STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT RENEWAL/MODIFICATION APPLICATION

LOCKWOOD ASH DISPOSAL SITE

Prepared on behalf of:

Lockwood Hills LLC
590 Plant Road
P.O. Box 187
Dresden, New York 14441

Prepared by:

DAIGLER ENGINEERING, P.C.
CIVIL & GEO-ENVIRONMENTAL ENGINEERING
2620 Grand Island Blvd.
Grand Island, New York 14072-2131

May 2020

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Permit Renewal/Modification Application

Lockwood Hills LLC

TABLE OF CONTENTS

List of Figures

List of Attachments

1 INTRODUCTION

Lockwood Hills LLC (Lockwood Hills) operates the Lockwood Ash Disposal Site (Lockwood or Landfill) located in the Town of Torrey, Yates County, New York on Swarthout Road. The Facility is bounded by Swarthout Road to the east, Feagle Road to the south, and NYS Route 14 to the north. The Keuka Lake Outlet bounds Lockwood to the west flowing past the Landfill in an approximate 100-foot deep ravine.

Lockwood Hills maintains a 6 NYCRR Part 360 Solid Waste Management Facility permit (Permit No. 8-5736-00005/00003-0) for this facility. The permit issued by the New York State Department of Environmental Conservation (NYSDEC) allows Lockwood to accept ash and wastewater treatment plant sludge. Stormwater and leachate discharge from the Landfill are managed in accordance with the requirements of State Pollutant Discharge Elimination System (SPDES) Permit No. NY-0107069.

On February 19, 2015, Lockwood Hills entered into a Consent Order (No. R8-20140710-47) with the NYSDEC to, in part, segregate stormwater from leachate. Segregation of the stormwater from the historic Leachate Pond was completed during the 2016 construction season after completing designed upgrades to Sediment Basin 1. All remaining stormwater improvements were completed in 2017. In 2019 the Leachate Pond was upgraded into the Treatment Pond under NYSDEC-approved design and construction documents, through the installation of a geomembrane containment liner system and cascade aerator inlet structure. All Consent Order work was completed prior to November 1, 2019, and a certification report was submitted to NYSDEC on December 27, 2019.

A timely and complete application for renewal of Lockwood Hills' SPDES permit (NY-0107069) was submitted on May 29, 2015. In the application it was noted that the permit would likely require modification due to Consent Order (No. R8-20140710-47) which became effective only months earlier. NYSDEC issued a letter to Lockwood dated February 18, 2016, noting that based on the timely submittal of the renewal application, the Lockwood SPDES permit was extended under the State Administrative Procedures Act (SAPA). This letter is included as Attachment 1.

2 OUTFALL DESCRIPTIONS

2.1 GENERAL

The purpose of this requested permit modification is to redesignate the existing permitted outfall and to add two new sub-outfalls for the two sediment basins installed pursuant to the Consent Order.

2.2 EXISTING OUTFALL

The existing Lockwood SPDES permit has one permitted outfall, referred to as Outfall 001. Prior to completion of the Consent Order work, this outfall discharged a combination of contact stormwater and leachate from the Landfill through a well-defined, deeply-cut channel to the Keuka Lake Outlet in the ravine below. Samples for purpose of compliance with the SPDES Permit effluent limits were collected at the discharge structure of the Leachate Pond in accordance with permit conditions.

2.3 PROPOSED MODIFICATIONS

2.3.1 The System

As a result of stormwater/leachate segregation performed in accordance with Consent Order No. R8-20140710-47, existing Outfall 001 now receives only treated leachate discharge from the Treatment Pond. Contact stormwater was redirected to Sediment Basin 1 and Sediment Basin 2. Both sediment basins now receive contact stormwater, as well as non-contact stormwater. Contact stormwater is defined as precipitation runoff from areas of the landfill that are inactive or from other site operations. Non-contact stormwater is defined as runoff from undisturbed areas of the site or runon from areas offsite. All runoff from active areas of the Landfill where precipitation may come in contact with the waste is collected by the leachate collection and removal system and routed to the Treatment Pond. Discharges from the Treatment Pond and both Sediment Basins now combine in a sediment trap before discharging offsite through the same well-defined, deeply-cut channel to the Keuka Lake Outlet.

Based on these changes, a re-designation of existing Outfall 001 to Sub-Outfall 01A and the addition of two new sub-outfalls (01B and 01C) for discharges from Sediment Basins 1 and 2, respectively are proposed. Further, it is proposed that Outfall 001 represent the single discharge

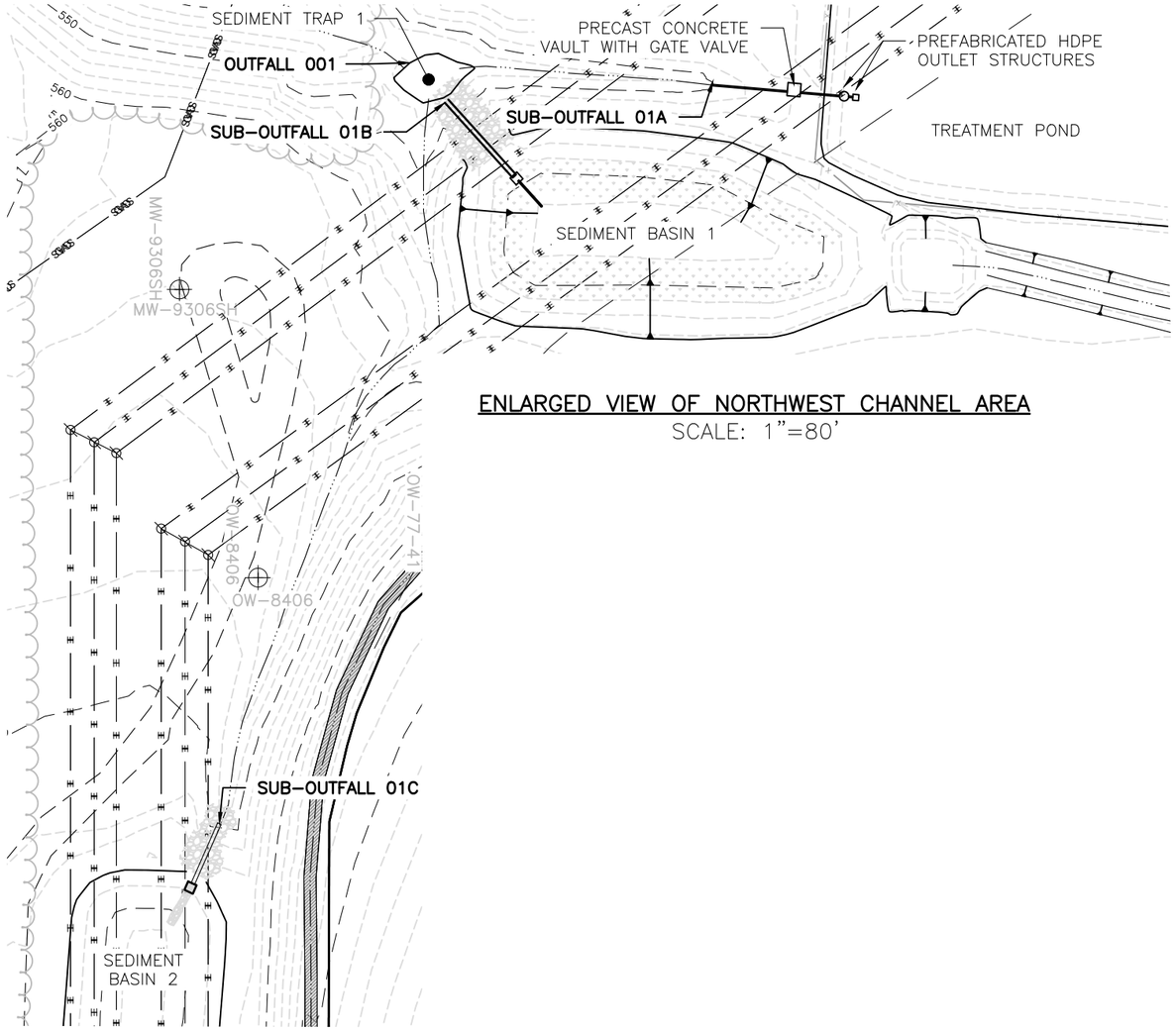
of all three sub-outfalls to the Keuka Lake Outlet. All proposed outfall locations and receiving waters are shown in Figure 1.

2.3.2 Sub-Outfall 01A

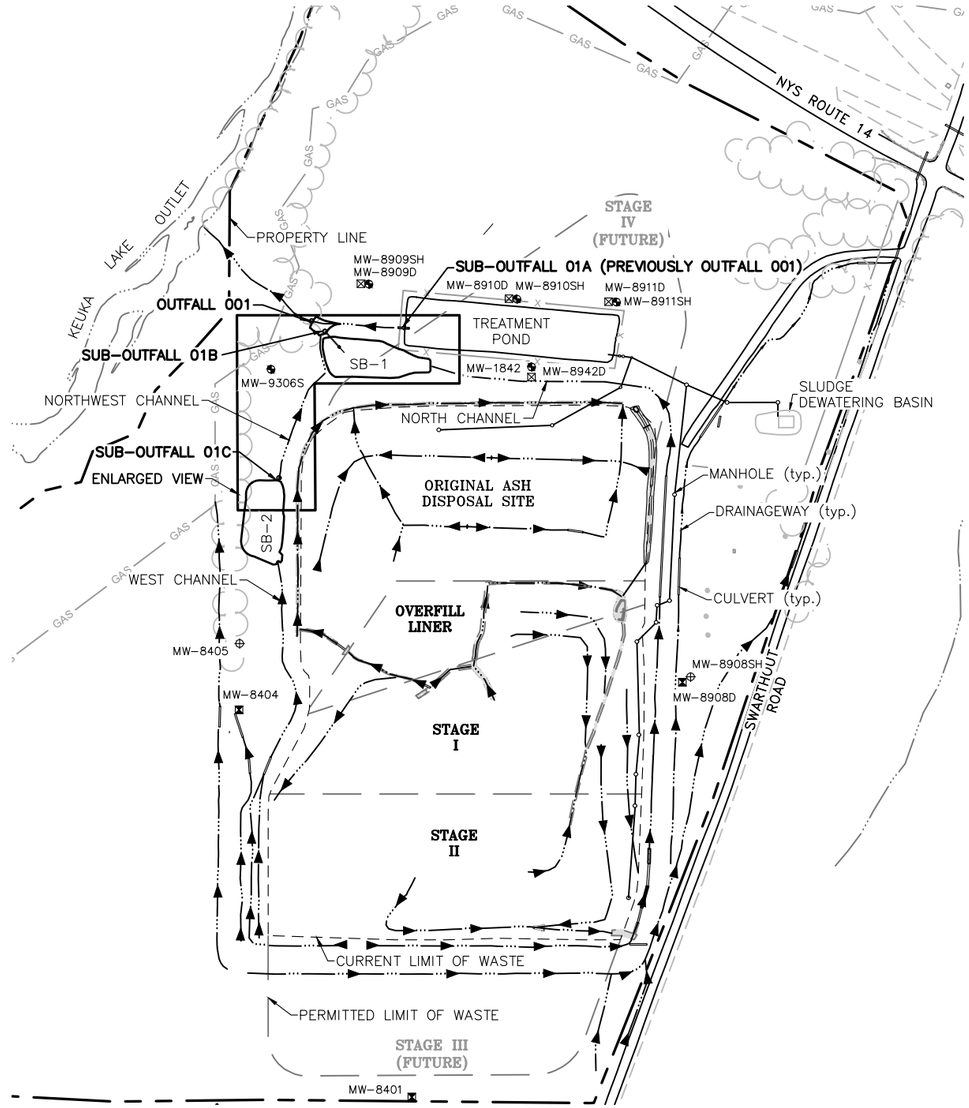
Sub-Outfall 01A (re-designated existing Outfall 001), will continue to operate as a batch discharge. Leachate is treated in the Treatment Pond through the incorporation of the step aerator at its inlet and settling within the Pond itself. When the liquid level in the Pond reaches a trigger depth (3.0 ft), a pre-discharge grab sample will be taken from the Pond using a long-handled scoop from the shore near the Pond discharge structures to confirm the effluent limits will be met and a discharge event will be scheduled. Discharge events will be initiated by opening the gate valve on the eight-inch diameter discharge pipe. Discharge events will be sampled using a composite sampler to collect 24-hour composites beginning on the first day of sampling. The composite sampler will be staged near the outlet end of the eight-inch discharge pipe and its intake tubing will be positioned to pull samples from the discharge channel at the end of the pipe. Composite samples will be analyzed for the SPDES-permitted parameters that require this sample type.

