Clear Form

MSW, INDUSTRIAL OR ASH LANDFILL ANNUAL/QUARTERLY REPORT

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

A. This annual/quarterly report is for the year of operation from January 01, 2017 to December 31, 2017

B. Quarterly Report for: ☐ Quarter 1 ☐ Quarter 2 ☐ Quarter 3 ☐ Quarter 4

SECTION 1 – FACILITY INFORMATION

FACILITY INFORMATION

FACILITY NAME:			
Oswego County Bristol Hill Landfill			
FACILITY LOCATION ADDRESS:	**FACILITY CITY:**	**STATE:**	**ZIP CODE:**
3125 St Rte 3	Fulton	NY	13069
FACILITY TOWN:	**FACILITY COUNTY:**	**FACILITY PHONE NUMBER:**	
Volney	Oswego	(315)591-9200	
FACILITY NYS PLANNING UNIT: (A list of NYS Planning Units can be found at the end of this report). Oswego County		**NYSDEC REGION #:** 7	

360 PERMIT #:	DATE ISSUED:	DATE EXPIRES:	NYS DEC ACTIVITY CODE OR REGISTRATION NUMBER:
7-3558-00012/13	4-4-2017	4-3-2027	

FACILITY CONTACT:	☒ public ☐ private	CONTACT PHONE NUMBER:	CONTACT FAX NUMBER:
Carl Schmidt		(315)591-9200	(315)591-9203

CONTACT EMAIL ADDRESS: carl.schmidt@oswegocounty.com

OWNER INFORMATION

OWNER NAME:	OWNER PHONE NUMBER:	OWNER FAX NUMBER:	
Oswego County Dept of Solid Waste	(315)591-9200	(315)591-9203	
OWNER ADDRESS:	**OWNER CITY:**	**STATE:**	**ZIP CODE:**
3125 St Rte 3	Fulton	NY	13069
OWNER CONTACT:	**OWNER CONTACT EMAIL ADDRESS:**		
Carl Schmidt	carl.schmidt@oswegocounty.com		

OPERATOR INFORMATION

OPERATOR NAME: ☒ *same as owner* ☐ public ☐ private

PREFERENCES

Preferred address to receive correspondence:	☐ *Facility location address*	☒ *Owner address*
☐ *Other (provide):*		
Preferred email address:	☐ *Facility Contact*	☒ *Owner Contact*
☐ *Other (provide):*		
Preferred individual to receive correspondence:	☐ *Facility Contact*	☒ *Owner Contact*
☐ *Other (provide):*		

Did you operate in 2017? ☒ Yes; Complete this form.

☐ No; Complete and submit Sections 1 and 22. If you no longer plan to operate and wish to relinquish your permit/registration associated with this solid waste management activity, also complete the "Inactive Solid Waste Management Facility or Activity Notification Form" located at: http://www.dec.ny.gov/chemical/52706.html .

SECTION 2 - SITE LIFE

1. Landfill Capacity Utilized Last Year (reporting year).

   a. What is the estimated landfill capacity that was utilized during the reporting year?

   98,597 Cubic Yards of Airspace

   Please do not report units as pounds per cubic yard.

   b. What is the estimated in-situ waste density for the reporting year?

   1.0 Tons/Cubic Yard

2. Remaining Constructed Capacity

   a. What is the remaining capacity of the landfill that is already constructed?

   665,729 Cubic Yards of Airspace

   b. What is the estimated remaining life of the constructed capacity?

   6 Years 9 Months

   at 98,597 Tons/Year.*

   *Please note that this tonnage rate must include all materials placed in the landfill, i.e., waste, soil, cover, alternative daily covers, etc.

   c. The tonnage rate reported under 2.b. is based on (select one):

   X The amount of materials placed in the landfill in the reporting year

   _____ Estimated future disposal

   _____ Permit limit

   Other (explain): _____

3. Permitted Capacity Still to be Constructed

   a. What is the remaining but not yet constructed landfill capacity that is authorized by a Part 360 permit?

   1,710,159 Cubic Yards of Airspace

   b. What is the projected life of capacity reported in 3.a?

   17 Years 4 Months

   at 98,597 Tons/Year.*

   *Please note that this tonnage rate must include all materials disposed in the landfill, i.e., waste, and soil and alternative daily covers.

   c. The tonnage rate reported under 3.b. is based on (select one):

   X The amount of materials placed in the landfill in the reporting year

   _____ Estimated future disposal

   _____ Permit limit

   Other (explain): _____

4. Capacity Proposed in a Part 360 Permit Application

What is the capacity of any expansion proposed in a Part 360 permit application that has been submitted to the Department but not authorized by a permit as of the end of the reporting period?

N/A _____ 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 expansion at the facility that is not yet authorized by a permit or proposed in a Part 360 permit application that has been submitted to the Department?

_____ Cubic Yards of Airspace

SECTION 3 - PRIMARY LEACHATE

Name of off-site leachate treatment facility(s) utilized: City of Oswego WWTP

Does the landfill have a constructed liner and a leachate collection system? ☒ Yes ☐ No

Enter the quantity of primary leachate that was collected, removed for on-site and off-site treatment, and recirculated each month, and the corresponding **Acreage, by Cell**:
(Note: For double-lined landfills this should not include the volume of leachate collected from secondary leachate collection and removal systems.)

For **each cell**, please report the **acreage** and the **primary leachate** amount.

