



February 5, 2018

New York State Department of Environmental Conservation Division of Solid & Hazardous Materials Bureau of Municipal Waste 625 Broadway, 9th Floor Albany, New York 12233



Subject:

NRG Dunkirk Landfill 2017 Annual Report Part 360 - MSW, Industrial or Ash Landfill

Attention Chief:

In accordance with Part 360 Permit Requirements, we are hereby submitting the following Annual Reports:

- i) Active(Municipal solid waste, Industrial, or Ash) Landfill Annual Report;
- ii) An attachment which includes all yearly totals for 2017;
- iii) An updated topographical survey and site progression plan;
- iv) Revised cost estimates for Landfill activities during 2017;
- v) Monthly groundwater elevations for 2017.

The Dunkirk Generating Station entered mothballed Staltus on December 31, 2015. As such NRG is currently investigating the implications this status will have on the Dunkirk Landfill.

There was no waste material moved to the landfill in 2017. In late 2016, coal and debris from the coal pile was moved landfill, and the progression surveys call this material 'ash'. The only materials moved to the landfill in 2017 are clay and soils used for a stable cover that will maintain vegetation. There was no additional ash or waste materials moved into the landfill in 2017. The quarterly reports show the amounts and timing of the addition of the various materials, however there is no category on the annual report for cover material.

If further information or clarification is required, please contact me at (716) 200-2797.

Sincerely,

George T. Streit

Environmental Coordinator

Enclosures (5)

cc: Mr. Peter Grasso, P.E. (NYSDEC)

Dunkirk Power LLC 106 Point Drive North Dunkirk, NY 14048

Mr. Thomas Coates



MSW, INDUSTRIAL OR ASH LANDFILL ANNUAL/QUARTERLY REPORT

Submit the Annual Report no later than March 1, 2018.

| S | SECTIO | N 1 – FA | CILITY INFORMATIO | ON | | | | |
|---|----------------|--------------------------|---------------------------|------------------|-----------------|------------------------|---------------------|--|
| | | FACILITY | INFORMATION | | | | | |
| FACILITY NAME: Dunkirk F | ly As | sh Land | Ifill | | | | | |
| FACILITY LOCATION ADDRESS: | | FACILITY | CITY: | | STA | TE: | ZIP CODE: | |
| 5141 VanBuren F | Road | | NA | | NY | / | 14048 | |
| FACILITY TOWN: | | FACILITY | COUNTY: | FAC | ILITY P | HON | E NUMBER: | |
| Pomfret | | Chau | tauqua | 71 | 6-67 | 73- | -6347 | |
| FACILITY NYS PLANNING UNIT: (A this report). | list of N | IYS Plannin | g Units can be found at | the er | nd of | NY RE | SDEC GION #: 9 | |
| 360 PERMIT #: D D D D D D D D D D D D D D D D D D | SUED: /2011 | DATE EXPIRES: 05/22/2021 | | | | ITY CODE OR NUMBER: | | |
| FACILITY CONTACT: | | public | | | | CONTACT FAX NUMBER: | | |
| George T Streit | | ☐ private | NUMBER: (716) 200-2797 | | | | | |
| CONTACT EMAIL ADDRESS: george | e.streit@ | @NRG.com | 1 | | | | | |
| | | | INFORMATION | | | | | |
| OWNER NAME: | | OWNER P | OWI | NER FA | X NI | JMBER: | | |
| Dunkirk Power, LLC | | (716) 6 | | OTA | | 710 0005 | | |
| OWNER ADDRESS: 106 Point Drive N | | OWNER C Dunkirk | | STA | IE: | ZIP CODE: 14048 | | |
| OWNER CONTACT: | _ | | ONTACT EMAIL ADDRE | ESS: | | | | |
| George T Streit | | George.Streit@NRG.com | | | | | | |
| | | OPERATO | RINFORMATION | | | | | |
| OPERATOR NAME: same a | as owne | r | | | □ pub □ priv | | | |
| | | | ERENCES | | | | | |
| Preferred address to receive correspond Other (provide): | ndence: | ■ Fa | acility location address | □ O ₁ | wner ad | ldres | S | |
| Preferred email address: ☐ Other (provide): | | ⊚ Fa | acility Contact | □0 | wner Co | ontac | et | |
| Preferred individual to receive corresp Other (provide): | ondence | e: 🖸 Fa | acility Contact | | wner Co | ontac | et | |
| Did you operate in 2017? Yes; C No; C relinquish your permit/registration asso Waste Management Facility or Activity | complete | and submit | | vity, al | so com | plete | the "Inactive Solid | |