A grab sample will be taken upon collection of the composite sample for the measurement of field parameters (pH and temperature) and low-level mercury analysis. Grab samples will be taken directly into sample bottles from the outlet end of the eight-inch discharge pipe.

The rate of discharge will be controlled by operating the gate valve at less than 100% open. Flow rate from Sub-Outfall 01A will be estimated using the updated Stage-Storage curve provided in Attachment 2.



ENLARGED VIEW OF NORTHWEST CHANNEL AREA
SCALE: 1"=80'



LOCKWOOD ASH DISPOSAL SITE OUTFALL LOCATION MAP
SCALE: 1"=400'

Q:\Lockwood Hills LLC\31-1619 Consent Order 2019\SPDES Permit Modification\AutoCAD\Proposed Outfall Locations.dwg 5/22/2020 9:51 AM

NO.	REVISION	BY	DATE

DAIGLER ENGINEERING, P.C.
CIVIL & GEO-ENVIRONMENTAL ENGINEERING
2620 GRAND ISLAND BLVD. GRAND ISLAND, NEW YORK 14072
(716) 773-6872 (716) 773-6873 FAX
JAMES A. DAIGLER, P.E.
NYSPE NO. 061689

DATE: May 2020

SCALE: NOTED

PREPARED FOR: LOCKWOOD HILLS LLC			PROPOSED OUTFALL LOCATIONS SPDES PERMIT RENEWAL/MODIFICATION APPLICATION
DES. BY:	DRW. BY:	CHK. BY:	
DWG: Proposed Outfall Locations.dwg	TOWN OF TORREY	YATES COUNTY	NEW YORK

FIGURE 1

2.3.3 Sub-Outfalls 01B and 01C

Proposed Sub-Outfalls 01B and 01C are located at the discharge point of Sediment Basins 1 and 2, respectively. Following the redesign of the stormwater system, the two sediment basins both now receive contact and non-contact stormwater in addition to groundwater discharges. Sediment Basin 1 is located north of the Original Ash Disposal Site (OADS) and receives contact and non-contact stormwater originating in the north, east, and southeast portion of the Landfill in addition to the area north of the OADS. Sediment Basin 2 is located west of the constructed portion of the Landfill and collects contact and non-contact stormwater originating from the west and southwest portion of the Landfill. Swales, perimeter channels, and downchutes are utilized to convey stormwater away from active landfilling areas to one of the sediment basins. Groundwater input to Sediment Basins 1 and 2 are from groundwater drains GWD-1 and GWD-2, respectively.

Discharges from Sediment Basins 1 and 2 are precipitation dependent. They are designed with permanent storage for the calculated water quality volume which will capture most lower return frequency storm events. Therefore, discharges should be associated only with storm events with a return frequency of around 1-yr or higher or during consecutive smaller events. Should wet weather sampling be required, samples can be collected from the end of the 30-inch or 24-inch corrugated HDPE discharge pipe from the square concrete discharge structures of Sediment Basins 1 and 2, respectively. Dry weather sampling events will be from the ponded water in the Sediment Basins.

2.3.4 Outfall 001

While not considered a permanent structure, the Sediment Trap 1 combines the discharges from the three separate sub-outfalls then conveys the discharge over a rock-lined spillway in one single outfall. Discharge from Outfall 001 is proposed to be sampled from the channel immediately downstream of the spillway. It is proposed that should wet weather sampling of Sediment Basin 1 and 2 be required, that a combined wet weather sample representative of both Sub-Outfalls 01B and 01C be collected from this location, provided the Treatment Pond was not concurrently being batch discharged.

3 PERMIT FORMS

The following forms have been completed and are included in this section as part of the SPDES permit modification request:

- **Industrial Application Form NY-2C Section I – Permittee and Facility Information**
- **Industrial Application Form NY-2C Section II – Outfall Information**
- **Industrial Application Form NY-2C Section III – Sampling Information**
    - All effluent quality data required to be collected by the current SPDES permit (No. 0107069) has been previously submitted as part of quarterly Discharge Monitoring Reports (DMRs), so data for the following total metals for Sub-Outfall 01A are not included with existing effluent quality data provided for Sub-Outfall 01A.
        - Aluminum; Arsenic; Boron; Cadmium; Copper; Iron; Mercury; Manganese; Selenium; and Zinc.
    - Data provided in the Existing Effluent Quality table for Sub-Outfall 01A are based on grab samples taken from the Leachate Pond from 2015 through the second quarter of 2019 and from the Treatment Pond during the last two quarters of 2019 as part of the Part 360 Environmental Monitoring Program.
    - No samples have been taken for proposed Outfall/Sub-Outfalls 001, 01B, and 01C. The effluent quality data collected for Sub-Outfall 01A (previously Outfall 001) have been used to estimate water quality for Outfall/Sub-Outfalls 001, 01B, and 01C. In cases where Leachate Pond data were used to supplement Sub-Outfall 01A sampling data, these data were used to estimate expected effluent quality in Outfall/Sub-Outfalls 001, 01B and 01C. Discharge from Sub-Outfall 01A flows to Outfall 001 and contact stormwater from the Landfill drains to Sediment Basins 1 and 2, so there is reason to believe that some or all of the parameters detected in Sub-Outfall 01A will be detected in these other three outfalls. Because discharge from Sub-Outfall 01A contains process wastewater it is expected that projected effluent concentrations provided in this application for

Outfall/Sub-Outfalls 001, 01B, and 01C are conservative or representative of worst-case scenarios for these outfalls. Discharges from the new sub-outfalls will not require additional treatment to comply with permit limitations.

ATTACHMENT 1

February 18, 2016 NYSDEC Notice of SAPA Extension

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Permits & Pollution Prevention
625 Broadway, 4th Floor, Albany, New York 12233-1750
P: (518) 402-9167 | F: (518) 402-9168 | deppermitting@dec.ny.gov
www.dec.ny.gov

February 18, 2016

Dale Irwin
Lockwood Hills LLC
PO Box 187
Dresden, NY 14441

Re: Facility: Lockwood Ash Disposal Landfill
DEC No.: 8-5736-00005
SPDES No.: NY0107069

Dear Permittee:

On June 1, 2015, the department received your application to renew the referenced State Pollution Discharge Environmental System (SPDES) permit. Prior to moving forward with the administrative procedures required for permit renewal, the department will be undertaking a full technical review of the SPDES discharge to determine the need to incorporate new permit requirements under the Federal Clean Water Act.

Based on your timely and sufficient renewal application submission, your current permit will remain in effect after the expiration date under the provisions of the State Administrative Procedure Act (SAPA), should the department's technical review and the subsequent permit modification not be completed prior to the expiration date of the current permit.

The timing of the department's full technical review will be determined by the ranking of the discharge under the department's Environmental Benefit Permit Strategy (EBPS). The EBPS utilizes a number of criteria to score and rank a wastewater discharge, giving priority for technical review to those discharges with the greatest potential to cause environmental harm. During the next five years, depending on the facility's priority ranking, you will receive a "Request for Information" from the department seeking data to be used in the evaluation of the discharge and in the establishment of new provisions proposed for inclusion in the permit. Renewal application procedures, including public notice, will be commenced concurrently with proposed permit modifications. A decision on permit renewal and modification will be made following a consideration of comments from you and the public or after a public hearing, if a hearing is held.

If you have questions on the revised renewal procedure or SAPA, please contact me at (518) 402-9165. Questions on the federal requirements under the programs listed above and modification of your permit should be directed as follows:

Brian Baker @ (518) 402-8111

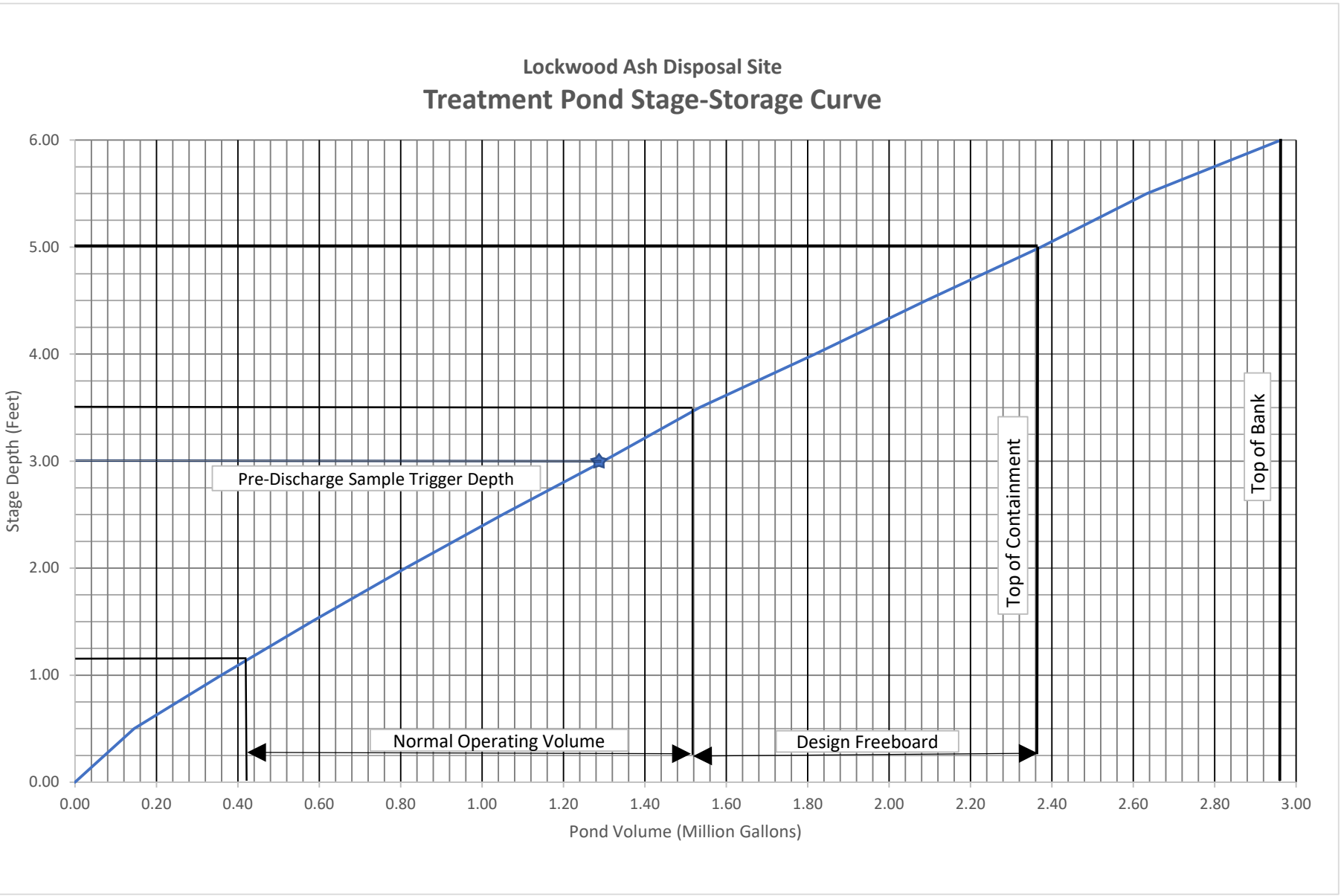
Sincerely,

Lindy Sue Czubernat
Environmental Program Specialist

cc: K. Tang
B. Baker
S. Rodabaugh – Region 8
S. Sheeley – Region 8
A. Arcaya – US EPA
P. Giamba – Committee to Preserve the Finger Lakes
A. Finneran
M. Kowalski
R. Teichler

ATTACHMENT 2

Treatment Pond Stage-Storage Curve



NOTE: Storage volumes determined using TIN Volume Surfaces created from record survey information in AutoCad Civil 3D 2019.

Lockwood Ash Disposal Site

Treatment Pond Stage-Storage Curve Data

		Pond Elevation* (feet)	Pond Incremental Depth (feet)	Cumulative Pond Volume (gallons)
	Permanent Pool	550	Dry - Top of Stone	Dry
		550.5	0.5	145,112
		551	1.0	358,910
Pond Drain	Operating Volume	**551.20**	**1.2**	417,729
		551.5	1.5	581,134
		552	2.0	811,719
		552.5	2.5	1,050,689
Pre-Discharge Sample Trigger Elev.		**553**	**3.0**	1,298,077
		553.5	3.5	1,533,934
	Design Freeboard	554	4.0	1,818,318
		554.5	4.5	2,091,308
Top of Containment		**555**	**5.0**	2,372,963
	Above Liner System	555.5	5.5	2,633,335
Top of Bank		**556**	**6.0**	2,962,915

*Vertical Control = Greenidge Station Site Datum.