	PRIMARY LEACHATE COLLECTED (GALLONS)						PRIMARY LEACHATE TREATED OFF SITE (GALLONS)					
	Cell 1 ___Acres	Cell 2 ___Acres	Cell 3 ___Acres	Cell 4 ___Acres	Cell 5 ___Acres	Cell 6 ___Acres	Cell 1 ___Acres	Cell 2 ___Acres	Cell 3 ___Acres	Cell 4 ___Acres	Cell 5 ___Acres	Cell 6 ___Acres
January												
February	PLEASE	SEE	ATTACHED	PAGE	5							
March												
April												
May												
June												
July												
August												
September												
October												
November												
December												
ANNUAL												

	PRIMARY LEACHATE RECIRCULATED (GALLONS)						PRIMARY LEACHATE TREATED ON SITE (GALLONS)					
	Cell 1 ___Acres	Cell 2 ___Acres	Cell 3 ___Acres	Cell 4 ___Acres	Cell 5 ___Acres	Cell 6 ___Acres	Cell 1 ___Acres	Cell 2 ___Acres	Cell 3 ___Acres	Cell 4 ___Acres	Cell 5 ___Acres	Cell 6 ___Acres
January												
February												
March												
April												
May												
June												
July												
August												
September												
October												
November												
December												
ANNUAL												

2017 Leachate Disposal By Site By Month

Bristol Hill	Fulton	Oswego	Watertown	2017 Total Gallons
January		1,179,000	30,000	1,209,000
February		927,000	0	927,000
March		1,644,000	0	1,644,000
1st Quarter Totals	**0**	**3,750,000**	**30,000**	**3,780,000**
April		1,629,000		1,629,000
May		1,617,000		1,617,000
June		903,000		903,000
2nd Quarter Totals	**0**	**4,149,000**	**0**	**4,149,000**
July		975,000		975,000
August		1,392,000		1,392,000
September		1,080,000		1,080,000
3rd Quarter Totals	**0**	**3,447,000**	**0**	**3,447,000**
October		972,000		972,000
November		182,000		182,000
November (rate change)		475,000		475,000
December		354,000		354,000
4th Quarter Totals	**0**	**1,983,000**	**0**	**1,983,000**
Total Gallons	**0**	**13,329,000**	**30,000**	**13,359,000**
Cost				
Gals over 12.5M		**829,000**		
$0.02 per gal	**$0.00**	**$16,580.00**		
Total	**$0.00**	**$16,580.00**	**$900.00**	**$17,480.00**

Fulton cost per gallon : $0.025	Fulton cost per gallon over 10 million: $.02
Oswego cost per gallon: $0.020	Watertown cost per gallon: $0.03 (0.055 after 7-1-17)

No Oswego Charge until 12.5M Gal per Intermunicipal Agreement

Silk Road	Fulton	Oswego	Watertown	2017 Total Gallons
January				
February				
March				
1st Quarter Totals	**0**	**0**	**0**	**0**
April				
May				
June	225,000			
2nd Quarter Totals	**225,000**	**0**	**0**	**225,000**
July				
August				
September				
3rd Quarter Totals	**0**	**0**	**0**	**0**
October				
November	0			
December				
4th Quarter Totals	**0**	**0**	**0**	**0**
Total Gallons	**225,000**	**0**	**0**	**225,000**
Cost	**$5,625.00**	**$0.00**	**$0.00**	**$5,625.00**

Year End	Fulton	Oswego	Watertown	Grand Totals
2017 Gallons	225,000	13,329,000	30,000	13,584,000
2017 Total Cost	$5,625.00	$16,580.00	$900.00	$23,105

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

Please see attached Maintenance Log (page 7 & 8)

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:

Please see Environmental Monitoring Plan results/analysis submitted to the Department under separate cover.

SECTION 4 - SECONDARY LEACHATE

Does landfill have a double liner system with a secondary leachate collection and removal system? ☒ Yes ☐ No

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:

Please see Environmental Monitoring Plan results/analysis submitted to the Department under separate cover.

Please report total cost for the year, not cost/gal.

Leachate Cost: (including transportation if appropriate) during the calendar year for leachate treatment: $ $17,480.00

Total quantity treated: 13,359,000 gal

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 leachate amount.

Oswego County Department of Solid Waste

Primary and Secondary Leachate | **Collection System**

Maintenance Log

As stipulated in the New York State Department of Environmental Conservation (NYSDEC) Part 360 operating permit condition number 51 for the Oswego County Bristol Hill Landfill, the primary and secondary leachate collection / removal systems must be flushed at least annually to maintain an unobstructed and free draining collection system.

This form will serve as documentation that this system maintenance is occurring as required.

Date of flushing: 9-19-17 Pig Lines to Super Blues

System Flushed: [X] Primary [ ] Secondary Conveyance

Completed by: M. Kilts, M. Stevens, B. Reno, C. Hunt

Comments & Observations: System is in good condition.

If during a weekly inspection or flushing operation, the leachate collection/removal system's efficiency is found to be impaired, remedial cleaning operations must be conducted. Notify the Solid Waste Operations Manager.

Please file completed form with the Solid Waste Operations Manager.

Oswego County Department of Solid Waste

Primary and Secondary Leachate | **Collection System**

Maintenance Log

As stipulated in the New York State Department of Environmental Conservation (NYSDEC) Part 360 operating permit condition number 51 for the Oswego County Bristol Hill Landfill, the primary and secondary leachate collection / removal systems must be flushed at least annually to maintain an unobstructed and free draining collection system.

This form will serve as documentation that this system maintenance is occurring as required.

Date of flushing: 9-18-17

System Flushed: ☒ Primary ☐ Secondary Conveyance

Completed by: M. Kilts, M. Stevens, B. Dano, C. Kunf

Comments & Observations: System Seems in good condition

If during a weekly inspection or flushing operation, the leachate collection/removal system's efficiency is found to be impaired, remedial cleaning operations must be conducted. Notify the Solid Waste Operations Manager.

Please file completed form with the Solid Waste Operations Manager.

	SECONDARY LEACHATE COLLECTED (GALLONS)						SECONDARY LEACHATE TREATED OFF SITE (GALLONS)					
	Cell 1 ___Acres	Cell 2 ___Acres	Cell 3 ___Acres	Cell 4 ___Acres	Cell 5 ___Acres	Cell 6 ___Acres	Cell 1 ___Acres	Cell 2 ___Acres	Cell 3 ___Acres	Cell 4 ___Acres	Cell 5 ___Acres	Cell 6 ___Acres
January												
February	PLEASE	SEE	ATTACHED	CEILL	CHARTS							
March												
April												
May												
June												
July												
August												
September												
October												
November												
December												
ANNUAL												

	SECONDARY LEACHATE RECIRCULATED (GALLONS)						SECONDARY LEACHATE TREATED ON SITE (GALLONS)					
	Cell 1 ___Acres	Cell 2 ___Acres	Cell 3 ___Acres	Cell 4 ___Acres	Cell 5 ___Acres	Cell 6 ___Acres	Cell 1 ___Acres	Cell 2 ___Acres	Cell 3 ___Acres	Cell 4 ___Acres	Cell 5 ___Acres	Cell 6 ___Acres
January												
February												
March												
April												
May												
June												
July												
August												
September												
October												
November												
December												
ANNUAL												