SECTION 2 - SITE LIFE

| 1. | Land | dfill Capacity Utilized Last Year (reporting year). | | |
|----|----------|--|------------------------------------|--|
| | a. | What is the estimated landfill capacity that was utilized during the rep 17,643 | orting year? Cubic Yards of Aiı | space |
| | L | What is the estimated in city waste density for the reporting year? | | Please do not report units as pounds per cubic yard. |
| | b. | What is the estimated in-situ waste density for the reporting year? 1.33 | Tons/Cubic Yard | |
| 2. | Rem | naining Constructed Capacity | | |
| | a. | What is the remaining capacity of the landfill that is already constructed 757,333 | | space |
| | b. | What is the estimated remaining life of the constructed capacity? 1,514 Years 8 Months at 500 Tons/Year.* Please note that this tonnage rate must include all materials placed cover, alternative daily covers, etc. | in the landfill, i.e., | waste, soil, |
| | C. | The tonnage rate reported under 2.b. is based on (select one): The amount of materials placed in the landfill in the reporement X Estimated future disposal Permit limit Other (explain): | | |
| 3. | Perr | mitted Capacity Still to be Constructed | | |
| | a. | What is the remaining but not yet constructed landfill capacity that is a permit? 853,055 Cubic Yards of Airspace | authorized by a Pa | rt 360 |
| | b. | What is the projected life of capacity reported in 3.a? 2,270 Years 0 Months at 500 Tons/Year. Please note that this tonnage rate must include all materials dispose soil and alternative daily covers. | d in the landfill, i.e | ., waste, and |
| | C. | The tonnage rate reported under 3.b. is based on (select one): The amount of materials placed in the landfill in the reporement in the selection of the landfill in the reporement in the selection of the landfill in the reporement in the selection of the landfill in the reporement in the landfill in the landfill in the reporement in the landfill in the l | ting year | |

| 4. | Capacity Proposed in a Part 360 Permit Application | |
|-------|--|---|
| | What is the capacity of any expansion proposed in a been submitted to the Department but not authorize reporting period? | |
| | 0 | Cubic Yards of Airspace |
| 5. | Estimated Potential Future Capacity Not Permitted | or in an Application (optional) |
| | What is the estimated capacity of any potential future yet authorized by a permit or proposed in a Part 360 submitted to the Department? | |
| | To Be Determined | Cubic Yards of Airspace |
| | SECTION 3 - PRIMARY LE | |
| Nam | e of off-site leachate treatment facility(s) utilized: Not | Applicable |
| | s the landfill have a constructed liner and a leachate co | |
| treat | r the quantity of primary leachate that was collected, rement, and recirculated each month, and the corresponde: For double-lined landfills this should not include the coted from secondary leachate collection and removal s | ding Acreage, by Cell: volume of leachate |
| | | For each cell, please report the acreage and the primary leachate amount. |

| | | PRIMARY L | EACHATE C | OLLECTED | (GALLONS) | PRIMARY LEACHATE TREATED OFF SITE (GALLONS) | | | | | | |
|-----------|------------------|-----------------|-------------|-------------|-----------------|---|------------------|-------------|-------------|-------------|-------------|-------------|
| | Cell 1 42 Acres | Cell 2 Acres | Cell 3Acres | Cell 4Acres | Cell 5 Acres | Cell 6Acres | Cell 1 42 Acres | Cell 2Acres | Cell 3Acres | Cell 4Acres | Cell 5Acres | Cell 6Acres |
| January | 2856613 | | | | | | 0 | | | | | |
| February | 2714642 | | | | | | 0 | | | | | |
| March | 2476068 | | | | | | 0 | | | | | |
| April | 1849319 | | | | | | 0 | | | | | |
| May | 2795824 | | | | | | 0 | | | | | |
| June | 1460915 | | | | | | 0 | | | | | |
| July | 1361893 | | | | | | 0 | | | | | |
| August | 0 | | | | | | 0 | | | | | |
| September | 3011498 | | | | | | 0 | | | | | |
| October | 1464616 | | | | | | 0 | | | | | |
| November | 2443858 | | | | | | 0 | | | | | |
| December | 3249414 | | | | | | 0 | | | | | |
| ANNUAL | 25684660 | | | | | | 0 | | | | | |

| | PI | RIMARY LEA | CHATE REC | CIRCULATE | (GALLONS | PRIMARY LEACHATE TREATED ON SITE (GALLONS) | | | | | | |
|-----------|-----------------|-----------------|-------------|-------------|-------------|--|-------------|-------------|-------------|-------------|-------------|-------------|
| | Cell 1 Acres | Cell 2 Acres | Cell 3Acres | Cell 4Acres | Cell 5Acres | Cell 6Acres | Cell 1Acres | Cell 2Acres | Cell 3Acres | Cell 4Acres | Cell 5Acres | Cell 6Acres |
| January | | | | | | | | | | | | |
| February | | | | | | | | | | | | |
| March | | | | | | | | | | | | |
| April | | | | | | | | | | | | |
| May | | | | | | | | | | | | |
| June | | | | | | | | | | | | |
| July | | | | | | | | | | | | |
| August | | | | | | | | | | | | |
| September | | | | | | | | | | | | |
| October | | | | | | | | | | | | |
| November | | | | | | | | | | | | |
| December | | | | | | | | | | | | |
| ANNUAL | | | | | | | | | | | | |

| Manual's schedule for the routine annual flushing and inspection of the primary leachate collection and removal system. List required submissions that have been attached to this form or the reason for not attaching a required piece of information: |
|---|
| Conducted in November and December 2017 and report submitted in December. |
| Submit (attached to this form) a tabulated compilation of the semi-annual primary leachate quality data collected throughout the year including a summary comparing this year's data with the previous year's data and a summary discussion of results. This list should identify sample location(s) and method of analysis. List required submissions that have been attached to this form or the reason for not attaching a required piece of information: |
| Data is submitted to the Department on a Quarterly basis. |
| SECTION 4 - SECONDARY LEACHATE |
| Does landfill have a double liner system with a secondary leachate collection and removal system?YesNo |
| Submit (attached to this form) a tabulated compilation of the semi-annual secondary leachate quality data collected throughout the year including a summary comparing this year's data with all previous years' data and a summary discussion of results. This list should identify sample location(s) and methods of analysis. List required submissions that have been attached to this form or the reason for not attaching a required piece of information: |
| Data is submitted to the Department on a Quarterly Basis. |
| |
| Please report total cost for the year, not cost/gal. |
| Leachate Cost: (including transportation if appropriate) during the calendar year for leachate treatment: \$\overline{NA}\) |
| Enter the quantity of secondary leachate that was collected, removed for on-site and off-site treatment, and recirculated each month, and the corresponding Acreage, by Cell: |
| For each cell, please report the acreage and the secondary |