Attachment 3

Form NY-2C

State Pollutant Discharge Elimination System (SPDES)

INDUSTRIAL APPLICATION FORM NY-2C

For New Permits and Permit Modifications to Discharge Industrial Wastewater and Storm Water

Section I - Permittee and Facility Information

Please type or print the requested information.

1. Current Permit Information (leave blank if for new discharge)

SPDES Number:	DEC Number:
NY-0107069	8-5736-00005/00001

2. Permit Action Requested: (Check applicable box)

- ☐ A **NEW** proposed discharge
- ☐ An **EBPS INFORMATION REQUEST** response
- ☑ A **RENEWAL** of an existing SPDES permit
- ☑ A **MODIFICATION** of the existing permit
- ☐ An **EXISTING** discharge currently without permit

Does this request include an increase in the quantity of water discharged from your facility to the waters of the State?

- ☐ **YES** - Describe the increase:
- ☑ **NO** - Go to Item 3. below.

3. Permittee Name and Address

Name: Lockwood Hills LLC		Attention: Dale Irwin
Street Address: 590 Plant Road, PO Box 187		
City or Village: Dresden	State: NY	ZIP Code: 14441

4. Facility Name, Address and Location

Name: Lockwood Ash Disposal Site			
Street Address: Swarthout Road		P.O. Box	
City or Village: Dresden	State: NY	ZIP Code: 14441	
Town: Torrey	County: Yates		
Telephone: 315-536-2359	FAX	NYTM - E: 335.4	NYTM - N: 4726.8
Tax Map Info (New York City, Nassau County and Suffolk County only)			
Section	Block	Subblock	Lot

5. Facility Contact Person

Name: Dale Irwin		Title: President	
Street Address: 590 Plant Road, PO Box 187			P.O. Box
City or Village: Dresden		State: NY	ZIP Code: 14441
Telephone: 315-536-2359	FAX	E-Mail or Internet: dirwin@greenidgellc.com	

6. Discharge Monitoring Report (DMR) Mailing Address

Mailing Name: Lockwood Hills LLC			
Street Address: 590 Plant Road, PO Box 187			P.O. Box
City or Village: Dresden		State: NY	ZIP Code: 14441
Telephone: 315-536-2359	FAX	E-Mail or Internet: dirwin@greenidgellc.com	
Name and Title of person responsible for signing DMRs: Dale Irwin/President		Signature: DALE IRWIN	

INDUSTRIAL APPLICATION FORM NY-2C
Section I - Permittee and Facility Information

Facility Name:	SPDES Number:
Lockwood Ash Disposal Site	NY-0107069

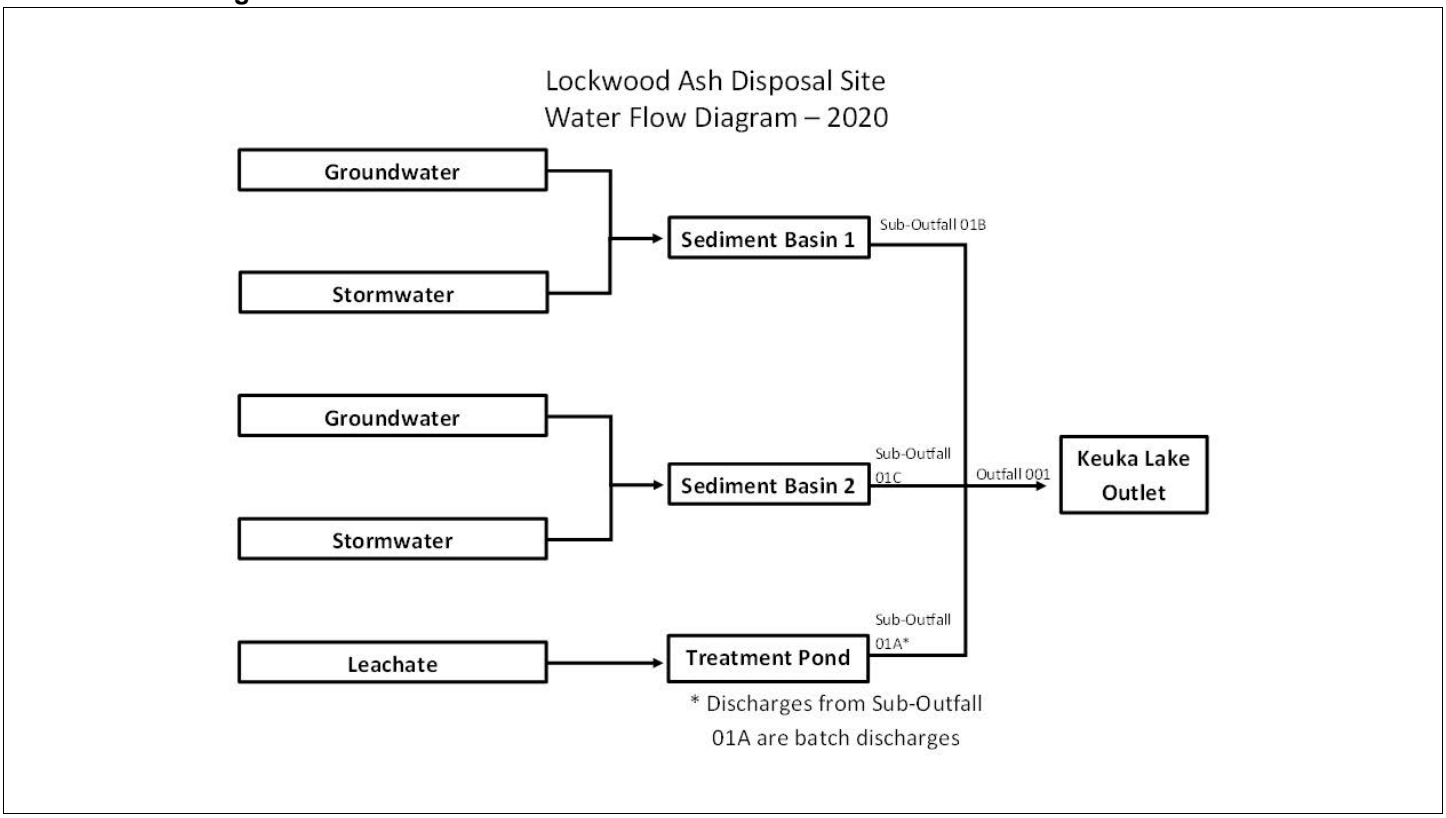
7. Summarize the outfalls present at the facility:

Outfall Number	Receiving Water	Type of discharge
001	Keuka Lake Outlet	Combined stormwater, groundwater and treated leachate
01A	Keuka Lake Outlet	Treated leachate
01B	Keuka Lake Outlet	Contact and non-contact stormwater
01C	Keuka Lake Outlet	Contact and non-contact stormwater

8. Map of Facility and Discharge Locations:

Provide a detailed map showing the location of the facility, all buildings or structures present, wastewater discharge systems, outfall locations into receiving waters, nearby surface water bodies, water supply wells, and groundwater monitoring wells, and attach it to this application. Also submit proof, either by indication on the map or other documentation, that a right of way for the discharges exists from the facility property to a public right of way.

9. Water Flow Diagram:



INDUSTRIAL APPLICATION FORM NY-2C
Section I - Permittee and Facility Information

Facility Name:	SPDES Number:
Lockwood Ash Disposal Site	NY-0107069

10. Nature of business: (Describe the activities at the facility and the date(s) that operation(s) at the facility commenced)

Lockwood operates a ash disposal site in the Town of Torrey, Yates County, New York. Lockwood maintains a 6 NYCRR Part 360 Solid Waste Management Facility Permit (Permit No. 8-5736-00005/00003-0) for this facility.

11. List the 4-digit SIC codes which describe your facility in order of priority:

Priority 1	Description:	Priority 3	Description:
4 9 5 3	Refuse System (Ash disposal site)		
Priority 2	**Description:**	**Priority 4**	**Description:**

12. Is your facility a primary industry as listed in Table 1 of the instructions?

[ ] **YES -** Complete the following table.

[No] **NO** - Go to Item 13. below.

Industrial Category	40 CFR		Industrial Category	40 CFR	
	Part	Subpart		Part	Subpart

13. Does this facility manufacture, handle, or discharge recombinant-DNA, pathogens, or other potentially infectious or dangerous organisms?

[ ] **YES** - Attach a detailed explanation to this application.

[No] **NO** - Go to Item 14 below.

14. Is storm runoff or leachate from a material storage area discharged by your facility?

[ ] **YES -** Complete the following table, and show the location of the stockpile(s) and discharge point(s) on the diagram in Item 9.

[No] **NO** - Go to Item 15 on the following page.

Size of area	Type(s) of material stored	Quantity of material stored	Runoff control devices

INDUSTRIAL APPLICATION FORM NY-2C
Section I - Permittee and Facility Information

Facility Name:	SPDES Number:
Lockwood Ash Disposal Site	NY-0107069

15. Facility Ownership: (Place an "X" in the appropriate box)

Corporate [X] Sole Proprietorship [ ] Partnership [ ] Municipal [ ] State [ ] Federal [ ] Other [ ]

Are any of the discharges applied for in this application on Indian lands? Yes [ ] No [X]

16. List information on any other environmental permits for this facility:

Issuing Agency	Permit Type	Permit Number	Permit Status		
			Active	Applied for	Inactive
NYSDEC	6 NYCRR Part 360 Solid Waste Management	8-5736-00005/00003-0	X		

17. Laboratory Certification:

Were any of the analyses reported in Section III of this application performed by a contract laboratory or a consulting firm?

[Yes] **YES -** Complete the following table.

[ ] **NO** - Go to Item 18 below.

Name of laboratory or consulting firm	Address	Telephone (area code and number)	Pollutants analyzed
Adirondack Environmental Services, Inc.	314 North Pearl Street, Albany, NY 12207	(518) 434-4546	Al, Alkalinity - Total (as CaCO3), As, B, Ba, Ca, Cd, Cl, Color, Cr, Cu, Fe, Hg, K, Mg, Mo, Na, Ni, Nitrogen - Ammonia (as N), Se, Sulfate (as S04), Total Hardness (as CaCO3), and Zn

18. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision 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 or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title (type or print)		Date signed
Dale Irwin		5/29/2020
Signature	Telephone number	FAX number
DALE IRWIN	(315) 536-2359	

INDUSTRIAL APPLICATION FORM NY-2C
Section I - Permittee and Facility Information

Facility Name:	SPDES Number:
Lockwood Ash Disposal Site	NY-0107069

19. Industrial Chemical Survey (ICS)

Complete all information for those substances your facility has used, produced, stored, distributed, or otherwise disposed of in the past five (5) years at or above the threshold values listed in the instructions. Include substances manufactured at your facility, as well as any substances that you have reason to know or believe present in materials used or manufactured at your facility. Do not include chemicals used only in analytical laboratory work, or small quantities of routine household cleaning chemicals. Enter the name and CAS number for each of the chemicals listed in Tables 6-10 of the instructions, and the table number which lists the chemical. You may use ranges (e.g. 10-100 lbs., 100-1000 lbs., 1000-10000 lbs., etc.) to describe the quantities used on an annual basis as well as for the amount presently on hand. For those chemicals listed in Tables 6, 7, or 8 which are indicated as being potentially present in the discharge from one or more outfalls at the facility, indicate which outfalls may be affected in the appropriate column below, and include sampling results in Section III of this application for each of the potentially affected outfalls. Make additional copies of this sheet if necessary.

Name of Substance	Table	CAS Number	Average Annual Usage	Amount Now On Hand	Units (gallons, lbs, etc)	Purpose of Use (see codes in Table 2 of instructions)	Present in Discharge? (Outfall(s)?)

This completes Section I of the SPDES Industrial Application Form NY-2C. Section II, which requires specific information for each of the outfalls at your facility, and Section III, which requires sampling information for each of the outfalls at your facility, must also be completed and submitted with this application.

State Pollutant Discharge Elimination System (SPDES)

INDUSTRIAL APPLICATION FORM NY-2C

For New Permits and Permit Modifications to Discharge Industrial Wastewater and Storm Water

Section II - Outfall Information

Please type or print the requested information.