Secondary Leachate Collection/Detection
Flow Rate Chart
Bristol Hill Landfill 1988 Cell
2017

2017	Time Since Prior Reading	Meter Readings (Gal)	Volume Pumped Since Prior Reading (Gal)	Volume Pumped Divided by Acres 5.3	Leakage Rate (Gal/Acre/Day)	30 - Day Average Leakage Rate	Total Gals Pumped Per Month	1988 CELL Comments
1-Oct-17		Sunday	0	0.00	0.00	0.00		
2-Oct-17	3	837	0	0.00	0.00	0.00		
3-Oct-17	1	837	0	0.00	0.00	0.00		
4-Oct-17	1	837	0	0.00	0.00	0.00		
5-Oct-17	1	837	0	0.00	0.00	0.00		
6-Oct-17	1	837	0	0.00	0.00	0.00		
7-Oct-17		Saturday	0	0.00	0.00	0.00		
8-Oct-17		Sunday	0	0.00	0.00	0.00		
9-Oct-17		Holiday	0	0.00	0.00	0.00		
10-Oct-17	4	837	0	0.00	0.00	0.00		
11-Oct-17	1	837	0	0.00	0.00	0.00		
12-Oct-17	1	837	0	0.00	0.00	0.00		
13-Oct-17	1	837	0	0.00	0.00	0.00		
14-Oct-17		Saturday	0	0.00	0.00	0.00		
15-Oct-17		Sunday	0	0.00	0.00	0.00		
16-Oct-17	3	837	0	0.00	0.00	0.00		
17-Oct-17	1	837	0	0.00	0.00	0.00		
18-Oct-17	1	837	0	0.00	0.00	0.00		
19-Oct-17	1	837	0	0.00	0.00	0.00		
20-Oct-17	1	837	0	0.00	0.00	0.00		
21-Oct-17		Saturday	0	0.00	0.00	0.00		
22-Oct-17		Sunday	0	0.00	0.00	0.00		
23-Oct-17	3	837	0	0.00	0.00	0.00		
24-Oct-17	1	837	0	0.00	0.00	0.00		
25-Oct-17	1	837	0	0.00	0.00	0.00		
26-Oct-17	1	837	0	0.00	0.00	0.00		
27-Oct-17	1	837	0	0.00	0.00	0.00		
28-Oct-17		Saturday	0	0.00	0.00	0.00		
29-Oct-17		Sunday	0	0.00	0.00	0.00		
30-Oct-17	3	837	0	0.00	0.00	0.00		
31-Oct-17	1	837	0	0.00	0.00	0.00	0	Month End

Secondary Leachate Collection/Detection
Flow Rate Chart
Bristol Hill Landfill 1988 Cell
2017

2017	Time Since Prior Reading	Meter Readings (Gal)	Volume Pumped Since Prior Reading (Gal)	Volume Pumped Divided by Acres 5.3	Leakage Rate (Gal/Acre/Day)	30 - Day Average Leakage Rate	Total Gals Pumped Per Month	1988 CELL Comments
1-Nov-17	1	837	0	0.00	0.00	0.00		
2-Nov-17	1	837	0	0.00	0.00	0.00		
3-Nov-17	1	837	0	0.00	0.00	0.00		
4-Nov-17		Saturday	0	0.00	0.00	0.00		
5-Nov-17		Sunday	0	0.00	0.00	0.00		
6-Nov-17	3	837	0	0.00	0.00	0.00		
7-Nov-17	1	837	0	0.00	0.00	0.00		
8-Nov-17	1	837	0	0.00	0.00	0.00		
9-Nov-17	1	837	0	0.00	0.00	0.00		
10-Nov-17		Holiday	0	0.00	0.00	0.00		
11-Nov-17		Saturday	0	0.00	0.00	0.00		
12-Nov-17		Sunday	0	0.00	0.00	0.00		
13-Nov-17	4	837	0	0.00	0.00	0.00		
14-Nov-17	1	837	0	0.00	0.00	0.00		
15-Nov-17	1	837	0	0.00	0.00	0.00		
16-Nov-17	1	837	0	0.00	0.00	0.00		
17-Nov-17	1	837	0	0.00	0.00	0.00		
18-Nov-17		Saturday	0	0.00	0.00	0.00		
19-Nov-17		Sunday	0	0.00	0.00	0.00		
20-Nov-17	3	837	0	0.00	0.00	0.00		
21-Nov-17	1	837	0	0.00	0.00	0.00		
22-Nov-17	1	837	0	0.00	0.00	0.00		
23-Nov-17		Holiday	0	0.00	0.00	0.00		
24-Nov-17		Holiday	0	0.00	0.00	0.00		
25-Nov-17		Saturday	0	0.00	0.00	0.00		
26-Nov-17		Sunday	0	0.00	0.00	0.00		
27-Nov-17	5	837	0	0.00	0.00	0.00		
28-Nov-17	1	837	0	0.00	0.00	0.00		
29-Nov-17	1	837	0	0.00	0.00	0.00		
30-Nov-17	1	837	0	0.00	0.00	0.00	0	Month End

Secondary Leachate Collection/Detection
Flow Rate Chart
Bristol Hill Landfill 1988 Cell
2017