Submit (attached to this form) a copy of the maintenance logs which document compliance with the Operation and Maintenance

Reprinted (12/17)

| | SI | ECONDARY | LEACHATE | COLLECTE | (GALLONS | SECONDARY LEACHATE TREATED OFF SITE (GALLONS) | | | | | | |
|-----------|--------------------|-------------|-------------|-------------|-------------|---|--------------------|-------------|-------------|-------------|-------------|-------------|
| | Cell 1 42_Acres | Cell 2Acres | Cell 3Acres | Cell 4Acres | Cell 5Acres | Cell 6Acres | Cell 1 42_Acres | Cell 2Acres | Cell 3Acres | Cell 4Acres | Cell 5Acres | Cell 6Acres |
| January | 320578 | | | | | | | | | | | |
| February | 258803 | | | | | | | | | | | |
| March | 411774 | | | | | | | | | | | |
| April | 231914 | | | | | | | | | | | |
| May | 256569 | | | | | | | | | | | |
| June | 201988 | | | | | | | | | | | |
| July | 349408 | | | | | | | | | | | |
| August | 350014 | | | | | | | | | | | |
| September | 176985 | | | | | | | | | | | |
| October | 41533 | | | | | | | | | | | |
| November | 88124 | | | | | | | | | | | |
| December | 52993 | | | | | | | | | | | |
| ANNUAL | 2740681 | | | | | | | | | | | |

| | SEC | ONDARY L | EACHATE R | ECIRCULAT | ED (GALLO | SECONDARY LEACHATE TREATED ON SITE (GALLONS) | | | | | | |
|-----------|-----------------|-------------|-------------|-------------|-------------|--|-----------------|-------------|-------------|-------------|-------------|-------------|
| | Cell 1 Acres | Cell 2Acres | Cell 3Acres | Cell 4Acres | Cell 5Acres | Cell 6Acres | Cell 1 Acres | Cell 2Acres | Cell 3Acres | Cell 4Acres | Cell 5Acres | Cell 6Acres |
| January | | | | | | | | | | | | |
| February | | | | | | | | | | | | |
| March | | | | | | | | | | | | |
| April | | | | | | | | | | | | |
| May | | | | | | | | | | | | |
| June | | | | | | | | | | | | |
| July | | | | | | | | | | | | |
| August | | | | | | | | | | | | |
| September | | | | | | | | | | | | |
| October | | | | | | | | | | | | |
| November | | | | | | | | | | | | |
| December | | | | | | | | | | | | |
| ANNUAL | | | | | | | | | | | | |

SECTION 5 – BENEFICIAL USE DETERMINATION MATERIALS

For each type of waste material that the Department has approved for use as alternative daily cover, intermediate cover, or other landfill material, provide the annual weight in tons, use (i.e., daily cover, intermediate cover, etc.), and source of material. (If material is from a solid waste facility also provide facility name, address, NYS Planning Unit, County/ Province, and State/Country.) Refer to the list of NYS Planning Units that can be found at the end of this report.

| Type of Solid Waste | Weight (tons/year) | Use | NYS Planning Unit (See Attached List of NYS Planning Units) | County or Province | State or Country | Source (Facility and Address) |
|---|-----------------------|-----|---|--------------------|---------------------|----------------------------------|
| Aggregate/Concrete | | | | | | |
| Contaminated Soil | | | | | | |
| Foundry Sand | | | | | | |
| Glass | | | | | | |
| Industrial Waste (specify) | | | | | | |
| | | | | | | |
| MSW/Wood Ash | | | | | | |
| Paper Mill Sludge | | | | | | |
| Processed C&D | | | | | | |
| Shredder Fluff | | | | | | |
| Tire Chips | | | | | | |
| Wood/Wood Chips | | | | | | |
| Other (specify) | | | | | | |
| | | | | | | |
| Total ADC | 0 | | | | | |
| Total Beneficial Use Determination Materials | 0 | | | | | |

Percent Alternative Daily Cover (ADC) Calculation

| ADC Calculations: | Total Toris ADC/Total Tons Waste Disposed x 100 = 0 | |
|-----------------------|---|--|
| / ID C Calculation of | Total Total Total Total Total Total | |

Please note the calculation is: Tons ADC (from table above)/Tons Solid Waste (from table in Section 6) x 100 and Not: Tons ADC / (Tons Solid Waste + ADC) x 100