Facility Name:	SPDES Number:
Lockwood Ash Disposal Site	NY-0107069

1. Outfall Number and Location

Outfall No.:		
001		
Latitude	Longitude	Receiving Water
42° 40' 33.76"	-76° 57' 45.60"	Keuka Lake Outlet

2. Type of Discharge and Discharge Rate (List all information applicable to this outfall)

	Volume/Flow	Units MGD	Units GPM	Units Other (specify)		Volume/Flow	Units MGD	Units GPM	Units Other (specify)
a. Process Wastewater	112,894			GPD	f. Noncontact Cooling Water				
b. Process Wastewater					g. Remediation System Discharge				
c. Process Wastewater					h. Boiler Blowdown				
d. Process Wastewater					i. Storm Water	Precipitation dependent			
e. Contact Cooling Water					j. Sanitary Wastewater				
k. Other discharge (specify): Groundwater						520.2			GPD
l. Other discharge (specify):									

3. List process information for the Process Wastewater streams identified in 2.a-d above:

a. Name of the process contributing to the discharge			Process SIC code:
Disposal of ash/coal combustion residuals			4 9 5 3
Describe the contributing process	Category: Refuse systems / Subcategory: Refuse systems, nec	Quantity per day	Units of measure
Leachate from the disposal of ash/coal combustion residuals		112,894	gal
b. Name of the process contributing to the discharge			Process SIC code:
Describe the contributing process	Category / Subcategory	Quantity per day	Units of measure
c. Name of the process contributing to the discharge			Process SIC code:
Describe the contributing process	Category / Subcategory	Quantity per day	Units of measure
d. Name of the process contributing to the discharge			Process SIC code:
Describe the contributing process	Category / Subcategory	Quantity per day	Units of measure

4. Expected or Proposed Discharge Flow Rates for this outfall: Precipitation dependent

a. Total Annual Discharge	b. Daily Minimum Flow	c. Daily Average Flow	d. Daily Maximum Flow	e. Maximum Design flow rate
MG	MGD	MGD	MGD	MGD

INDUSTRIAL APPLICATION FORM NY-2C
Section II - Outfall Information

Facility Name:	Outfall No.:
Lockwood Ash Disposal Site	001
	SPDES Number: NY-0107069

5. Is this a seasonal discharge?

Yes **YES -** Complete the following table.

NO - Go to Item 6 below.

* The current SPDES permit conditions do not allow flows greater than 250,000 gpd. The daily maximum flow rate during the last twelve months was 350,000 gpd, which occurred due to an employee error at the facility.

Operations contributing flow (list)	Discharge frequency		Flow				
	Batches per year	Duration per batch	Flow rate per day LTA	Flow rate per day Daily Max	Total volume per discharge	Units	Duration (Days)
Batch discharge from Treatment Pond	3 to 5	15.5 days	112,894 gpd	250,000* gpd	2,300,000	gal	13
Discharge from Sediment Basin 1		Precipitation dependent					
Discharge from Sediment Basin 2		Precipitation dependent					

6. Water Supply Source (indicate all that apply)

	Name or owner of water supply source	Volume or flow rate	Units (check one)		
Municipal Supply			MGD	GPD	GPM
Private Surface Water Source			MGD	GPD	GPM
Private Supply Well			MGD	GPD	GPM
Other (specify)	Groundwater & precipitation	Precipitation dependent	MGD	GPD	GPM

7. Outfall configuration: (Surface water discharges only)

A. Where is the discharge point located with respect to the receiving water?

In the streambank:	X	
In the stream:		
Within a lake or ponded water:		
Within an estuary:		Attach Supplement C, MIXING ZONE REQUIREMENTS FOR DISCHARGES TO ESTUARIES.
Discharge is equipped with diffuser:		Attach description, including configuration and plan drawing of diffuser, if used.

B. If located in a stream, approximately what percentage of stream width from shore is the discharge point located?

10% _____ **25%** _____ **50%** _____ **Other:** _____

C. If located in a stream, describe the stream geometry in the general vicinity of the discharge point, under low flow conditions:

Stream width	Stream depth	Stream velocity
Feet	**Feet**	**Feet/Sec**

Are the results of a mixing/diffusion study attached? _____ **YES** _____ **NO**

Section II - Outfall Information

Facility Name:	Outfall No.:
Lockwood Ash Disposal Site	001
	SPDES Number: NY-0107069

8. Thermal Discharge Criteria

Is your facility one of the applicable types of facilities listed in the instructions, and does the temperature of this discharge exceed the receiving water temperature by greater than three (3) degrees Fahrenheit?

[ ] **YES -** Complete the following table.

[No] **NO** - Go to Item 9. below.

[ ] **Information on the intake and discharge configuration of this outfall is attached**.

Discharge Temperature, deg. F			Duration of maximum discharge temperature		Dates of maximum discharge temperature		Maximum flow rate	Discharge configuration (e.g. subsurface, surface, effluent diffuser, diffusion well, etc.)
Average change in temperature (delta T)	Maximum change in temperature (delta T)	Maximum temperature	hours per day	days per year	From	To	MGD	

9. Are any water treament chemicals or additives that are used by your facility subsequently discharged through this outfall?

[ ] **YES -** Complete the following table and complete pages 1 of 3 and 2 of 3 of Form WTCFX for each water treatment chemical listed.

[No] **NO** - Go to Item 10. below.

Manufacturer	WTC trade name	Manufacturer	WTC trade name

10. Has any biological test for acute or chronic toxicity been performed on this outfall or on the receiving water in relation to this outfall in the past three (3) years?

[ ] **YES -** Complete the following table.

[No] **NO** - Go to Item 11. on the following page.

Water tested	Purpose of test	Type of test	Chronic or Acute?	Subject species	Testing date(s)		Submitted? (Date)
					Start	Finish	

INDUSTRIAL APPLICATION FORM NY-2C
Section II - Outfall Information

Facility Name:	Outfall No.:
Lockwood Ash Disposal Site	001
	SPDES Number: NY-0107069

11. Is the discharge from this outfall treated to remove process wastes, water treatment additives, or other pollutants?

Yes **YES -** Complete the following table. Treatment codes are listed in Table 4.

☐ **NO** - Go to Item 12 below.

Treatment process	Treatment Code(s)	Treatment used for the removal of:	Design Flow Rate (include units)
Sedimentation	1-U	Suspended solids and associated pollutants	25,000 GPD
Unlisted Process - A cascade aerator was installed at the inlet to the Treatment Pond to increase dissolved oxygen (DO) in leachate	6-A	Promote oxidation of ferrous iron to iron hydroxide precipitate	25,000 GPD

12. Does this facility have either a compliance agreement with a regulating agency, or have planned changes in production, which will materially alter the quantity and/or quality of the discharge from this outfall?

Yes **YES -** Complete the following table.

☐ **NO** - Go to Section III on the following page.

Description of project	Subject to Condition or Agreement in existing permit or consent order? (List)	Change due to production increase?	Completion Date(s)	
			Required	Projected
Leachate pond remediation	Consent order: R8-20140710-47	No		Upon submission of Part 360 Permit Renewal/ Mod Application

This completes Section II of the SPDES Industrial Application Form NY-2C. Section I, which requires general information regarding your facility, and Section III, which requires sampling information for each of the outfalls at your facility, must also be completed and submitted with this application.

INDUSTRIAL APPLICATION FORM NY-2C
Section III - Sampling Information

Facility Name:	SPDES No.:	Outfall No.:
Lockwood Ash Disposal Site	NY-0107069	001

1. Sampling Information - Conventional Parameters

Sub-Outfall 01A data used.

Provide the analytical results of at least one analysis for every pollutant in this table. If this outfall is subject to a waiver as listed in Table 5 of the instructions for one or more of the parameters listed below, provide the results for those parameters which are required for this type of outfall.

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (using the same format) instead of completing this page.

Pollutant	Effluent data							Units		Intake data (optional)		
	a. Maximum daily value		b. Maximum 30 day value		c. Long term average		d. Number of analyses	a. Concentration	b. Mass	a. Long term average value		b. Number of analyses
	1. Concentration	2. Mass	1. Concentration	2. Mass	1. Concentration	2. Mass				1. Concentration	2. Mass	
a. Biochemical Oxygen Demand, 5 day (BOD)												
b. Chemical Oxygen Demand (COD)												
c. Total Suspended Solids (TSS)	42.0	39.7	42.0	39.7	7.2	3.4	15	mg/L	Kg			
d. Total Dissolved Solids (TDS)	3,300	3,123	3,300	3,123	1941	911	20	mg/L	Kg			
e. Oil & Grease												
f. Chlorine, Total Residual (TRC)												
g. Total Organic Nitrogen (TON)												
h. Ammonia (as N)	0.2	189	0.2	189	0.06	28.2	20	mg/L	g			
i. Flow	Value 250,000		Value 250,000		Value 123,974		15	gpd		Value		
j. Temperature, winter	Value 76.5 °F		Value 76.5 °F		Value 51.9 °F		6			Value		
k. Temperature, summer	Value 89.6 °F		Value 89.6 °F		Value 64.8 °F		9			Value		
l. pH	Minimum 7.3	Maximum 8.6	Minimum 7.3	Maximum 8.6	8.11		15			Minimum	Maximum	

2. Sampling Information - Priority Pollutants, Toxic Pollutants, and Hazardous Substances

a. Primary Industries:

i. Does the discharge from this outfall contain process wastewater?

- [ ] **Yes** - Go to Item **ii.** below.
- [ ] **No** - Go to Item **b.** below.

ii. Indicate which GC/MS fractions have been tested for: Volatiles: [ ] Acid: [ ] Base/Neutral: [ ] Pesticide: [ ]

b. All applicants:

i. Do you know or have reason to believe that any of the pollutants listed in Tables 6, 7, or 8 of the instructions are present in the discharge from this outfall?

- [Yes] **Yes** - Concentration and mass data attached.
- [ ] **No** - Go to Item **ii.** below.

ii. Do you know or have reason to believe that any of the pollutants listed in Table 9 or Table 10 of the instructions, or any other toxic, harmful, or injurious chemical substances not listed in Tables 6-10, are present in the discharge from this outfall?

- [ ] **Yes** - Source or reason for presence in discharge attached
- [ ] **Yes** - Quantitative or qualitative data attached
- [No] **No**

INDUSTRIAL APPLICATION FORM NY-2C
Section III - Sampling Information

Facility Name: Lockwood Ash Disposal Site	SPDES No.: NY-0107069	Outfall No.: 001

3. Projected Effluent Quality - Priority Pollutants, Toxic Pollutants, and Hazardous Substances

Provide analytical results of at least one analysis for each pollutant that you know or have reason to believe is present in this discharge, as well as for any GC/MS fractions and metals required to be sampled from Section III Forms, Item 2.a on the preceding page. Sub-Outfall 01A data used.

List the name and CAS number for each pollutant that you know or have reason to believe is present in the discharge from this outfall. For each pollutant listed from Tables 6, 7, or 8, provide the results of at least one analysis for that pollutant, and determine the mass discharge based on the flow rate reported in Item 1.i. For each pollutant listed from Table 9, or any other toxic pollutant not listed in Tables 6-10, you must provide concentration and mass data (if available) and/or an explanation for their presence in the discharge. Make as many copies of this table as necessary for each outfall.

Page 1 of 2

Pollutant and CAS Number	Effluent data							Units		Intake data (optional)			Believed present, no sampling results available
	a. Maximum daily value		b. Maximum 30 day value *(if available)*		c. Long term average value *(if available)*		d. Number of analyses	a. Concentration	b. Mass	a. Long term average value		d. Number of analyses	
	(1)Concentration	(2) Mass	(1)Concentration	(2) Mass	(1)Concentration	(2) Mass				(1)Concentration	(2) Mass		
Alkalinity, Total (as CaCO3) CAS Number:	300	283			144	67.8	20	mg/L	Kg				
Aluminum,T/07439-90-5 CAS Number:	0.17	161			0.07	31.9	15	mg/L	g				
Arsenic, T/07440-38-2 CAS Number:	11.0	10.4			5.8	2.7	15	µg/L	mg				
Barium, T/07440-39-3 CAS Number:	225	213			80.2	37.6	5	µg/L	g				
Boron, T/07440-42-8 CAS Number:	23.1	21.9			15.3	7.2	15	mg/L	Kg				
Chloride CAS Number:	301	285			159	74.6	20	mg/L	Kg				
Cadmium, T/ 07440-43-9 CAS Number:	0.021	19.9			0.004	1.9	15	mg/L	g				
Chromium, T/07440-47-3 CAS Number:	9.3	8.8			4.9	2.3	5	µg/L	g				
Copper, T/07440-50-8 CAS Number:	0.018	17.0			0.006	2.8	15	mg/L	g				
Iron, T/07439-89-6 CAS Number:	0.7	662			0.28	131	15	mg/L	g				
Magnesium, T/07439-95-4 CAS Number:	128	121			73.9	34.7	20	mg/L	Kg				
Manganese, T/07439-96-5 CAS Number:	0.6	567.8			0.12	57.0	15	mg/L	Kg				
Mercury, T/07439-97-6 CAS Number:	0.0032	3.0			0.00068	0.32	15	µg/L	mg				

Monitoring data for Sub-Outfall 01A and Pond Grab data were used to calculate the Maximum Daily and Long-Term Averages provided in the table above. Given that these estimates are based on Sub-Outfall 01A data, we expect these estimates to be conservative or representative of worst-case scenario conditions. Non-detect data was treated as 1/2 the detection limit for calculating long term averages.