2017	Time Since Prior Reading	Meter Readings (Gal)	Volume Pumped Since Prior Reading (Gal)	Volume Pumped Divided by Acres 5.3	Leakage Rate (Gal/Acre/Day)	30 - Day Average Leakage Rate	Total Gals Pumped Per Month	1988 CELL Comments
1-Dec-17	1	837	0	0.00	0.00	0.00		
2-Dec-17		Saturday	0	0.00	0.00	0.00		
3-Dec-17		Sunday	0	0.00	0.00	0.00		
4-Dec-17	3	837	0	0.00	0.00	0.00		
5-Dec-17	1	837	0	0.00	0.00	0.00		
6-Dec-17	1	837	0	0.00	0.00	0.00		
7-Dec-17	1	837	0	0.00	0.00	0.00		
8-Dec-17	1	837	0	0.00	0.00	0.00		
9-Dec-17		Saturday	0	0.00	0.00	0.00		
10-Dec-17		Sunday	0	0.00	0.00	0.00		
11-Dec-17	3	837	0	0.00	0.00	0.00		
12-Dec-17	1	837	0	0.00	0.00	0.00		
13-Dec-17	1	837	0	0.00	0.00	0.00		
14-Dec-17	1	837	0	0.00	0.00	0.00		
15-Dec-17	1	837	0	0.00	0.00	0.00		
16-Dec-17		Saturday	0	0.00	0.00	0.00		
17-Dec-17		Sunday	0	0.00	0.00	0.00		
18-Dec-17	3	837	0	0.00	0.00	0.00		
19-Dec-17	1	837	0	0.00	0.00	0.00		
20-Dec-17	1	837	0	0.00	0.00	0.00		
21-Dec-17	1	837	0	0.00	0.00	0.00		
22-Dec-17	1	837	0	0.00	0.00	0.00		
23-Dec-17		Saturday	0	0.00	0.00	0.00		
24-Dec-17		Sunday	0	0.00	0.00	0.00		
25-Dec-17		Holiday	0	0.00	0.00	0.00		
26-Dec-17	4	837	0	0.00	0.00	0.00		
27-Dec-17	1	837	0	0.00	0.00	0.00		
28-Dec-17	1	837	0	0.00	0.00	0.00		
29-Dec-17	1	837	0	0.00	0.00	0.00		
30-Dec-17	1	837	0	0.00	0.00	0.00		
31-Dec-17	1	Sunday	0	0.00	0.00	0.00	0	Month End

Secondary Leachate Collection/Detection
Flow Rate Chart
Bristol Hill Landfill 1992 Cell
2017

2017 Date	Time Since Prior Reading	Meter Readings (Gal)	Volume Pumped Since Prior Reading (Gal)	Volume Pumped Divided by Acres 5.5	Leakage Rate (Gal/Acre/Day)	30 - Day Average Leakage Rate	Total Gals Pumped Per Month	Comments
1-Oct-17		Sunday	0	0.00	0.00	0.04		
2-Oct-17	3	32022	0	0.00	0.00	0.04		
3-Oct-17	1	32023	1	0.18	0.18	0.04		
4-Oct-17	1	32023	0	0.00	0.00	0.05		
5-Oct-17	1	32025	2	0.36	0.36	0.05		
6-Oct-17	1	32025	0	0.00	0.00	0.05		
7-Oct-17		Saturday	0	0.00	0.00	0.05		
8-Oct-17		Sunday	0	0.00	0.00	0.05		
9-Oct-17	4	Holiday	0	0.00	0.00	0.05		
10-Oct-17	1	32027	2	0.36	0.12	0.05		
11-Oct-17	1	32027	0	0.00	0.00	0.05		
12-Oct-17	1	32027	0	0.00	0.00	0.04		
13-Oct-17	1	32027	0	0.00	0.00	0.03		
14-Oct-17		Saturday	0	0.00	0.00	0.03		
15-Oct-17		Sunday	0	0.00	0.00	0.03		
16-Oct-17	3	32027	0	0.00	0.00	0.03		
17-Oct-17	1	32027	0	0.00	0.00	0.03		
18-Oct-17	1	32027	0	0.00	0.00	0.03		
19-Oct-17	1	32028	1	0.18	0.18	0.03		
20-Oct-17	1	32028	0	0.00	0.00	0.03		
21-Oct-17		Saturday	0	0.00	0.00	0.03		
22-Oct-17		Sunday	0	0.00	0.00	0.03		
23-Oct-17	3	32028	0	0.00	0.00	0.03		
24-Oct-17	1	32028	0	0.00	0.00	0.03		
25-Oct-17	1	32028	0	0.00	0.00	0.03		
26-Oct-17	1	32028	0	0.00	0.00	0.03		
27-Oct-17	1	32028	0	0.00	0.00	0.03		
28-Oct-17		Saturday	0	0.00	0.00	0.03		
29-Oct-17		Sunday	0	0.00	0.00	0.03		
30-Oct-17	3	32039	11	2.00	1.00	0.03		
31-Oct-17	1	32042	3	0.55	0.55	0.06	20	Month End

Secondary Leachate Collection/Detection
Flow Rate Chart
Bristol Hill Landfill 1992 Cell
2017

2017 Date	Time Since Prior Reading	Meter Readings (Gal)	Volume Pumped Since Prior Reading (Gal)	Volume Pumped Divided by Acres 5.5	Leakage Rate (Gal/Acre/Day)	30 - Day Average Leakage Rate	Total Gals Pumped Per Month	Comments
1-Nov-17	1	32039	-3	-0.55	-0.55	0.08		
2-Nov-17	1	32100	61	11.09	11.09	0.06		
3-Nov-17	1	32121	21	3.82	3.82	0.43		
4-Nov-17		Saturday	0	0.00	0.00	0.54		
5-Nov-17		Sunday	0	0.00	0.00	0.54		
6-Nov-17	3	32149	28	5.09	2.55	0.54		
7-Nov-17	1	32155	6	1.09	1.09	0.63		
8-Nov-17	1	32161	6	1.09	1.09	0.66		
9-Nov-17	1	32161	0	0.00	0.00	0.69		
10-Nov-17		Holiday	0	0.00	0.00	0.69		
11-Nov-17		Saturday	0	0.00	0.00	0.69		
12-Nov-17		Sunday	0	0.00	0.00	0.69		
13-Nov-17	4	32162	1	0.18	0.09	0.69		
14-Nov-17	1	32162	0	0.00	0.00	0.70		
15-Nov-17	1	32162	0	0.00	0.00	0.70		
16-Nov-17	1	32162	0	0.00	0.00	0.70		
17-Nov-17	1	32162	0	0.00	0.00	0.70		
18-Nov-17		Saturday	0	0.00	0.00	0.69		
19-Nov-17		Sunday	0	0.00	0.00	0.69		
20-Nov-17	3	32162	0	0.00	0.00	0.69		
21-Nov-17	1	32162	0	0.00	0.00	0.69		
22-Nov-17	1	32163	1	0.18	0.18	0.69		
23-Nov-17		Holiday	0	0.00	0.00	0.70		
24-Nov-17		Holiday	0	0.00	0.00	0.70		
25-Nov-17		Saturday	0	0.00	0.00	0.70		
26-Nov-17		Sunday	0	0.00	0.00	0.70		
27-Nov-17	5	32165	2	0.36	0.18	0.70		
28-Nov-17	1	32165	0	0.00	0.00	0.70		
29-Nov-17	1	32165	0	0.00	0.00	0.67		
30-Nov-17	1	32165	0	0.00	0.00	0.65	123	Month End