SECTION 6 - SOLID WASTE DISPOSED

| Provide the tonnages of solid waste disposed. | Exclude Beneficial Use Material amounts reported in Section 5 and Recyclable Material amounts reported in Section 8 |
|---|---|
| Specify the methods used to measure the qua | ntities disposed and the percentages measured by each method: |

| 100_% Scale Weight | % Estimated |
|--------------------|--------------------|
| % Truck Count | % Other (Specify:) |

| Type of Solid Waste | January (tons) | February (tons) | March (tons) | April (tons) | May (tons) | June (tons) | July (tons) |
|--|-------------------|--------------------|-----------------|-----------------|---------------|----------------|----------------|
| Asbestos | | | | | | | |
| Ash (Coal) | | | | | | | |
| Ash (MSW Energy Recovery) | | | | | | | _ |
| Construction & Demolition Debris (mixed) | | | | | | | |
| Industrial Waste (Including Industrial Process Sludges) | | | | | | | |
| Mixed Municipal Solid Waste (Residential, Institutional & Commercial) | | | | | | | |
| Oil/Gas Drilling Waste | | | | | | | |
| Petroleum Contaminated Soil | | | | | | | |
| Sewage Treatment Plant Sludge | | | | | | | |
| Treated Regulated Medical Waste | | | | | | | |
| Emergency Authorization Waste (Storm Debris) | | | | | _ | | |
| Other (specify) | | | _ | | | | |
| Coal/Coal debris | | | | | | | |
| Total Tons Disposed | | | | | | | |

SECTION 6 - SOLID WASTE DISPOSED (continued)

| Type of Solid Waste | Tip Fee (\$/Ton) | August (tons) | September (tons) | October (tons) | November (tons) | December (tons) | Total Year (tons) | Daily Avg. (tons) |
|--|---------------------|------------------|---------------------|-------------------|--------------------|--------------------|----------------------|----------------------|
| Asbestos | | | | | | | | |
| Ash (Coal) | | | | | | | 0 | 0 |
| Ash (MSW Energy Recovery) | _ | | | | | | | |
| Construction & Demolition Debris (mixed) | | | | | | | | |
| Industrial Waste (Including Industrial Process Sludges) | | | | | | | | |
| Mixed Municipal Solid Waste (Residential, Institutional & Commercial) | | | | | | | | |
| Oil/Gas Drilling Waste | | | | | | | 1 | |
| Petroleum Contaminated Soil | | | | | | | | |
| Sewage Treatment Plant Sludge | | | | | | | | |
| Treated Regulated Medical Waste | | | | | | | | |
| Emergency Authorization Waste (Storm Debris) | | | | - | | | | |
| Other (specify) | | | | | | | | |
| Coal and Coal Debris | | | | | | | 0 | 0 |
| Total Tons Disposed | | | | | | | 0 | 0 |

SECTION 7 - SERVICE AREA OF SOLID WASTE RECEIVED

Identify the service area of the waste. The Total Tons Received reported below should equal the Total Tons Disposed in Section 6 (Solid Waste Disposed). DO NOT REPORT IN CUBIC YARDS!

- 1) <u>Direct hauled from the generator of the waste</u>. In the case where the waste is hauled to your facility from the generator (i.e. hauled from residences, commercial establishments, etc.), "<u>Direct Haul</u>" is the appropriate response in Column 2 under "Service Area." Please report the tonnage by waste type and identify the state, county and planning unit where it was generated; or
- 2) <u>Sent to your facility from another solid waste management facility</u>. Waste may be sent to your transfer station from another solid waste management facility. In this case, please report the tonnage by waste type from each sending solid waste management facility, as well as the sending facility's name, address, county, and the planning unit where the sending facility is located.

| 3 | ste transported by each: | | |
|----------------------|-------------------------------|-------------------|--------------------------------|
| % Rail | % Water | % Other (specify: |) |
| | | | |
| rvice areas below ar | e included in these transport | methods | |
| | | | % Rail% Water% Other (specify: |

| | SERVICE AREA OF SOI | LID WASTE REC | CEIVED | | |
|--|--|--|--|--|---------------|
| TYPE OF SOLID WASTE | SOLID WASTE MANAGEMENT FACILITY FROM WHICH IT WAS RECEIVED (Name & Address) OR "Direct Haul" | SERVICE AREA STATE OR COUNTRY | SERVICE AREA COUNTY OR PROVINCE | SERVICE AREA NYS PLANNING UNIT (See Attached List of NYS Planning Units) | TONS RECEIVED |
| Asbestos | | | | | |
| Ash (Coal) | Direct Haul from Dunkirk Power | NY | Chautauqua County | | 0 |
| Ash (MSW Energy Recovery) | | | | | |
| Construction & Demolition Debris (mixed) | | | | | |

| | SERVICE AREA OF SOL | ID WASTE REC | EIVED | | |
|---|--|--|--|--|---------------|
| TYPE OF SOLID WASTE | SOLID WASTE MANAGEMENT FACILITY FROM WHICH IT WAS RECEIVED (Name & Address) OR "Direct Haul" | SERVICE AREA STATE OR COUNTRY | SERVICE AREA COUNTY OR PROVINCE | SERVICE AREA NYS PLANNING UNIT (See Attached List of NYS Planning Units) | TONS RECEIVED |
| Industrial Waste (Including Industrial Process Sludges) | | | | | |
| Mixed Municipal Solid Waste (Residential, Institutional & Commercial) | | | | | |
| Oil/Gas Drilling Waste | | | | | |
| Petroleum Contaminated Soil | | | | | |
| Sewage Treatment Plant Sludge | | | | | |
| Treated Regulated Medical Waste (TRMW)* | | | | | |
| Emergency Authorization Waste (Storm Debris) | | | | | |
| Other (specify) | | | | | |
| Coal Debris | Direct Haul from Dunkirk Power | NY | Chautauqua County | , | 0 |

^{*} List generators that provide you Certificates of Treatment forms and quantities of TRMW from each ______

SECTION 8 -LANDFILL RECYCLABLE & RECOVERED MATERIALS

| Is your facility also a permitted or registered Recyclables Handling & Recovery Facility? |
|---|
| Yes; Complete Section 9 for material recovered from the mixed solid waste stream. Complete a Recyclables Handling & Recovery Facility (RHRF) form for material received as source separated. The RHRF form is located at: http://www.dec.ny.gov/chemical/52706.html . |
| ■ No; Complete Section 9 for material recovered from the mixed solid waste stream and for material received as source separated. |

A. Service Area of Recyclable Material Received

Identify the service area of the material. DO NOT REPORT IN CUBIC YARDS!

