basin are removed from the basin with a small loader and eventually transported to Dunkirk Station's off-site ash landfill.

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?

The pump house unit was designed by a PE and the drawings contain a PE stamp. Typically, the

previous owner's construction services group supervised all onsite construction projects. DPL does not have detailed records on the construction of this unit. This below-grade concrete basin only contains boiler wash water for a limited period of time; it is inspected by the operations department during use but not under the supervision of a PE.

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?

When in use, the condition of the pump house unit is assessed on a weekly basis by Dunkirk Station personnel with regard to operational safety. If problems of a severe nature are observed, such as concrete wall failure, DPL would consult with DPL engineers experienced in this area or with external geotechnical engineers. No significant safety issues have been observed with respect to the basin during recent inspections. Plans are to continue with the weekly inspection conducted by Dunkirk Station staff and perform assessments by a company civil engineer as needed.

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.

The last inspection of northwest pump house was performed on March 25, 2009 by a NYSDEC Water Division engineer during a SPDES inspection, at which time no problems were observed for the system. At this time, DPL is not aware of any additional planned state or federal inspection or evaluation in the future.

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 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.

Surface area: 216 sq. ft. (12'x18'); Storage capacity: 0.02 acre ft. Liquid volume approximately 900 gallons. Unit is below grade. The volume varies depending on the number of air preheater

washes that are performed during unit outages. A very nominal amount of ash related solids are present after boiler/precipitator washes but solids are primarily coal fines. At present we estimate basin has approximately 900 gallons of liquid; DPL estimates that approximately 1.0 cubic yards of solids are present at the bottom of the basin.

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).

There have been no known spills or unpermitted releases from the pump house unit in the last ten years.

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

The legal owner and operator is DPL Dunkirk Power, LLC.

ATTACHMENT C
Settling Pond System
Dunkirk Electric Generating Station

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 residues or by-products, but still contain free liquids.

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 does not have a rating, please note that fact.

The settling pond system has no rating because it does not meet the applicability criteria of the New York State Dam Safety Program. Non-hazardous waste surface impoundments which are part of an approved waste water treatment process (i.e., SPDES permit) are exempt from the states Dam Safety Program. The settling pond system has no rating; DPL's self assessment rates this is a low hazard. Berm height varies from 0' (or grade) to a maximum height of 5'. Spillage would be limited to the owner's property. The settling pond discharge is regulated by the NYSDEC as part of the SPDES permit.

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

The in-service date for the settling pond system is unknown. The last modification was done in 1987 when the settling ponds were lined or partially lined.

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 settling pond system is a surface pond collection system used to collect bottom ash from the bottom ash handling system (Hydrobins) and to contain minor amounts of flyash from roadway washdown from the vicinity of the fly ash silo.

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?

The settling ponds were designed by the previous owner's engineering department which was under the direction of a PE. Typically, the previous owner's construction services group supervised all onsite construction projects. DPL does not have detailed records on the design and construction of this unit.

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?

The condition of the settling pond system is assessed by Dunkirk Station personnel during periodic (twice per month) sampling of the discharge. No significant safety issues have been observed with respect to the settling ponds during recent inspections. Plans are to continue with the monthly inspections conducted by Dunkirk Station staff and to perform an annual assessment by Dunkirk Station engineering staff.

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.

The last inspection and walkthrough of the settling pond system was performed on March 25, 2009 by a NYSDEC Water Division engineer during a SPDES inspection, at which time no problems were observed for the system. At this time, DPL is not aware of any additional planned state or federal inspection or evaluation in the future.

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.

None.

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.

The impoundment area consists of three interconnected ponds, with the ponds being in series with flow passing from one pond to the next to the next before discharge by pipe to an outfall that is regulated under the NYSDEC SPDES permit program. The total impounded surface area of the three interconnected ponds is 2.24 acres with an approximate total capacity of 11.6 acre-ft. The

berm height ranges from a maximum of 5' feet to a minimum of 0' (or grade). The total estimated liquid volume of the three interconnected ponds is 3,800,000 gallons. The amount of ash related solids is unknown. The first pond (input pond) is dredged on an annual basis, typically removing approximately 950 cubic yards of bottom ash. Based on this dredging cycle DPL estimates that at present the input pond has approximately 320 cubic yards of solids. The two additional ponds are rarely dredged as the majority of the solids settle in the first pond. The amount of solids in the second and third pond would be due to carry-over and can only be estimated as less than 50 cubic yards in the second and less than three cubic yards in the third. Water discharge from the system, from the third pond, is monitored twice a month for total suspended solids under the SPDES Permit and there has never been an exceedance for solids at the discharge from this system.

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).

There have been no known spills or unpermitted releases from the unit in the last ten years.

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

The legal owner and operator is DPL Dunkirk Power, LLC.