Secondary Leachate Collection/Detection
Flow Rate Chart
Bristol Hill Landfill 1992 Cell
2017

2017 Date	Time Since Prior Reading	Meter Readings (Gal)	Volume Pumped Since Prior Reading (Gal)	Volume Pumped Divided by Acres 5.5	Leakage Rate (Gal/Acre/Day)	30 - Day Average Leakage Rate	Total Gals Pumped Per Month	Comments
1-Dec-17	1	32165	0	0.00	0.00	0.67		
2-Dec-17		Saturday	0	0.00	0.00	0.30		
3-Dec-17		Sunday	0	0.00	0.00	0.17		
4-Dec-17	1	32168	3	0.55	0.27	0.17		
5-Dec-17	1	32168	0	0.00	0.00	0.18		
6-Dec-17	1	32168	0	0.00	0.00	0.10		
7-Dec-17	1	32168	0	0.00	0.00	0.06		
8-Dec-17	1	32170	2	0.36	0.36	0.02		
9-Dec-17		Saturday	0	0.00	0.00	0.04		
10-Dec-17		Sunday	0	0.00	0.00	0.04		
11-Dec-17	1	32172	2	0.36	0.18	0.04		
12-Dec-17	1	32172	0	0.00	0.00	0.04		
13-Dec-17	1	32172	0	0.00	0.00	0.04		
14-Dec-17	1	32174	2	0.36	0.36	0.04		
15-Dec-17	1	32174	0	0.00	0.00	0.05		
16-Dec-17		Saturday	0	0.00	0.00	0.05		
17-Dec-17		Sunday	0	0.00	0.00	0.05		
18-Dec-17	1	32174	0	0.00	0.00	0.05		
19-Dec-17	1	32174	0	0.00	0.00	0.05		
20-Dec-17	1	32174	0	0.00	0.00	0.05		
21-Dec-17	1	32174	0	0.00	0.00	0.05		
22-Dec-17	1	32178	4	0.73	0.73	0.05		
23-Dec-17		Saturday	0	0.00	0.00	0.07		
24-Dec-17		Sunday	0	0.00	0.00	0.07		
25-Dec-17		Holiday	0	0.00	0.00	0.07		
26-Dec-17	4	32183	5	0.91	0.30	0.07		
27-Dec-17	1	32183	0	0.00	0.00	0.07		
28-Dec-17	1	32187	4	0.73	0.73	0.07		
29-Dec-17	1	32187	0	0.00	0.00	0.10		
30-Dec-17		Saturday	0	0.00	0.00	0.10		
31-Dec-17		Sunday	0	0.00	0.00	0.10	22	Month End

Secondary Leachate Collection/Detection
Flow Rate Chart
Bristol Hill Landfill 1996 Cell
2017

2017 Date	Time Since Prior Reading	Meter Readings (Gal)	Volume Pumped Since Prior Reading (Gal)	Volume Pumped Divided by Acres 7.0	Leakage Rate (Gal/Acre/Day)	30 - Day Average Leakage Rate	Total Gals Pumped Per Month	Comments
31-Dec-16	1	421	0	0	0	0.00		Month End
1-Jan-17	1	Sunday	0	0.00	0.00	0.00		
2-Jan-17		Holiday	0	0.00	0.00	0.00		
3-Jan-17	4	421	0	0.00	0.00	0.00		
4-Jan-17	1	421	0	0.00	0.00	0.00		
5-Jan-17	1	421	0	0.00	0.00	0.00		
6-Jan-17	1	421	0	0.00	0.00	0.00		
7-Jan-17		Saturday	0	0.00	0.00	0.00		
8-Jan-17		Sunday	0	0.00	0.00	0.00		
9-Jan-17	3	421	0	0.00	0.00	0.00		
10-Jan-17	1	421	0	0.00	0.00	0.00		
11-Jan-17	1	421	0	0.00	0.00	0.00		
12-Jan-17	1	421	0	0.00	0.00	0.00		
13-Jan-17	1	421	0	0.00	0.00	0.00		
14-Jan-17		Saturday	0	0.00	0.00	0.00		
15-Jan-17		Sunday	0	0.00	0.00	0.00		
16-Jan-17		Holiday	0	0.00	0.00	0.00		
17-Jan-17	4	421	0	0.00	0.00	0.00		
18-Jan-17	1	421	0	0.00	0.00	0.00		
19-Jan-17	1	421	0	0.00	0.00	0.00		
20-Jan-17	1	421	0	0.00	0.00	0.00		
21-Jan-17		Saturday	0	0.00	0.00	0.00		
22-Jan-17		Sunday	0	0.00	0.00	0.00		
23-Jan-17	3	421	0	0.00	0.00	0.00		
24-Jan-17	1	421	0	0.00	0.00	0.00		
25-Jan-17	1	421	0	0.00	0.00	0.00		
26-Jan-17	1	421	0	0.00	0.00	0.00		
27-Jan-17	1	421	0	0.00	0.00	0.00		
28-Jan-17		Saturday	0	0.00	0.00	0.00		
29-Jan-17		Sunday	0	0.00	0.00	0.00		
30-Jan-17	3	421	0	0.00	0.00	0.00		
31-Jan-17	1	421	0	0.00	0.00	0.00	0	Month End

Secondary Leachate Collection/Detection
Flow Rate Chart
Bristol Hill Landfill 1996 Cell
2017