- 1) <u>Direct hauled from the generator of the recyclables</u>. In the case where the recyclables are hauled to your facility from the generator (i.e. hauled from residences, commercial establishments, etc.), "<u>Direct Haul</u>" would be the appropriate response in Column 2 under "Service Area". Please report the tonnage by material type and identify the state, county and planning unit where it was generated; or
- 2) Sent to your facility from another solid waste management facility. Recyclables may be sent to your facility from another solid waste management facility. In this case, please report the tonnage by material type from each sending solid waste management facility, as well as the sending facility's name, address, county, and the planning unit where the sending facility is located.

Explain which materials and service areas below are included in these transport methods

| | SERVICE AREA OF RECYCLA | BLE MATERIAL | RECEIVED | | |
|---|--|--|---------------------------------------|--|---------------|
| MATERIAL | SOLID WASTE MANAGEMENT FACILITY FROM WHICH IT WAS RECEIVED (Name & Address) OR "Direct Haul" | SERVICE AREA STATE OR COUNTRY | SERVICE AREA COUNTY OR PROVINCE | SERVICE AREA NYS PLANNING UNIT (See Attached List of NYS Planning Units) | TONS RECEIVED |
| Commingled Containers (metal, glass, plastic) | | | | | |
| Commingled Paper (all grades) | | | | | |
| Single Stream (total) | | | | | |
| Brush, Branches, Trees, & Stumps | | | | | |
| Food Scraps | | | | | |
| Yard Waste (curbside) | | | | | |
| Other (specify) | | | | | |
| | | | TOTAL | . RECEIVED (tons): | |

SECTION 8 – LANDFILL RECYCLABLE & RECOVERED MATERIALS

B. Material Recovered

Identify the name of the destination facility to which the material was sent from your facility, the corresponding State/Country, the County/Province, the NYS Planning Unit, and the amount of material transported. Refer to the list of NYS Planning Units that can be found at the end of this report.

DO NOT REPORT IN CUBIC YARDS!

| Specify transport meth | od and percentages of | total material transported | d by each: | |
|------------------------|--------------------------|----------------------------|-------------------|--|
| % Road | % Rail | % Water | % Other (specify: | |
| | | | | |
| Explain which material | ls and destinations belo | w are included in these t | transport methods | |

| DESTINATION (Name & Address) | DESTINATION STATE OR COUNTRY | DESTINATION COUNTY OR PROVINCE | DESTINATION NYS PLANNING UNIT (See Attached List of NYS Planning Units) | TONS RECOVERED (out of facility) |
|------------------------------|------------------------------------|--------------------------------------|---|--|
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | DESTINATION STATE OR | DESTINATION STATE OR COUNTY OR | DESTINATION DESTINATION STATE OR COUNTY OR NYS PLANNING UNIT (See Attached List of |

SECTION 8 – LANDFILL RECYCLABLE & RECOVERED MATERIALS (continued) B. Material Recovered

| | GL | ASS RECOVERED | | | |
|--|------------------------------|------------------------------------|--------------------------------------|---|----------------------------------|
| RECOVERED MATERIAL | DESTINATION (Name & Address) | DESTINATION STATE OR COUNTRY | DESTINATION COUNTY OR PROVINCE | DESTINATION NYS PLANNING UNIT (See Attached List of NYS Planning Units) | TONS RECOVERED (out of facility) |
| Container Glass | | | | , | |
| Industrial Scrap Glass | | | | | |
| Other Glass (specify) | | | | | |
| | | | TOTAL GLASS R | ECOVERED (tons): | |
| was allowed a property with the property | ME | TAL RECOVERED | | | |
| RECOVERED MATERIAL | DESTINATION (Name & Address) | DESTINATION STATE OR COUNTRY | DESTINATION COUNTY OR PROVINCE | PLANNING UNIT (See Attached List of NYS Planning Units) | TONS RECOVERED (out of facility) |
| Aluminum Foil / Trays | | | | | |
| Bulk Metal (from MSW) | | | | | |
| Bulk Metal (from CD debris) | | | | | |
| Enameled Appliances / White Goods | | | | | |
| Industrial Scrap Metal | | | | | |
| Tin & Aluminum Containers | | | | | |
| Other Metal (specify) | | | - | | |
| | | | TOTAL METAL R | ECOVERED (tons): | |

SECTION 8 – LANDFILL RECYCLABLE & RECOVERED MATERIALS (continued) B. Material Recovered

| PLASTIC RECOVERED | | | | | | |
|-----------------------------------|------------------------------|------------------------------------|--------------------------------------|---|-------------------|--|
| RECOVERED MATERIAL | DESTINATION (Name & Address) | DESTINATION STATE OR COUNTRY | DESTINATION COUNTY OR PROVINCE | DESTINATION NYS PLANNING UNIT (See Attached List of NYS Planning Units) | TONS RECOVERED | |
| Mixed Plastic (#1 - #7) | | | | | | |
| PET (plastic #1) | | | | | | |
| HDPE (plastic #2) | | | | | | |
| Other Rigid Plastics (#3 - #7) | | | | | | |
| Industrial Scrap Plastic | | | | | | |
| Plastic Film & Bags | | | | | | |
| Other Plastics (specify) | , | | | | | |
| | | Т | OTAL PLASTIC R | ECOVERED (tons): | | |