INDUSTRIAL APPLICATION FORM NY-2C
Section III - Sampling Information

Facility Name:	SPDES No.:	Outfall No.:
Lockwood Ash Disposal Site	NY-0107069	001

3. Projected Effluent Quality - Priority Pollutants, Toxic Pollutants, and Hazardous Substances

Provide analytical results of at least one analysis for each pollutant that you know or have reason to believe is present in this discharge, as well as for any GC/MS fractions and metals required to be sampled from Section III Forms, Item 2.a on the preceding page. Sub-Outfall 01A data used.

List the name and CAS number for each pollutant that you know or have reason to believe is present in the discharge from this outfall. For each pollutant listed from Tables 6, 7, or 8, provide the results of at least one analysis for that pollutant, and determine the mass discharge based on the flow rate reported in Item 1.i. For each pollutant listed from Table 9, or any other toxic pollutant not listed in Tables 6-10, you must provide concentration and mass data (if available) and/or an explanation for their presence in the discharge. Make as many copies of this table as necessary for each outfall.

Page 2 of 2

Pollutant and CAS Number	Effluent data							Units		Intake data (optional)			Believed present, no sampling results available
	a. Maximum daily value		b. Maximum 30 day value *(if available)*		c. Long term average value *(if available)*		d. Number of analyses	a. Concentration	b. Mass	a. Long term average value		d. Number of analyses	
	(1)Concentration	(2) Mass	(1)Concentration	(2) Mass	(1)Concentration	(2) Mass				(1)Concentration	(2) Mass		
Potassium, T/07440-09-7 CAS Number:	89.6	84.8			59.8	28.1	20	mg/L	Kg				
Selenium, T/07782-49-2 CAS Number:	0.016	15.1			0.0059	2.8	15	mg/L	g				
Sodium, T/07440-23-5 CAS Number:	329	311			163	76.4	20	mg/L	Kg				
Sulfate (as SO4)/14808-79-8 CAS Number:	1,740	1,647			1,005	472	20	mg/L	Kg				
Zinc, T/07440-66-6 CAS Number:	0.07	66.2			0.01	5.5	15	mg/L	g				
Color CAS Number:	15				7.5		4	CU					
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													

Monitoring data for Sub-Outfall 01A and Pond Grab data were used to calculate the Maximum Daily and Long-Term Averages provided in the table above. Given that these estimates are based on Sub-Outfall 01A data, we expect these estimates to be conservative or representative of worst-case scenario conditions. Non-detect data was treated as 1/2 the detection limit for calculating long term averages.

State Pollutant Discharge Elimination System (SPDES)

INDUSTRIAL APPLICATION FORM NY-2C

For New Permits and Permit Modifications to Discharge Industrial Wastewater and Storm Water

Section II - Outfall Information

Please type or print the requested information.

Facility Name:	SPDES Number:
Lockwood Ash Disposal Site	NY-0107069

1. Outfall Number and Location

Outfall No.:		
01A		
Latitude	Longitude	Receiving Water
40° 42' 33.59"	-76° 57' 42.54"	Keuka Lake Outlet

2. Type of Discharge and Discharge Rate (List all information applicable to this outfall)

	Volume/Flow	Units MGD	Units GPM	Units Other (specify)		Volume/Flow	Units MGD	Units GPM	Units Other (specify)
a. Process Wastewater	112,894			GPD	f. Noncontact Cooling Water				
b. Process Wastewater					g. Remediation System Discharge				
c. Process Wastewater					h. Boiler Blowdown				
d. Process Wastewater					i. Storm Water				
e. Contact Cooling Water					j. Sanitary Wastewater				
k. Other discharge (specify):									
l. Other discharge (specify):									

3. List process information for the Process Wastewater streams identified in 2.a-d above:

a. Name of the process contributing to the discharge			Process SIC code:
Disposal of ash/coal combustion residuals			4 | 9 | 5 | 3
Describe the contributing process	**Category / Subcategory**	**Quantity per day**	**Units of measure**
Leachate from the disposal of ash/coal combustion residuals	Category: Refuse systems Subcategory: Refuse systems, nec	112,894	gal
b. Name of the process contributing to the discharge			Process SIC code:
			| | |
Describe the contributing process	Category / Subcategory	Quantity per day	Units of measure
c. Name of the process contributing to the discharge			Process SIC code:
			| | |
Describe the contributing process	Category / Subcategory	Quantity per day	Units of measure
d. Name of the process contributing to the discharge			Process SIC code:
			| | |
Describe the contributing process	Category / Subcategory	Quantity per day	Units of measure

4. Expected or Proposed Discharge Flow Rates for this outfall:

a. Total Annual Discharge	b. Daily Minimum Flow	c. Daily Average Flow	d. Daily Maximum Flow	e. Maximum Design flow rate
6,200,000 gal	0 gpd	112,894 gpd	190,000 gpd	250,000 gpd

INDUSTRIAL APPLICATION FORM NY-2C
Section II - Outfall Information

Facility Name:	Outfall No.:
Lockwood Ash Disposal Site	01A
	SPDES Number: NY-0107069

5. Is this a seasonal discharge?

Yes **YES -** Complete the following table.

☐ **NO** - Go to Item 6 below.

* The current SPDES permit conditions do not allow flows greater than 250,000 gpd. The daily maximum flow rate during the last twelve months was 350,000 gpd, which occurred due to an employee error at the facility.

Operations contributing flow (list)	Discharge frequency		Flow				
	Batches per year	Duration per batch	Flow rate per day LTA	Flow rate per day Daily Max	Total volume per discharge	Units	Duration (Days)
Batch discharge from Settling Pond	3 to 5	15.5 days	112,894 gpd	250,000 gpd*	2,300,000	gal	13

6. Water Supply Source (indicate all that apply)

	Name or owner of water supply source	Volume or flow rate	Units (check one)		
Municipal Supply			MGD	GPD	GPM
Private Surface Water Source			MGD	GPD	GPM
Private Supply Well			MGD	GPD	GPM
Other (specify)	Precipitation	Precipitation dependent	MGD	GPD	GPM

7. Outfall configuration: (Surface water discharges only)

A. Where is the discharge point located with respect to the receiving water?

In the streambank: ☐

In the stream: ☐

Within a lake or ponded water: ☐

Within an estuary: ☐ Attach Supplement C, MIXING ZONE REQUIREMENTS FOR DISCHARGES TO ESTUARIES.

Discharge is equipped with diffuser: ☐ Attach description, including configuration and plan drawing of diffuser, if used.

This is a sub-outfall to Outfall 001.

B. If located in a stream, approximately what percentage of stream width from shore is the discharge point located?

10% ☐ **25%** ☐ **50%** ☐ **Other:**

C. If located in a stream, describe the stream geometry in the general vicinity of the discharge point, under low flow conditions:

Stream width	Stream depth	Stream velocity
Feet	**Feet**	**Feet/Sec**

Are the results of a mixing/diffusion study attached? ☐ **YES** ☐ **NO**

Section II - Outfall Information

Facility Name:	Outfall No.:
Lockwood Ash Disposal Site	01A
	SPDES Number: NY-0107069

8. Thermal Discharge Criteria

Is your facility one of the applicable types of facilities listed in the instructions, and does the temperature of this discharge exceed the receiving water temperature by greater than three (3) degrees Fahrenheit?

[ ] **YES -** Complete the following table.

[No] **NO** - Go to Item 9. below.

[ ] **Information on the intake and discharge configuration of this outfall is attached**.

Discharge Temperature, deg. F			Duration of maximum discharge temperature		Dates of maximum discharge temperature		Maximum flow rate	Discharge configuration (e.g. subsurface, surface, effluent diffuser, diffusion well, etc.)
Average change in temperature (delta T)	Maximum change in temperature (delta T)	Maximum temperature	hours per day	days per year	From	To	MGD	

9. Are any water treament chemicals or additives that are used by your facility subsequently discharged through this outfall?

[ ] **YES -** Complete the following table and complete pages 1 of 3 and 2 of 3 of Form WTCFX for each water treatment chemical listed.

[No] **NO** - Go to Item 10. below.

Manufacturer	WTC trade name	Manufacturer	WTC trade name

10. Has any biological test for acute or chronic toxicity been performed on this outfall or on the receiving water in relation to this outfall in the past three (3) years?

[Yes] **YES -** Complete the following table.

[ ] **NO** - Go to Item 11. on the following page.

Water tested	Purpose of test	Type of test	Chronic or Acute?	Subject species	Testing date(s)		Submitted? (Date)
					Start	Finish	
Discharge of Leachate Pond	SPDES Compliance	Whole Effluent Toxicity	Chronic	*Pimephales promelas &*	10/24/2016	10/28/2016	12/27/2016
				Ceriodaphnia dubia			

INDUSTRIAL APPLICATION FORM NY-2C
Section II - Outfall Information

Facility Name:	Outfall No.:
Lockwood Ash Disposal Site	01A
	SPDES Number: NY-0107069

11. Is the discharge from this outfall treated to remove process wastes, water treatment additives, or other pollutants?

Yes **YES -** Complete the following table. Treatment codes are listed in Table 4.

☐ **NO** - Go to Item 12 below.

Treatment process	Treatment Code(s)	Treatment used for the removal of:	Design Flow Rate (include units)
Sedimentation	1-U	Suspended solids and associated pollutants	25,000 GPD
Unlisted Process - A cascade aerator was installed at the inlet to the Treatment Pond to increase dissolved oxygen (DO) in leachate	6-A	Promote oxidation of ferrous iron to iron hydroxide precipitate	25,000 GPD

12. Does this facility have either a compliance agreement with a regulating agency, or have planned changes in production, which will materially alter the quantity and/or quality of the discharge from this outfall?

Yes **YES -** Complete the following table.

☐ **NO** - Go to Section III on the following page.

Description of project	Subject to Condition or Agreement in existing permit or consent order? (List)	Change due to production increase?	Completion Date(s)	
			Required	Projected
Leachate pond remediation	Consent order: R8-20140710-47	No		Upon submission of Part 360 Permit Renewal/ Mod Application

This completes Section II of the SPDES Industrial Application Form NY-2C. Section I, which requires general information regarding your facility, and Section III, which requires sampling information for each of the outfalls at your facility, must also be completed and submitted with this application.

INDUSTRIAL APPLICATION FORM NY-2C
Section III - Sampling Information

Facility Name:	SPDES No.:	Outfall No.:
Lockwood Ash Disposal Site	NY-0107069	01A

1. Sampling Information - Conventional Parameters

Provide the analytical results of at least one analysis for every pollutant in this table. If this outfall is subject to a waiver as listed in Table 5 of the instructions for one or more of the parameters listed below, provide the results for those parameters which are required for this type of outfall.

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (using the same format) instead of completing this page.

Pollutant	Effluent data							Units		Intake data (optional)		
	a. Maximum daily value		b. Maximum 30 day value		c. Long term average		d. Number of analyses	a. Concentration	b. Mass	a. Long term average value		b. Number of analyses
	1. Concentration	2. Mass	1. Concentration	2. Mass	1. Concentration	2. Mass				1. Concentration	2. Mass	
a. Biochemical Oxygen Demand, 5 day (BOD)												
b. Chemical Oxygen Demand (COD)												
c. Total Suspended Solids (TSS)	42.0	39.7	42.0	39.7	7.2	3.4	15	mg/L	Kg			
d. Total Dissolved Solids (TDS)	3,300	3,123	3,300	3,123	1941	911	20	mg/L	Kg			
e. Oil & Grease												
f. Chlorine, Total Residual (TRC)												
g. Total Organic Nitrogen (TON)												
h. Ammonia (as N)	0.2	189	0.2	189	0.06	28.2	20	mg/L	g			
i. Flow	Value 250,000*		Value 250,000*		Value 123,974		15	gpd		Value		
j. Temperature, winter	Value 76.5 °F		Value 76.5 °F		Value 51.9 °F		6			Value		
k. Temperature, summer	Value 89.6 °F		Value 89.6 °F		Value 64.8 °F		9			Value		
l. pH	Minimum 7.3	Maximum 8.6	Minimum 7.3	Maximum 8.6	8.11		15			Minimum	Maximum	

* The current SPDES permit conditions do not allow flows greater than 250,000 gpd. The daily maximum flow rate during the last twelve months was 350,000 gpd, which occurred due to an employee error at the facility.