2017 Date	Time Since Prior Reading	Meter Readings (Gal)	Volume Pumped Since Prior Reading (Gal)	Volume Pumped Divided by Acres 7.0	Leakage Rate (Gal/Acre/Day)	30 - Day Average Leakage Rate	Total Gals Pumped Per Month	Comments	
1-Feb-17	1	421	0	0.00	0.00	0.00			
2-Feb-17	1	421	0	0.00	0.00	0.00			
3-Feb-17	1	421	0	0.00	0.00	0.00			
4-Feb-17		Saturday		0.00	0.00	0.00			
5-Feb-17		Sunday		0.00	0.00	0.00			
6-Feb-17	3	421	0	0.00	0.00	0.00			
7-Feb-17	1	421	0	0.00	0.00	0.00			
8-Feb-17	1	421	0	0.00	0.00	0.00			
9-Feb-17	1	421	0	0.00	0.00	0.00			
10-Feb-17	1	421	0	0.00	0.00	0.00			
11-Feb-17		Saturday		0.00	0.00	0.00			
12-Feb-17		Sunday		0.00	0.00	0.00			
13-Feb-17		Holiday		0.00	0.00	0.00			
14-Feb-17	4	421	0	0.00	0.00	0.00			
15-Feb-17	1	421	0	0.00	0.00	0.00			
16-Feb-17	1	421	0	0.00	0.00	0.00			
17-Feb-17	1	421	0	0.00	0.00	0.00			
18-Feb-17		Saturday		0.00	0.00	0.00			
19-Feb-17		Sunday		0.00	0.00	0.00			
20-Feb-17	3	421	0	0.00	0.00	0.00			
21-Feb-17	1	421	0	0.00	0.00	0.00			
22-Feb-17	1	421	0	0.00	0.00	0.00			
23-Feb-17	1	421	0	0.00	0.00	0.00			
24-Feb-17	1	421	0	0.00	0.00	0.00			
25-Feb-17		Saturday		0.00	0.00	0.00			
26-Feb-17		Sunday		0.00	0.00	0.00			
27-Feb-17	3	421	0	0.00	0.00	0.00			
28-Feb-17	1	421	0	0.00	0.00	0.00	0	Month End	

Secondary Leachate Collection/Detection
Flow Rate Chart
Bristol Hill Landfill 1996 Cell
2017

2017 Date	Time Since Prior Reading	Meter Readings (Gal)	Volume Pumped Since Prior Reading (Gal)	Volume Pumped Divided by Acres 7.0	Leakage Rate (Gal/Acre/Day)	30 - Day Average Leakage Rate	Total Gals Pumped Per Month	Comments	
1-Mar-17	1	421	0	0.00	0.00	0.00			
2-Mar-17	1	421	0	0.00	0.00	0.00			
3-Mar-17	1	421	0	0.00	0.00	0.00			
4-Mar-17		Saturday		0.00	0.00	0.00			
5-Mar-17		Sunday		0.00	0.00	0.00			
6-Mar-17	3	422	1	0.14	0.05	0.00			
7-Mar-17	1	422	0	0.00	0.00	0.00			
8-Mar-17	1	422	0	0.00	0.00	0.00			
9-Mar-17	1	422	0	0.00	0.00	0.00			
10-Mar-17	1	422	0	0.00	0.00	0.00			
11-Mar-17		Saturday		0.00	0.00	0.00			
12-Mar-17		Sunday		0.00	0.00	0.00			
13-Mar-17	3	422	0	0.00	0.00	0.00			
14-Mar-17	1	422	0	0.00	0.00	0.00			
15-Mar-17	1	422	0	0.00	0.00	0.00			
16-Mar-17	1	422	0	0.00	0.00	0.00			
17-Mar-17	1	422	0	0.00	0.00	0.00			
18-Mar-17		Saturday		0.00	0.00	0.00			
19-Mar-17		Sunday		0.00	0.00	0.00			
20-Mar-17	3	422	0	0.00	0.00	0.00			
21-Mar-17	1	422	0	0.00	0.00	0.00			
22-Mar-17	1	422	0	0.00	0.00	0.00			
23-Mar-17	1	422	0	0.00	0.00	0.00			
24-Mar-17	1	422	0	0.00	0.00	0.00			
25-Mar-17		Saturday		0.00	0.00	0.00			
26-Mar-17		Sunday		0.00	0.00	0.00			
27-Mar-17	3	422	0	0.00	0.00	0.00			
28-Mar-17	1	422	0	0.00	0.00	0.00			
29-Mar-17	1	422	0	0.00	0.00	0.00			
30-Mar-17	1	422	0	0.00	0.00	0.00			
31-Mar-17	1	422	0	0.00	0.00	0.00	1	Month End	

Secondary Leachate Collection/Detection
Flow Rate Chart
Bristol Hill Landfill 1996 Cell
2017

2017 Date	Time Since Prior Reading	Meter Readings (Gal)	Volume Pumped Since Prior Reading (Gal)	Volume Pumped Divided by Acres 7.0	Leakage Rate (Gal/Acre/Day)	30 - Day Average Leakage Rate	Total Gals Pumped Per Month	Comments	
1-Apr-17		Saturday		0.00	0.00	0.00			
2-Apr-17		Sunday		0.00	0.00	0.00			
3-Apr-17	3	422	0	0.00	0.00	0.00			
4-Apr-17	1	422	0	0.00	0.00	0.00			
5-Apr-17	1	422	0	0.00	0.00	0.00			
6-Apr-17	1	422	0	0.00	0.00	0.00			
7-Apr-17	1	422	0	0.00	0.00	0.00			
8-Apr-17		Saturday		0.00	0.00	0.00			
9-Apr-17		Sunday		0.00	0.00	0.00			
10-Apr-17	3	422	0	0.00	0.00	0.00			
11-Apr-17	1	422	0	0.00	0.00	0.00			
12-Apr-17	1	422	0	0.00	0.00	0.00			
13-Apr-17	1	422	0	0.00	0.00	0.00			
14-Apr-17	1	422	0	0.00	0.00	0.00			
15-Apr-17		Saturday		0.00	0.00	0.00			
16-Apr-17		Sunday		0.00	0.00	0.00			
17-Apr-17	3	422	0	0.00	0.00	0.00			
18-Apr-17	1	422	0	0.00	0.00	0.00			
19-Apr-17	1	422	0	0.00	0.00	0.00			
20-Apr-17	1	422	0	0.00	0.00	0.00			
21-Apr-17	1	422	0	0.00	0.00	0.00			
22-Apr-17		Saturday		0.00	0.00	0.00			
23-Apr-17		Sunday		0.00	0.00	0.00			
24-Apr-17	3	422	0	0.00	0.00	0.00			
25-Apr-17	1	422	0	0.00	0.00	0.00			
26-Apr-17	1			0.00	0.00	0.00		Remote counter failed.	
27-Apr-17	1		0	0.00	0.00	0.00		Remote readout says 2338,	
28-Apr-17	1		0	0.00	0.00	0.00		flow meter local reading has not changed	
29-Apr-17		Saturday		0.00	0.00	0.00			
30-Apr-17		Sunday		0.00	0.00	0.00	1		