SECTION 8 - LANDFILL RECYCLABLE & RECOVERED MATERIALS (continued) B. Material Recovered

| | MIXED MATERIAL RECOVERED | | | | | | | |
|---|------------------------------|------------------------------------|--------------------------------------|---|----------------------------------|--|--|--|
| RECOVERED MATERIAL | DESTINATION (Name & Address) | DESTINATION STATE OR COUNTRY | DESTINATION COUNTY OR PROVINCE | DESTINATION NYS PLANNING UNIT (See Attached List of NYS Planning Units) | TONS RECOVERED (out of facility) | | | |
| Commingled Containers (metal, glass, plastic) | | | | | | | | |
| Commingled Paper & Containers | | | | | | | | |
| Single Stream (total) | | | | | | | | |
| Other (specify) | | | | | | | | |
| | | | | | | | | |
| | | TOTAL | MIXED MATERIA | L RECOVERED (tons) | : | | | |

SECTION 8 – LANDFILL RECYCLABLE & RECOVERED MATERIALS (continued) B. Material Recovered

| | MISCELLANE | OUS MATERIAL RECOVE | RED | | |
|-------------------------------------|------------------------------|------------------------------------|--------------------------------------|---|--|
| RECOVERED MATERIAL | DESTINATION (Name & Address) | DESTINATION STATE OR COUNTRY | DESTINATION COUNTY OR PROVINCE | DESTINATION NYS PLANNING UNIT (See Attached List of NYS Planning Units) | TONS RECOVERED (out of facility) |
| Electronics | | | | | |
| Textiles | | | | | |
| Brush, Branches, Trees, & Stumps | | | | | |
| Food Scraps | | | | | |
| Yard Waste (curbside) | | | | | |
| Other (specify) | | | | | |
| | | | | | |
| | | TOTAL MISCELLA | NEOUS MATERIA | L RECOVERED (tons) |): |

VOLUME TO WEIGHT CONVERSION FACTORS

| MATERIAL | EQUIVALENT | | MATERIAL | EQUIVALENT | | MATERIAL | EQUIVALENT | |
|--------------------------|--------------|------------|--------------------------------|----------------|------------|-----------------------------|--------------|------------|
| GLASS - whole bottles | 1 cubic yard | 0.35 tons | GLASS - crushed mechanically | 1 cubic yard | 0.88 tons | ALUMINUM - cans - whole | 1 cubic yard | 0.03 tons |
| GLASS - semi crushed | 1 cubic yard | 0.70 tons | GLASS - uncrushed manually | 55 gallon drum | 0.16 tons | ALUMINUM – cans – flattened | 1 cubic yard | 0.125 tons |
| PAPER - high grade loose | 1 cubic yard | 0.18 tons | PLASTIC - PET - whole | 1 cubic yard | 0.015 tons | | | |
| PAPER - high grade baled | 1 cubic yard | 0.36 tons | PLASTIC - PET - flattened | 1 cubic yard | 0.04 tons | | | |
| PAPER - mixed loose | 1 cubic yard | 0.15 tons | PLASTIC - PET - baled | 1 cubic yard | 0.38 tons | WHITE GOODS - uncompacted | 1 cubic yard | 0.10 tons |
| NEWSPRINT - loose | 1 cubic yard | 0.29 tons | PLASTIC – styrofoam | 1 cubic yard | 0.02 tons | WHITE GOODS - compacted | 1 cubic yard | 0.5 tons |
| NEWSPRINT - compacted | 1 cubic yard | 0.43 tons | PLASTIC - HDPE - whole | 1 cubic yard | 0.012 tons | | | |
| CORRUGATED - loose | 1 cubic yard | 0.015 tons | PLASTIC - HDPE - flattened 1 | 1 cubic yard | 0.03 tons | | | |
| CORRUGATED - baled | 1 cubic yard | 0.55 tons | PLASTIC - HDPE - baled | 1 cubic yard | 0.38 tons | FERROUS METAL - cans whole | 1 cubic yard | 0.08 tons |
| | | | PLASTIC - mixed (grocery bags) | 45 gallon bag | 0.01 tons | FERROUS METAL - cans | 1 cubic yard | 0.43 tons |

SECTION 9 – UNAUTHORIZED SOLID WASTE

| l Date F | e Received Type Received | | | | Date Disposed | | | Disposal Method & Location | | |
|----------------|-------------------------------|------------|-------------|------------------------|----------------|-----------------|---------------|----------------------------|-------------|--------------|
| | | | | | | | - | • | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | and Model | | | of fixed unit | | | |
| | | | | res and Model | | | of portable | unit. | | |
| | | | riggered gi | ve information below f | or each incide | ent: | | | | |
| If the radiati | on monitors h | ave been t | 00 0 | | | | | D: . | Removed | |
| If the radiati | | Rece | | T | | Truck | Pooding | Dienoeal | Rem | oved |
| If the radiati | on monitors h Incident Number | | | Hauler | Origin | Truck Number | Reading | Disposal Status | Rem Date | oved Time |