2. Sampling Information - Priority Pollutants, Toxic Pollutants, and Hazardous Substances

a. Primary Industries:

i. Does the discharge from this outfall contain process wastewater?

- [ ] **Yes** - Go to Item **ii.** below.
- [ ] **No** - Go to Item **b.** below.

ii. Indicate which GC/MS fractions have been tested for: Volatiles: [ ] Acid: [ ] Base/Neutral: [ ] Pesticide: [ ]

b. All applicants:

i. Do you know or have reason to believe that any of the pollutants listed in Tables 6, 7, or 8 of the instructions are present in the discharge from this outfall?

- [Yes] **Yes** - Concentration and mass data attached.
- [ ] **No** - Go to Item **ii.** below.

ii. Do you know or have reason to believe that any of the pollutants listed in Table 9 or Table 10 of the instructions, or any other toxic, harmful, or injurious chemical substances not listed in Tables 6-10, are present in the discharge from this outfall?

- [ ] **Yes** - Source or reason for presence in discharge attached
- [ ] **Yes** - Quantitative or qualitative data attached
- [No] **No**

INDUSTRIAL APPLICATION FORM NY-2C
Section III - Sampling Information

Facility Name:	SPDES No.:	Outfall No.:
Lockwood Ash Disposal Site	NY-0107069	01A

4. Existing Effluent Quality - Priority Pollutants, Toxic Pollutants, and Hazardous Substances

Provide analytical results for the last three (3) years for each pollutant that you know or have reason to believe present in this discharge from this outfall, as well as for any GC/MS fractions and metals required to be sampled from Section III Forms, Item 2.a for this discharge.

Make as many copies of this table as necessary for each outfall. You can list the results from 24 sampling dates on each copy of this page.	Parameter name: Alkalinity, Total (as CaC03)	Parameter name: Barium, T	Parameter name: Chloride	Parameter name: Chromium, T	Parameter name: Color	Parameter name: Magnesium, T	Parameter name: Potassium
Page 1 Of 2	CAS Number:	CAS Number: 07440-39-3	CAS Number:	CAS Number: 07440-47-3	CAS Number:	CAS Number: 07439-95-4	CAS Number: 07440-09-7
Date	Flow rate	Concentration	Concentration	Concentration	Concentration	Concentration	Concentration	Concentration
	Units:	Units: mg/L(asCaCO3)	Units: µg/L	Units: mg/L	Units: µg/L	Units: CU	Units: mg/L	Units: µg/L
3/23/2015		84		10.9			7.92	4850
6/23/2015		60		173			83.8	55200
9/28/2015		87	28.9	143	<5 (1/2 DL = 2.5)	5	97	76100
11/18/2015		113		110			74.4	56700
3/14/2016		210		81.1			44	34600
6/13/2016		75		159			98.5	80800
9/14/2016		87		221			128	89600
12/5/2016		155	22.6	125	<5 (1/2 DL = 2.5)		68.4	58500
3/29/2017		195	24.6	110	9.27	5	45.3	41600
6/28/2017		88		160			68.5	45800
9/20/2017		110		156			82	70500
12/26/2017		300		197			94.9	81400
3/28/2018		290		185			62.3	58100
6/20/2018		84	<200 (1/2 DL = 100)	219	<10 (1/2 DL = 5)	15	95.8	83500
9/26/2018		96		176			80	53600
12/12/2018		220		154			57.4	58400
3/18/2019		220		92.9			32	31100
6/19/2019		84		241			65.3	69500
9/18/2019		210	225	301	<10 (1/2 DL = 5)	5	126	79300
11/20/2019		120		165			65.6	67800

NOTE: Results for parameters listed in the attached narrative were already submitted as part of quarterly DMRs. Sub-Outfall 01A is 001 in the existing permit. Data listed here are from grab samples taken from the Leachate Pond and therefore, have no associated flow rate.

INDUSTRIAL APPLICATION FORM NY-2C
Section III - Sampling Information

Facility Name:	SPDES No.:	Outfall No.:
Lockwood Ash Disposal Site	NY-0107069	01A

4. Existing Effluent Quality - Priority Pollutants, Toxic Pollutants, and Hazardous Substances

Provide analytical results for the last three (3) years for each pollutant that you know or have reason to believe present in this discharge from this outfall, as well as for any GC/MS fractions and metals required to be sampled from Section III Forms, Item 2.a for this discharge.

Make as many copies of this table as necessary for each outfall. You can list the results from 24 sampling dates on each copy of this page.	Parameter name: Sodium, T	Parameter name: Sulfate (as SO4)	Parameter name:	Parameter name:	Parameter name:	Parameter name:	Parameter name:
Page 2 Of 2	CAS Number: 07440-23-5	CAS Number: 14808-79-8	CAS Number:	CAS Number:	CAS Number:	CAS Number:	CAS Number:

Date	Flow rate	Concentration	Concentration	Concentration	Concentration	Concentration	Concentration	Concentration
	Units:	Units: mg/L	Units: mg/L	Units:	Units:	Units:	Units:	Units:
3/23/2015		11.8	66.7					
6/23/2015		200	1160					
9/28/2015		244	1130					
11/18/2015		92.8	959					
3/14/2016		72.5	615					
6/13/2016		217	1220					
9/14/2016		329	1740					
12/5/2016		138	899					
3/29/2017		106	627					
6/28/2017		121	927					
9/20/2017		140	1090					
12/26/2017		232	1240					
3/28/2018		167	1060					
6/20/2018		186	1330					
9/26/2018		219	1020					
12/12/2018		117	901					
3/18/2019		81.5	440					
6/19/2019		129	1060					
9/18/2019		298	1680					
11/20/2019		154	929					

NOTE: Results for parameters listed in the attached narrative were already submitted as part of quarterly DMRs. Sub-Outfall 01A is 001 in the existing permit. Data listed here are from grab samples taken from the Leachate Pond and therefore, have no associated flow rate.

State Pollutant Discharge Elimination System (SPDES)

INDUSTRIAL APPLICATION FORM NY-2C

For New Permits and Permit Modifications to Discharge Industrial Wastewater and Storm Water

Section II - Outfall Information

Please type or print the requested information.

Facility Name:	SPDES Number:
Lockwood Ash Disposal Site	NY-0107069

1. Outfall Number and Location

Outfall No.:		
01B		
Latitude	Longitude	Receiving Water
42° 40' 33.49"	-76° 57' 45.12"	Keuka Lake Outlet

2. Type of Discharge and Discharge Rate (List all information applicable to this outfall)

	Volume/Flow	Units MGD	Units GPM	Units Other (specify)		Volume/Flow	Units MGD	Units GPM	Units Other (specify)
a. Process Wastewater					f. Noncontact Cooling Water				
b. Process Wastewater					g. Remediation System Discharge				
c. Process Wastewater					h. Boiler Blowdown				
d. Process Wastewater					i. Storm Water	Precipitation dependent			
e. Contact Cooling Water					j. Sanitary Wastewater				
k. Other discharge (specify): Groundwater						520.2			GPD
l. Other discharge (specify):									

3. List process information for the Process Wastewater streams identified in 2.a-d above: N/A

a. Name of the process contributing to the discharge			Process SIC code: | | |
Describe the contributing process	Category / Subcategory	Quantity per day	Units of measure
b. Name of the process contributing to the discharge			Process SIC code: | | |
Describe the contributing process	Category / Subcategory	Quantity per day	Units of measure
c. Name of the process contributing to the discharge			Process SIC code: | | |
Describe the contributing process	Category / Subcategory	Quantity per day	Units of measure
d. Name of the process contributing to the discharge			Process SIC code: | | |
Describe the contributing process	Category / Subcategory	Quantity per day	Units of measure

4. Expected or Proposed Discharge Flow Rates for this outfall: Precipitation dependent

a. Total Annual Discharge	b. Daily Minimum Flow	c. Daily Average Flow	d. Daily Maximum Flow	e. Maximum Design flow rate
MG	MGD	MGD	MGD	MGD

INDUSTRIAL APPLICATION FORM NY-2C
Section II - Outfall Information

Facility Name:	Outfall No.:
Lockwood Ash Disposal Site	01B
	SPDES Number: NY-0107069

5. Is this a seasonal discharge?

Yes **YES -** Complete the following table.

☐ **NO** - Go to Item 6 below.

Operations contributing flow (list)	Discharge frequency		Flow				
	Batches per year	Duration per batch	Flow rate per day LTA	Flow rate per day Daily Max	Total volume per discharge	Units	Duration (Days)
Discharge from Sediment Basin 1			Precipitation dependent				

6. Water Supply Source (indicate all that apply)

	Name or owner of water supply source	Volume or flow rate	Units (check one)		
Municipal Supply			MGD	GPD	GPM
Private Surface Water Source			MGD	GPD	GPM
Private Supply Well			MGD	GPD	GPM
Other (specify)	Groundwater & precipitation	Precipitation dependent	MGD	GPD	GPM

7. Outfall configuration: (Surface water discharges only)

A. Where is the discharge point located with respect to the receiving water?

In the streambank: ☐

In the stream: ☐

Within a lake or ponded water: ☐

Within an estuary: ☐ Attach Supplement C, MIXING ZONE REQUIREMENTS FOR DISCHARGES TO ESTUARIES.

Discharge is equipped with diffuser: ☐ Attach description, including configuration and plan drawing of diffuser, if used.

This is a sub-outfall to Outfall 001.

B. If located in a stream, approximately what percentage of stream width from shore is the discharge point located?

10% ☐ **25%** ☐ **50%** ☐ **Other:**

C. If located in a stream, describe the stream geometry in the general vicinity of the discharge point, under low flow conditions:

Stream width	Stream depth	Stream velocity
Feet	**Feet**	**Feet/Sec**

Are the results of a mixing/diffusion study attached? ☐ **YES** ☐ **NO**

Section II - Outfall Information

Facility Name:	Outfall No.:
Lockwood Ash Disposal Site	01B
	SPDES Number: NY-0107069

8. Thermal Discharge Criteria

Is your facility one of the applicable types of facilities listed in the instructions, and does the temperature of this discharge exceed the receiving water temperature by greater than three (3) degrees Fahrenheit?

[ ] **YES -** Complete the following table.

[No] **NO** - Go to Item 9. below.

[ ] **Information on the intake and discharge configuration of this outfall is attached**.

Discharge Temperature, deg. F			Duration of maximum discharge temperature		Dates of maximum discharge temperature		Maximum flow rate	Discharge configuration (e.g. subsurface, surface, effluent diffuser, diffusion well, etc.)
Average change in temperature (delta T)	Maximum change in temperature (delta T)	Maximum temperature	hours per day	days per year	From	To	MGD	

9. Are any water treament chemicals or additives that are used by your facility subsequently discharged through this outfall?

[ ] **YES -** Complete the following table and complete pages 1 of 3 and 2 of 3 of Form WTCFX for each water treatment chemical listed.

[No] **NO** - Go to Item 10. below.

Manufacturer	WTC trade name	Manufacturer	WTC trade name

10. Has any biological test for acute or chronic toxicity been performed on this outfall or on the receiving water in relation to this outfall in the past three (3) years?

[ ] **YES -** Complete the following table.

[No] **NO** - Go to Item 11. on the following page.

Water tested	Purpose of test	Type of test	Chronic or Acute?	Subject species	Testing date(s)		Submitted? (Date)
					Start	Finish	

INDUSTRIAL APPLICATION FORM NY-2C
Section II - Outfall Information

Facility Name:	Outfall No.:
Lockwood Ash Disposal Site	01B
	SPDES Number: NY-0107069

11. Is the discharge from this outfall treated to remove process wastes, water treatment additives, or other pollutants?

Yes **YES -** Complete the following table. Treatment codes are listed in Table 4.

☐ **NO** - Go to Item 12 below.