Secondary Leachate Collection/Detection
Flow Rate Chart
Bristol Hill Landfill 1996 Cell
2017

2017 Date	Time Since Prior Reading	Meter Readings (Gal)	Volume Pumped Since Prior Reading (Gal)	Volume Pumped Divided by Acres 7.0	Leakage Rate (Gal/Acre/Day)	30 - Day Average Leakage Rate	Total Gals Pumped Per Month	Comments
1-May-17	3	0	0	0.00	0.00	0.00		Counter replacement 5/1/17
2-May-17	1	0	0	0.00	0.00	0.00		
3-May-17	1	0	0	0.00	0.00	0.00		
4-May-17	1	0	0	0.00	0.00	0.00		
5-May-17	1	0	0	0.00	0.00	0.00		
6-May-17		Saturday		0.00	0.00	0.00		
7-May-17		Sunday		0.00	0.00	0.00		
8-May-17	3	0	0	0.00	0.00	0.00		
9-May-17	1	0	0	0.00	0.00	0.00		
10-May-17	1	131	131	18.71	18.71	0.67		
11-May-17	1	131	0	0.00	0.00	0.67		
12-May-17	1	131	0	0.00	0.00	0.67		
13-May-17		Saturday		0.00	0.00	0.67		
14-May-17		Sunday		0.00	0.00	0.67		
15-May-17	3	0	-131	-18.71	-6.24	0.45		Reset couter,due to bad counter connection.
16-May-17	1	0	0	0.00	0.00	0.45		New 30 average started today
17-May-17	1	0	0	0.00	0.00	0.45		Remote readout says 3986
18-May-17	1	0	0	0.00	0.00	0.45		flowmeter local reading has not changed
19-May-17	1	0	0	0.00	0.00	0.45		
20-May-17		Saturday		0.00	0.00	0.45		
21-May-17		Sunday		0.00	0.00	0.45		
22-May-17	1	0	0	0.00	0.00	0.45		
23-May-17	1	0	0	0.00	0.00	0.45		
24-May-17	1	0	0	0.00	0.00	0.45		
25-May-17	1	0	0	0.00	0.00	0.45		
26-May-17	1	0	0	0.00	0.00	0.45		
27-May-17		Saturday		0.00	0.00	0.45		
28-May-17		Sunday		0.00	0.00	0.45		
29-May-17		Holiday		0.00	0.00	0.45		
30-May-17	4	41	41	5.86	1.46	0.50		
31-May-17	1	49	8	1.14	1.14	0.54	49	Month End

Secondary Leachate Collection/Detection
Flow Rate Chart
Bristol Hill Landfill 1996 Cell
2017

2017 Date	Time Since Prior Reading	Meter Readings (Gal)	Volume Pumped Since Prior Reading (Gal)	Volume Pumped Divided by Acres 7.0	Leakage Rate (Gal/Acre/Day)	30 - Day Average Leakage Rate	Total Gals Pumped Per Month	Comments
1-Jun-17	1	62	13	1.86	1.86	0.61		
2-Jun-17	1	63	1	0.14	0.14	0.61		
3-Jun-17		Saturday		0.00	0.00	0.61		
4-Jun-17		Sunday		0.00	0.00	0.61		
5-Jun-17	3	65	2	0.29	0.10	0.61		
6-Jun-17	1	65	0	0.00	0.00	0.61		
7-Jun-17	1	66	1	0.14	0.14	-0.05		
8-Jun-17	1	68	2	0.29	0.29	-0.04		
9-Jun-17	1	68	0	0.00	0.00	-0.04		
10-Jun-17		Saturday		0.00	0.00	-0.04		
11-Jun-17		Sunday		0.00	0.00	-0.04		
12-Jun-17	3	72	4	0.57	0.19	0.19		
13-Jun-17	1	74	2	0.29	0.29	0.20		
14-Jun-17	1	75	1	0.14	0.14	0.21		
15-Jun-17	1	76	1	0.14	0.14	0.21		
16-Jun-17	1	78	2	0.29	0.29	0.22		
17-Jun-17		Saturday		0.00	0.00	0.22		
18-Jun-17		Sunday		0.00	0.00	0.22		
19-Jun-17	3	80	2	0.29	0.10	0.22		
20-Jun-17	1	82	2	0.29	0.29	0.23		
21-Jun-17	1	82	0	0.00	0.00	0.23		
22-Jun-17	1	85	3	0.43	0.43	0.25		
23-Jun-17	1	85	0	0.00	0.00	0.25		
24-Jun-17		Saturday		0.00	0.00	0.25		
25-Jun-17		Sunday		0.00	0.00	0.25		
26-Jun-17	3	90	5	0.71	0.24	0.26		New 30 day average begins
27-Jun-17	1	90	0	0.00	0.00	0.21		
28-Jun-17	1	92	2	0.29	0.29	0.18		
29-Jun-17	1	93	1	0.14	0.14	0.11		
30-Jun-17	1	95	2	0.29	0.29	0.12	46	Month End

Secondary Leachate Collection/Detection
Flow Rate Chart
Bristol Hill Landfill 1996 Cell
2017