SECTION 10 - WASTE IN PLACE

Summary by Waste Type and Year

Include all active and inactive sections of the landfill. Report waste disposed annually by type, if known, in tons per year. Report total waste disposed, if breakdown of types is not available. In the case where more than one landfill section operated in a given year identify each separately, if known. If the annual amount is not available, report the quantities for a range of years. If you include amounts from old, closed landfills then clearly identify them on the table and explain below. In each row, report quantities disposed each year (or group of years if individual years unknown) for each waste type. Report cumulative WIP at bottom (sum of annual quantities disposed). Add additional sheets as necessary.

| Year | MSW (tons) | Asbestos Waste (tons) | Ash (tons) | C&D Debris (tons) | Industrial Waste (tons) | Petroleum Contaminated Soil (tons) | Sewage Treatment Plant Sludge (tons) | Other (tons) | Year(s) Total (tons) | Identify Landfill Section(s) Used |
|----------------------------|---------------|-----------------------------|---------------|-------------------------|-------------------------------|---|---|-----------------|----------------------------|--|
| 2017 | | | 0 | | | | | 0 | 0 | Phase II -B |
| 2016 | | J., | 267 | **** | | | | 22,108 | 22,375 | Phase II - B |
| 2015 | | · | 18,349 | | | | | 0 | 18,349 | Phase II - B |
| Previous | | | 1,219,000* | | | | | 0 | 1,219,000* | Phase II |
| WIP Cumulative Total | | | 1,237,600* | | | | | 22,108 | 1,259,700* | |

| Overall in place volume 930,557** cubic yards | |
|---|--|
| Method for determining waste composition, if known. | |
| Explain if closed landfills are included above | |

^{*} Estimates of previous materials only. Only includes Phase II. Phase I is not active or receiving waste.

^{**} Volume of materials in Phase II Only - does not include Phase I materials.

Waste Summary by Landfill Section

Not Applicable

| ards, if know |
|---------------|
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |

* Note: If Concentration NMOC, Lo and k are not known or included, default values will be used to calculate the NMOCs emissions from the Landfill.

<u>Flare</u>

| Open and Enclosed Flares located at the Landfill and the Landfill Gas Recovery Facility: Number of Flares: | |
|---|-----------------------------------|
| | Please report units in cubic feet |
| Type of Flare: Opened Flare Enclosed Flare | |
| Quantity of Gas Collected and Flared Annually cubic fer Flare Hours of Operation per Year hours/year Methane Percentage in Landfill Gas before flaring % Methane Destruction efficiency % | eet |
| Candlestick Flares: Number of Candlestick Flares cubic feet Estimate of Gas Flared Candlestick Flare cubic feet | |
| Gas To Energy | Please report units |
| Number of Internal Combustion Engines: | in cubic feet |
| Quantity of Gas collected for Internal Combustion Engine Annually | cubic feet |
| Gas Processed for Use (Other than gas to electricity) | |
| Quantity of Gas Collected for Processing cubic feet Methane Percentage in Landfill Gas before processing % On-site or Off-site User of Gas | |
| Landfill Gas Recovery Facility/Landfill Data | |
| Facility Contact Phone # () | |
| Contact e-mail address Fax # () | |
| Operation and maintenance cost for calendar year: \$ | |
| Does the LGRF experience shut downs:YesNo | |
| If yes, indicate reasons for shut downs. List required submissions that have been attached to the reasons for not attaching a required piece of information: | nis form or |
| | |
| | |
| | |
| Year landfill opened: Anticipated landfill closure date: | |
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Results of Condensate Sampling

| condensate sa | ampling. List s | ubmissions (re | | ig results accomplisection) that have be n: | | |
|-----------------|--|--|--|--|--------------------------------------|----------------------------------|
| | | | | | | |
| | | | | | | |
| | - | | | | | |
| | | Landfill Gas | Utilized For E | nergy Recovery | | |
| Provide the fo | llowing informa | ation for the lan | dfill gas recove | red for energy. DO | NOT INCLUD | E THE GAS |
| | Landfill Gas Collected for Energy Recovery (Cubic Feet) | Steam* Generated (Cubic Feet) | Total Electricity* Generated for onsite and offsite use (K.W.H.) | Total Gas Processed for use other than electricity generation (Cubic Feet) | Condensate Generated (Gallons) | Facility Operation (Hours) |
| January | | | | | | |
| February | | | | | | |
| March | | | | | | |
| April | | | | | | |
| May | | | | | | |
| June | | | | | | |
| July | | | | | | |
| August | | | | | | |
| September | | | | | | |
| October | | | | | | |
| November | | | | | | |
| December | | | | | | |
| ANNUAL TOTAL | | | | | | |
| * Provide whe | ere applicable. | | | | | |
| Normal Week | days of Operat | ion | Normal Ho | urs of Operation | | |
| Electricity Ge | nerated and us | ed onsite | ffsite | KWH | | |
| | | | C | cubic feet ubic feet | | |
| Describe the | collection, stora | age, treatment | and disposal te | chniques used in m | nanaging the co | ndensate: |
| | | | | | | |
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| SECTION 12 - COST ESTIMATES AND FINANCIAL ASSURANCE DOCUMENTS |
|---|
| Are there required cost estimates and financial assurance documents for closure and post-closure care? |
| ■ Yes □ No If yes, attach additional sheets reflecting annual adjustments for inflation and any changes to the Closure Plan? |
| |
| SECTION 13 – PROBLEMS Were any problems encountered during the reporting period (e.g., specific occurrences which have led to changes in facility procedures)? |
| Yes No If yes, attach additional sheets identifying each problem and the methods for resolution of the problem. |
| |
| SECTION 14 – CHANGES Were there any changes from approved reports, plans, specifications, and permit conditions? |
| ☐ Yes ■ No If yes, attach additional sheets identifying changes with a justification for each change. |
| SECTION 15 - ANALYTICAL RESULTS |
| Submit (attached to this form) tables showing the sample collection date, the analytical results [including all peaks even if below the Method Detection Limits (MDL)], designation of upgradient wells and location number for each environmental monitoring point sampled, applicable water quality standards, and groundwater protection standards if established, MDL's, and Chemical Abstracts Service (CAS) numbers on all parameters. List submissions (required by this section) that have been attached to this form or the reasons for not attaching a required piece of information: |
| Not applicable to annual report - see quarterly data |
| Section 16 - Comparing Data Submit (attached to this form) tables or graphical representations comparing current water quality with existing water quality and with upgradient water quality. These comparisons may include Piper diagrams, Stiff diagrams, tables, or other analyses. List submissions (required by this section) that have been attached to this form or the reasons for not attaching a required piece of information: |
| Not applicable to annual report - see quarterly data |
| |