Treatment process	Treatment Code(s)	Treatment used for the removal of:	Design Flow Rate (include units)
Sedimentation	1-U	Suspended solids and associated pollutants	Precipitation dependent

12. Does this facility have either a compliance agreement with a regulating agency, or have planned changes in production, which will materially alter the quantity and/or quality of the discharge from this outfall?

☐ **YES -** Complete the following table.

No **NO** - Go to Section III on the following page.

Description of project	Subject to Condition or Agreement in existing permit or consent order? (List)	Change due to production increase?	Completion Date(s)	
			Required	Projected

This completes Section II of the SPDES Industrial Application Form NY-2C. Section I, which requires general information regarding your facility, and Section III, which requires sampling information for each of the outfalls at your facility, must also be completed and submitted with this application.

INDUSTRIAL APPLICATION FORM NY-2C
Section III - Sampling Information

Facility Name:	SPDES No.:	Outfall No.:
Lockwood Ash Disposal Site	NY-0107069	01B

1. Sampling Information - Conventional Parameters

Sub-Outfall 01A data used.

Provide the analytical results of at least one analysis for every pollutant in this table. If this outfall is subject to a waiver as listed in Table 5 of the instructions for one or more of the parameters listed below, provide the results for those parameters which are required for this type of outfall.

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (using the same format) instead of completing this page.

Pollutant	Effluent data							Units		Intake data (optional)		
	a. Maximum daily value		b. Maximum 30 day value		c. Long term average		d. Number of analyses	a. Concentration	b. Mass	a. Long term average value		b. Number of analyses
	1. Concentration	2. Mass	1. Concentration	2. Mass	1. Concentration	2. Mass				1. Concentration	2. Mass	
a. Biochemical Oxygen Demand, 5 day (BOD)												
b. Chemical Oxygen Demand (COD)												
c. Total Suspended Solids (TSS)	42.0	3,123	42.0	39.7	7.2	3.4	15	mg/L	Kg			
d. Total Dissolved Solids (TDS)	3,300	39.7	3,300	3,123	1941	911	20	mg/L	Kg			
e. Oil & Grease												
f. Chlorine, Total Residual (TRC)												
g. Total Organic Nitrogen (TON)												
h. Ammonia (as N)	0.2	189	0.2	189	0.06	28.2	20	mg/L	g			
i. Flow	Value 250,000		Value 250,000		Value 123,974		15	gpd		Value		
j. Temperature, winter	Value 76.5 °F		Value 76.5 °F		Value 51.9 °F		6			Value		
k. Temperature, summer	Value 89.6 °F		Value 89.6 °F		Value 64.8 °F		9			Value		
l. pH	Minimum 7.3	Maximum 8.6	Minimum 7.3	Maximum 8.6	8.11		15			Minimum	Maximum	

2. Sampling Information - Priority Pollutants, Toxic Pollutants, and Hazardous Substances

a. Primary Industries:

i. Does the discharge from this outfall contain process wastewater?

- **Yes** - Go to Item **ii.** below.
- **No** - Go to Item **b.** below.

ii. Indicate which GC/MS fractions have been tested for: Volatiles: ☐ Acid: ☐ Base/Neutral: ☐ Pesticide: ☐

b. All applicants:

i. Do you know or have reason to believe that any of the pollutants listed in Tables 6, 7, or 8 of the instructions are present in the discharge from this outfall? **Yes**

- **Yes** - Concentration and mass data attached.
- **No** - Go to Item **ii.** below.

ii. Do you know or have reason to believe that any of the pollutants listed in Table 9 or Table 10 of the instructions, or any other toxic, harmful, or injurious chemical substances not listed in Tables 6-10, are present in the discharge from this outfall? **No**

- **Yes** - Source or reason for presence in discharge attached
- **Yes** - Quantitative or qualitative data attached
- **No**

INDUSTRIAL APPLICATION FORM NY-2C
Section III - Sampling Information

Facility Name: Lockwood Ash Disposal Site	SPDES No.: NY-0107069	Outfall No.: 01B

3. Projected Effluent Quality - Priority Pollutants, Toxic Pollutants, and Hazardous Substances

Provide analytical results of at least one analysis for each pollutant that you know or have reason to believe is present in this discharge, as well as for any GC/MS fractions and metals required to be sampled from Section III Forms, Item 2.a on the preceding page. Sub-Outfall 01A data used.

List the name and CAS number for each pollutant that you know or have reason to believe is present in the discharge from this outfall. For each pollutant listed from Tables 6, 7, or 8, provide the results of at least one analysis for that pollutant, and determine the mass discharge based on the flow rate reported in Item 1.i. For each pollutant listed from Table 9, or any other toxic pollutant not listed in Tables 6-10, you must provide concentration and mass data (if available) and/or an explanation for their presence in the discharge. Make as many copies of this table as necessary for each outfall.

Pollutant and CAS Number	Effluent data							Units		Intake data (optional)			Believed present, no sampling results available
	a. Maximum daily value		b. Maximum 30 day value *(if available)*		c. Long term average value *(if available)*		d. Number of analyses	a. Concentration	b. Mass	a. Long term average value		d. Number of analyses	
	(1)Concentration	(2) Mass	(1)Concentration	(2) Mass	(1)Concentration	(2) Mass				(1)Concentration	(2) Mass		
Alkalinity, Total (as CaCO3) CAS Number:	300	283			144	67.8	20	mg/L	Kg				
Aluminum,T/07439-90-5 CAS Number:	0.17	161			0.07	31.9	15	mg/L	g				
Arsenic, T/07440-38-2 CAS Number:	11.0	10.4			5.8	2.7	15	µg/L	mg				
Barium, T/07440-39-3 CAS Number:	225	213			80.2	37.6	5	µg/L	g				
Boron, T/07440-42-8 CAS Number:	23.1	21.9			15.3	7.2	15	mg/L	Kg				
Chloride CAS Number:	301	285			159	74.6	20	mg/L	Kg				
Cadmium, T/ 07440-43-9 CAS Number:	0.021	19.9			0.004	1.9	15	mg/L	g				
Chromium, T/07440-47-3 CAS Number:	9.3	8.8			4.9	2.3	5	µg/L	g				
Copper, T/07440-50-8 CAS Number:	0.018	17.0			0.006	2.8	15	mg/L	g				
Iron, T/07439-89-6 CAS Number:	0.7	662			0.28	131	15	mg/L	g				
Magnesium, T/07439-95-4 CAS Number:	128	121			73.9	34.7	20	mg/L	Kg				
Manganese, T/07439-96-5 CAS Number:	0.6	567.8			0.12	57.0	15	mg/L	Kg				
Mercury, T/07439-97-6 CAS Number:	0.0032	3.0			0.00068	0.32	15	µg/L	mg				

Monitoring data for Sub-Outfall 01A and Pond Grab data were used to calculate the Maximum Daily and Long-Term Averages provided in the table above. Given that these estimates are based on Sub-Outfall 01A data, we expect these estimates to be conservative or representative of worst-case scenario conditions. Non-detect data was treated as 1/2 the detection limit for calculating long term averages.

INDUSTRIAL APPLICATION FORM NY-2C
Section III - Sampling Information

Facility Name:	SPDES No.:	Outfall No.:
Lockwood Ash Disposal Site	NY-0107069	01B

3. Projected Effluent Quality - Priority Pollutants, Toxic Pollutants, and Hazardous Substances

Provide analytical results of at least one analysis for each pollutant that you know or have reason to believe is present in this discharge, as well as for any GC/MS fractions and metals required to be sampled from Section III Forms, Item 2.a on the preceding page. Sub-Outfall 01A data used.

List the name and CAS number for each pollutant that you know or have reason to believe is present in the discharge from this outfall. For each pollutant listed from Tables 6, 7, or 8, provide the results of at least one analysis for that pollutant, and determine the mass discharge based on the flow rate reported in Item 1.i. For each pollutant listed from Table 9, or any other toxic pollutant not listed in Tables 6-10, you must provide concentration and mass data (if available) and/or an explanation for their presence in the discharge. Make as many copies of this table as necessary for each outfall. Page 2 of 2

Pollutant and CAS Number	Effluent data							Units		Intake data (optional)			Believed present, no sampling results available
	a. Maximum daily value		b. Maximum 30 day value *(if available)*		c. Long term average value *(if available)*		d. Number of analyses	a. Concentration	b. Mass	a. Long term average value		d. Number of analyses	
	(1)Concentration	(2) Mass	(1)Concentration	(2) Mass	(1)Concentration	(2) Mass				(1)Concentration	(2) Mass		
Potassium, T/07440-09-7 CAS Number:	89.6	84.8			59.8	28.1	20	mg/L	Kg				
Selenium, T/07782-49-2 CAS Number:	0.016	15.1			0.0059	2.8	15	mg/L	g				
Sodium, T/07440-23-5 CAS Number:	329	311			163	76.4	20	mg/L	Kg				
Sulfate (as SO4)/14808-79-8 CAS Number:	1,740	1,647			1,005	472	20	mg/L	Kg				
Zinc, T/07440-66-6 CAS Number:	0.07	66.2			0.01	5.5	15	mg/L	g				
Color CAS Number:	15				7.5		4	CU					
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													

Monitoring data for Sub-Outfall 01A and Pond Grab data were used to calculate the Maximum Daily and Long-Term Averages provided in the table above. Given that these estimates are based on Sub-Outfall 01A data, we expect these estimates to be conservative or representative of worst-case scenario conditions. Non-detect data was treated as 1/2 the detection limit for calculating long term averages.

State Pollutant Discharge Elimination System (SPDES)

INDUSTRIAL APPLICATION FORM NY-2C

For New Permits and Permit Modifications to Discharge Industrial Wastewater and Storm Water

Section II - Outfall Information

Please type or print the requested information.

Facility Name:	SPDES Number:
Lockwood Ash Disposal Site	NY-0107069

1. Outfall Number and Location

Outfall No.:		
01C		
Latitude	Longitude	Receiving Water
42° 40' 29.66"	-76° 57' 46.73"	Keuka Lake Outlet

2. Type of Discharge and Discharge Rate (List all information applicable to this outfall)

	Volume/Flow	Units MGD	Units GPM	Units Other (specify)		Volume/Flow	Units MGD	Units GPM	Units Other (specify)
a. Process Wastewater					f. Noncontact Cooling Water				
b. Process Wastewater					g. Remediation System Discharge				
c. Process Wastewater					h. Boiler Blowdown				
d. Process Wastewater					i. Storm Water	Precipitation dependent			
e. Contact Cooling Water					j. Sanitary Wastewater				
k. Other discharge (specify): Groundwater						No GW flow since 2012			
l. Other discharge (specify):									

3. List process information for the Process Wastewater streams identified in 2.a-d above: N/A

a. Name of the process contributing to the discharge			Process SIC code: | | |
Describe the contributing process	Category / Subcategory	Quantity per day	Units of measure
b. Name of the process contributing to the discharge			Process SIC code: | | |
Describe the contributing process	Category / Subcategory	Quantity per day	Units of measure
c. Name of the process contributing to the discharge			Process SIC code: | | |
Describe the contributing process	Category / Subcategory	Quantity per day	Units of measure
d. Name of the process contributing to the discharge			Process SIC code: | | |
Describe the contributing process	Category / Subcategory	Quantity per day	Units of measure

4. Expected or Proposed Discharge Flow Rates for this outfall: Precipitation dependent

a. Total Annual Discharge	b. Daily Minimum Flow	c. Daily Average Flow	d. Daily Maximum Flow	e. Maximum Design flow rate
MG	MGD	MGD	MGD	MGD

INDUSTRIAL APPLICATION FORM NY-2C
Section II - Outfall Information

Facility Name:	Outfall No.:
Lockwood Ash Disposal Site	01C
	SPDES Number: NY-0107069

5. Is this a seasonal discharge?

Yes **YES -** Complete the following table.

☐ **NO** - Go to Item 6 below.

Operations contributing flow (list)	Discharge frequency		Flow				
	Batches per year	Duration per batch	Flow rate per day LTA	Flow rate per day Daily Max	Total volume per discharge	Units	Duration (Days)
Discharge from Sediment Basin 2			Precipitation dependent				

6. Water Supply Source (indicate all that apply)

	Name or owner of water supply source	Volume or flow rate	Units (check one)		
Municipal Supply			MGD	GPD	GPM
Private Surface Water Source			MGD	GPD	GPM
Private Supply Well			MGD	GPD	GPM
Other (specify)	Groundwater & precipitation	Precipitation dependent	MGD	GPD	GPM

7. Outfall configuration: (Surface water discharges only)

A. Where is the discharge point located with respect to the receiving water?

In the streambank: ☐

In the stream: ☐

Within a lake or ponded water: ☐

Within an estuary: ☐ Attach Supplement C, MIXING ZONE REQUIREMENTS FOR DISCHARGES TO ESTUARIES.