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SECTION 17 - DISCUSSION OF RESULTS

| Submit (attached to this form) a summary of any contraventions of State water quality standards, significant increases in concentrations above existing water quality, any exceedances of groundwater protection standards, and discussion of results, and any proposed modifications to the sampling and sinalysis schedule necessary to meet the Existing, Operational and Contingency water quality monitoring equirements. List submissions (required by this section) that have been attached to this form or the easons for not attaching a required piece of information: | | | | | | |
|--|----------|--|--|--|--|--|
| None | | | | | | |
| SECTION 18 - DATA QUALITY ASSESSMENT | | | | | | |
| Submit (attached to this form) any required data quality assessment reports. List submissions (required by this section) that have been attached to this form or the reasons for not attaching a required piece information: | ed of | | | | | |
| Not applicable | | | | | | |
| SECTION 19 - SUMMARIES OF MONITORING DATA Submit (attached to this form) a summary of the water quality information presented in Sections 16 ar 17 for the year of operation for which the Annual Report is made, noting any changes in water quality which have occurred throughout the year. List submissions (required by this section) that have been attached to this form or the reasons for not attaching a required piece of information: | ıd | | | | | |
| Data is submitted to the Department on a quarterly basis. | | | | | | |
| SECTION 20 - SURFACE IMPOUNDMENTS Does this landfill have a surface impoundment? | | | | | | |
| ■ Yes □ No If yes, repeat Sections 15 through 18 above for Quarterly Reports and Section 19 above for Annual report. Attach additional submissions required by this section. | | | | | | |
| | | | | | | |
| SECTION 21 - PERMIT/CONSENT ORDER REPORTING REQUIREMENTS Are there any additional permit/consent order reporting requirements not covered by the previous sections of this form? | | | | | | |
| ■ Yes □ No If yes, attach additional sheets identifying the reporting requirements with their respective responses. | | | | | | |

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SECTION 22 - SIGNATURE AND DATE BY OWNER OR OPERATOR

Owner or Operator must sign, date and submit the completed form by email or mail to the appropriate Regional Office (See attachment for Regional Office email & mailing addresses and Solid Waste Contacts.)

The Owner or Operator must also submit one copy by email, fax or mail to:

New York State Department of Environmental Conservation
Division of Materials Management
Bureau of Permitting and Planning
625 Broadway
Albany, New York 12233-7260
Fax 518-402-9041

Email address: SWMFannualreport@dec.ny.gov

| I hereby affirm under penalty of perjury that information provid exhibits was prepared by me or under my supervision and dire and belief, and that I have the authority to sign this report form that any false statement made herein is punishable as a Class of the Penal Law. Signature | ction and is true to the best of my knowledge pursuant to 6 NYCRR Part 360. I am aware |
|---|--|
| George T Streit Name (Print or Type) | Environmental Coordinator Title (Print or Type) |
| George.Streit@NRG.com | m |
| Email (Print or Type | e) |
| 106 Point Dr. N | Dunkirk |
| Address | City |
| New York, 14048 | 716 673 6347 |

State and Zip

ATTACHMENTS: YES NO (Please check appropriate line)

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Phone Number



ATTACHMENT FOR THE ANNUAL REPORT, 2017

| 1. | GALLONS OF LEACHATE DISCHARGED TO | THE LANDFILL FACILITY |
|----|-------------------------------------|------------------------|
| ۵. | PHASE I, CELL A: | 404,184 |
| 3. | PHASE I, CELL B: | 133,681 |
| Ξ. | PHASE II, CELL A: | 3,284,730 |
| Э. | PHASE II, CELL B: | 916,746 |
| Ξ. | MANHOLE # 5: | 24,902,184 |
| =. | L.D. BASINS: | 0 |
| Ξ. | BASINS DISCHARGE: | 25,684,660 |
| 2. | TONS OF ASH UNLOADED AT THE LANDFI | LL DURING THE YEAR: |
| ۹. | FLY ASH: | 0 |
| 3. | BOTTOM ASH: | 0 |
| 3. | TONS OF FLY ASH AND BOTTOM ASH UTIL | LIZED DURING THE YEAR: |
| ۹. | FLY ASH: | 0 |
| 3. | BOTTOM ASH: | 0 |
| 1. | TONS OF COAL AND COAL DEBRIS LANDF | ILL DURING THE YEAR: |
| ` | COAL AND COAL DERRIS: | 0 |