Discharge is equipped with diffuser: ☐ Attach description, including configuration and plan drawing of diffuser, if used.

This is a sub-outfall to Outfall 001.

B. If located in a stream, approximately what percentage of stream width from shore is the discharge point located?

10% ☐ **25%** ☐ **50%** ☐ **Other:**

C. If located in a stream, describe the stream geometry in the general vicinity of the discharge point, under low flow conditions:

Stream width	Stream depth	Stream velocity
Feet	**Feet**	**Feet/Sec**

Are the results of a mixing/diffusion study attached? ☐ **YES** ☐ **NO**

Section II - Outfall Information

Facility Name:	Outfall No.:
Lockwood Ash Disposal Site	01C
	SPDES Number: NY-0107069

8. Thermal Discharge Criteria

Is your facility one of the applicable types of facilities listed in the instructions, and does the temperature of this discharge exceed the receiving water temperature by greater than three (3) degrees Fahrenheit?

[ ] **YES -** Complete the following table.

[No] **NO** - Go to Item 9. below.

[ ] **Information on the intake and discharge configuration of this outfall is attached**.

Discharge Temperature, deg. F			Duration of maximum discharge temperature		Dates of maximum discharge temperature		Maximum flow rate	Discharge configuration (e.g. subsurface, surface, effluent diffuser, diffusion well, etc.)
Average change in temperature (delta T)	Maximum change in temperature (delta T)	Maximum temperature	hours per day	days per year	From	To	MGD	

9. Are any water treament chemicals or additives that are used by your facility subsequently discharged through this outfall?

[ ] **YES -** Complete the following table and complete pages 1 of 3 and 2 of 3 of Form WTCFX for each water treatment chemical listed.

[No] **NO** - Go to Item 10. below.

Manufacturer	WTC trade name	Manufacturer	WTC trade name

10. Has any biological test for acute or chronic toxicity been performed on this outfall or on the receiving water in relation to this outfall in the past three (3) years?

[ ] **YES -** Complete the following table.

[No] **NO** - Go to Item 11. on the following page.

Water tested	Purpose of test	Type of test	Chronic or Acute?	Subject species	Testing date(s)		Submitted? (Date)
					Start	Finish	

INDUSTRIAL APPLICATION FORM NY-2C
Section II - Outfall Information

Facility Name:	Outfall No.:
Lockwood Ash Disposal Site	01C
	SPDES Number: NY-0107069

11. Is the discharge from this outfall treated to remove process wastes, water treatment additives, or other pollutants?

Yes **YES -** Complete the following table. Treatment codes are listed in Table 4.

☐ **NO** - Go to Item 12 below.

Treatment process	Treatment Code(s)	Treatment used for the removal of:	Design Flow Rate (include units)
Sedimentation	1-U	Suspended solids and associated pollutants	Precipitation dependent

12. Does this facility have either a compliance agreement with a regulating agency, or have planned changes in production, which will materially alter the quantity and/or quality of the discharge from this outfall?

☐ **YES -** Complete the following table.

No **NO** - Go to Section III on the following page.

Description of project	Subject to Condition or Agreement in existing permit or consent order? (List)	Change due to production increase?	Completion Date(s)	
			Required	Projected

This completes Section II of the SPDES Industrial Application Form NY-2C. Section I, which requires general information regarding your facility, and Section III, which requires sampling information for each of the outfalls at your facility, must also be completed and submitted with this application.

INDUSTRIAL APPLICATION FORM NY-2C
Section III - Sampling Information

Facility Name:	SPDES No.:	Outfall No.:
Lockwood Ash Disposal Site	NY-0107069	01C

1. Sampling Information - Conventional Parameters

Sub-Outfall 01A data used.

Provide the analytical results of at least one analysis for every pollutant in this table. If this outfall is subject to a waiver as listed in Table 5 of the instructions for one or more of the parameters listed below, provide the results for those parameters which are required for this type of outfall.

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (using the same format) instead of completing this page.

Pollutant	Effluent data							Units		Intake data (optional)		
	a. Maximum daily value		b. Maximum 30 day value		c. Long term average		d. Number of analyses	a. Concentration	b. Mass	a. Long term average value		b. Number of analyses
	1. Concentration	2. Mass	1. Concentration	2. Mass	1. Concentration	2. Mass				1. Concentration	2. Mass	
a. Biochemical Oxygen Demand, 5 day (BOD)												
b. Chemical Oxygen Demand (COD)												
c. Total Suspended Solids (TSS)	42.0	39.7	42.0	39.7	7.2	3.4	15	mg/L	Kg			
d. Total Dissolved Solids (TDS)	3,300	3,123	3,300	3,123	1941	911	20	mg/L	Kg			
e. Oil & Grease												
f. Chlorine, Total Residual (TRC)												
g. Total Organic Nitrogen (TON)												
h. Ammonia (as N)	0.2	189	0.2	189	0.06	28.2	20	mg/L	g			
i. Flow	Value 250,000		Value 250,000		Value 123,974		15	gpd		Value		
j. Temperature, winter	Value 76.5 °F		Value 76.5 °F		Value 51.9 °F		6			Value		
k. Temperature, summer	Value 89.6 °F		Value 89.6 °F		Value 64.8 °F		9			Value		
l. pH	Minimum 7.3	Maximum 8.6	Minimum 7.3	Maximum 8.6	8.11		15			Minimum	Maximum	

2. Sampling Information - Priority Pollutants, Toxic Pollutants, and Hazardous Substances

a. Primary Industries:

i. Does the discharge from this outfall contain process wastewater?

- [ ] **Yes** - Go to Item **ii.** below.
- [ ] **No** - Go to Item **b.** below.

ii. Indicate which GC/MS fractions have been tested for: Volatiles: [ ] Acid: [ ] Base/Neutral: [ ] Pesticide: [ ]

b. All applicants:

i. Do you know or have reason to believe that any of the pollutants listed in Tables 6, 7, or 8 of the instructions are present in the discharge from this outfall?

- [Yes] **Yes** - Concentration and mass data attached.
- [ ] **No** - Go to Item **ii.** below.

ii. Do you know or have reason to believe that any of the pollutants listed in Table 9 or Table 10 of the instructions, or any other toxic, harmful, or injurious chemical substances not listed in Tables 6-10, are present in the discharge from this outfall?

- [ ] **Yes** - Source or reason for presence in discharge attached
- [ ] **Yes** - Quantitative or qualitative data attached
- [No] **No**

INDUSTRIAL APPLICATION FORM NY-2C
Section III - Sampling Information

Facility Name: Lockwood Ash Disposal Site	SPDES No.: NY-0107069	Outfall No.: 01C

3. Projected Effluent Quality - Priority Pollutants, Toxic Pollutants, and Hazardous Substances

Provide analytical results of at least one analysis for each pollutant that you know or have reason to believe is present in this discharge, as well as for any GC/MS fractions and metals required to be sampled from Section III Forms, Item 2.a on the preceding page. Sub-Outfall 01A data used.

List the name and CAS number for each pollutant that you know or have reason to believe is present in the discharge from this outfall. For each pollutant listed from Tables 6, 7, or 8, provide the results of at least one analysis for that pollutant, and determine the mass discharge based on the flow rate reported in Item 1.i. For each pollutant listed from Table 9, or any other toxic pollutant not listed in Tables 6-10, you must provide concentration and mass data (if available) and/or an explanation for their presence in the discharge. Make as many copies of this table as necessary for each outfall.

Page 1 of 2

Pollutant and CAS Number	Effluent data							Units		Intake data (optional)			Believed present, no sampling results available
	a. Maximum daily value		b. Maximum 30 day value *(if available)*		c. Long term average value *(if available)*		d. Number of analyses	a. Concentration	b. Mass	a. Long term average value		d. Number of analyses	
	(1)Concentration	(2) Mass	(1)Concentration	(2) Mass	(1)Concentration	(2) Mass				(1)Concentration	(2) Mass		
Alkalinity, Total (as CaCO3) CAS Number:	300	283			144	67.8	20	mg/L	Kg				
Aluminum,T/07439-90-5 CAS Number:	0.17	161			0.07	31.9	15	mg/L	g				
Arsenic, T/07440-38-2 CAS Number:	11.0	10.4			5.8	2.7	15	µg/L	mg				
Barium, T/07440-39-3 CAS Number:	225	213			80.2	37.6	5	µg/L	g				
Boron, T/07440-42-8 CAS Number:	23.1	21.9			15.3	7.2	15	mg/L	Kg				
Chloride CAS Number:	301	285			159	74.6	20	mg/L	Kg				
Cadmium, T/ 07440-43-9 CAS Number:	0.021	19.9			0.004	1.9	15	mg/L	g				
Chromium, T/07440-47-3 CAS Number:	9.3	8.8			4.9	2.3	5	µg/L	g				
Copper, T/07440-50-8 CAS Number:	0.018	17.0			0.006	2.8	15	mg/L	g				
Iron, T/07439-89-6 CAS Number:	0.7	662			0.28	131	15	mg/L	g				
Magnesium, T/07439-95-4 CAS Number:	128	121			73.9	34.7	20	mg/L	Kg				
Manganese, T/07439-96-5 CAS Number:	0.6	567.8			0.12	57.0	15	mg/L	Kg				
Mercury, T/07439-97-6 CAS Number:	0.0032	3.0			0.00068	0.32	15	µg/L	mg				

Monitoring data for Sub-Outfall 01A and Pond Grab data were used to calculate the Maximum Daily and Long-Term Averages provided in the table above. Given that these estimates are based on Sub-Outfall 01A data, we expect these estimates to be conservative or representative of worst-case scenario conditions. Non-detect data was treated as 1/2 the detection limit for calculating long term averages.

INDUSTRIAL APPLICATION FORM NY-2C
Section III - Sampling Information

Facility Name:	SPDES No.:	Outfall No.:
Lockwood Ash Disposal Site	NY-0107069	01C

3. Projected Effluent Quality - Priority Pollutants, Toxic Pollutants, and Hazardous Substances

Provide analytical results of at least one analysis for each pollutant that you know or have reason to believe is present in this discharge, as well as for any GC/MS fractions and metals required to be sampled from Section III Forms, Item 2.a on the preceding page. Sub-Outfall 01A data used.

List the name and CAS number for each pollutant that you know or have reason to believe is present in the discharge from this outfall. For each pollutant listed from Tables 6, 7, or 8, provide the results of at least one analysis for that pollutant, and determine the mass discharge based on the flow rate reported in Item 1.i. For each pollutant listed from Table 9, or any other toxic pollutant not listed in Tables 6-10, you must provide concentration and mass data (if available) and/or an explanation for their presence in the discharge. Make as many copies of this table as necessary for each outfall.

Page 2 of 2

Pollutant and CAS Number	Effluent data							Units		Intake data (optional)			Believed present, no sampling results available
	a. Maximum daily value		b. Maximum 30 day value *(if available)*		c. Long term average value *(if available)*		d. Number of analyses	a. Concentration	b. Mass	a. Long term average value		d. Number of analyses	
	(1)Concentration	(2) Mass	(1)Concentration	(2) Mass	(1)Concentration	(2) Mass				(1)Concentration	(2) Mass		
Potassium, T/07440-09-7 CAS Number:	89.6	84.8			59.8	28.1	20	mg/L	Kg				
Selenium, T/07782-49-2 CAS Number:	0.016	15.1			0.0059	2.8	15	mg/L	g				
Sodium, T/07440-23-5 CAS Number:	329	311			163	76.4	20	mg/L	Kg				
Sulfate (as SO4)/14808-79-8 CAS Number:	1,740	1,647			1,005	472	20	mg/L	Kg				
Zinc, T/07440-66-6 CAS Number:	0.07	66.2			0.01	5.5	15	mg/L	g				
Color CAS Number:	15				7.5		4	CU					
CAS Number:													
CAS Number:													
CAS Number:													
CAS Number:													
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Monitoring data for Sub-Outfall 01A and Pond Grab data were used to calculate the Maximum Daily and Long-Term Averages provided in the table above. Given that these estimates are based on Sub-Outfall 01A data, we expect these estimates to be conservative or representative of worst-case scenario conditions. Non-detect data was treated as 1/2 the detection limit for calculating long term averages.