2017 Date	Time Since Prior Reading	Meter Readings (Gal)	Volume Pumped Since Prior Reading (Gal)	Volume Pumped Divided by Acres 7.0	Leakage Rate (Gal/Acre/Day)	30 - Day Average Leakage Rate	Total Gals Pumped Per Month	Comments
1-Jul-17		Saturday		0.00	0.00	0.12		
2-Jul-17		Sunday		0.00	0.00	0.12		
3-Jul-17	3	101	8	1.14	1.14	0.16		
4-Jul-17		Holiday	0	0.00	0.00	0.16		
5-Jul-17	2	101	0	0.00	0.00	0.15		
6-Jul-17	1	103	2	0.29	0.29	0.15		
7-Jul-17	1	103	0	0.00	0.00	0.15		
8-Jul-17		Saturday		0.00	0.00	0.15		
9-Jul-17		Sunday		0.00	0.00	0.15		
10-Jul-17	3	103	0	0.00	0.00	0.14		
11-Jul-17	1	104	1	0.14	0.14	0.14		
12-Jul-17	1	105	1	0.14	0.14	0.14		
13-Jul-17	1	107	2	0.29	0.29	0.14		
14-Jul-17	1	107	0	0.00	0.00	0.13		
15-Jul-17		Saturday		0.00	0.00	0.13		
16-Jul-17		Sunday		0.00	0.00	-0.13		
17-Jul-17	3	107	0	0.00	0.00	0.13		
18-Jul-17	1	108	1	0.14	0.14	0.13		
19-Jul-17	1	109	1	0.14	0.14	0.13		
20-Jul-17	1	110	1	0.14	0.14	0.12		
21-Jul-17	1	110	0	0.00	0.00	0.12		
22-Jul-17		Saturday		0.00	0.00	0.12		
23-Jul-17		Sunday		0.00	0.00	0.12		
24-Jul-17	3	111	1	0.14	0.05	0.11		
25-Jul-17	1	111	0	0.00	0.00	0.11		
26-Jul-17	1	112	1	0.14	0.14	0.11		
27-Jul-17	1	112	0	0.00	0.00	0.10		
28-Jul-17	1	112	0	0.00	0.00	0.09		
29-Jul-17		Saturday		0.00	0.00	0.09		
30-Jul-17		Sunday		0.00	0.00	0.09		
31-Jul-17	3	112	0	0.00	0.00	0.05	17	Month End

Secondary Leachate Collection/Detection
Flow Rate Chart
Bristol Hill Landfill 1996 Cell
2017

2017 Date	Time Since Prior Reading	Meter Readings (Gal)	Volume Pumped Since Prior Reading (Gal)	Volume Pumped Divided by Acres 7.0	Leakage Rate (Gal/Acre/Day)	30 - Day Average Leakage Rate	Total Gals Pumped Per Month	Comments	
1-Aug-17	1	112	0	0.00	0.00	0.05			
2-Aug-17	1	112	0	0.00	0.00	0.05			
3-Aug-17	1	112	0	0.00	0.00	0.04			
4-Aug-17	1	112	0	0.00	0.00	0.04			
5-Aug-17		Saturday		0.00	0.00	0.04			
6-Aug-17		Sunday		0.00	0.00	0.04			
7-Aug-17	3	114	2	0.29	0.10	0.05			
8-Aug-17	1	114	0	0.00	0.00	0.04			
9-Aug-17	1	114	0	0.00	0.00	0.04			
10-Aug-17	1	114	0	0.00	0.00	0.03			
11-Aug-17	1	114	0	0.00	0.00	0.03			
12-Aug-17		Saturday		0.00	0.00	0.03			
13-Aug-17		Sunday		0.00	0.00	0.03			
14-Aug-17	3	116	2	0.29	0.10	0.03			
15-Aug-17	1	116	0	0.00	0.00	0.02			
16-Aug-17	1	116	0	0.00	0.00	0.02			
17-Aug-17	1	116	0	0.00	0.00	0.01			
18-Aug-17	1	116	0	0.00	0.00	0.01			
19-Aug-17		Saturday		0.00	0.00	0.01			
20-Aug-17		Sunday		0.00	0.00	0.01			
21-Aug-17	3	116	0	0.00	0.00	0.01			
22-Aug-17	1	116	0	0.00	0.00	0.01			
23-Aug-17	1	117	1	0.14	0.14	0.01			
24-Aug-17	1	117	0	0.00	0.00	0.01			
25-Aug-17	1	118	1	0.14	0.14	0.02			
26-Aug-17		Sunday		0.00	0.00	0.02			
27-Aug-17		Saturday		0.00	0.00	0.02			
28-Aug-17		118	0	0.00	0.00	0.02			
29-Aug-17	4	118	0	0.00	0.00	0.02			
30-Aug-17	1	118	0	0.00	0.00	0.02			
31-Aug-17	1	118	0	0.00	0.00	0.02	6	Month End	

Secondary Leachate Collection/Detection
Flow Rate Chart
Bristol Hill Landfill 1996 Cell
2017

2017 Date	Time Since Prior Reading	Meter Readings (Gal)	Volume Pumped Since Prior Reading (Gal)	Volume Pumped Divided by Acres 7.0	Leakage Rate (Gal/Acre/Day)	30 - Day Average Leakage Rate	Total Gals Pumped Per Month	Comments
1-Sep-17	1	118	0	0.00	0.00	0.02		
2-Sep-17		Saturday		0.00	0.00	0.02		
3-Sep-17		Sunday		0.00	0.00	0.02		
4-Sep-17	3	Holiday		0.00	0.00	0.01		
5-Sep-17	1	118	0	0.00	0.00	0.01		
6-Sep-17	1	118	0	0.00	0.00	0.01		
7-Sep-17	1	120	2	0.29	0.29	0.02		
8-Sep-17	1	120	0	0.00	0.00	0.02		
9-Sep-17		Saturday		0.00	0.00	0.02		
10-Sep-17		Sunday		0.00	0.00	0.02		
11-Sep-17	3	122	2	0.29	0.10	0.02		
12-Sep-17	1	124	2	0.29	0.29	0.03		
13-Sep-17	1	124	0	0.00	0.00	0.03		
14-Sep-17	1	124	0	0.00	0.00	0.03		
15-Sep-17	1	124	0	0.00	0.00	0.03		
16-Sep-17		Saturday		0.00	0.00	0.03		
17-Sep-17		Sunday		0.00	0.00	0.03		
18-Sep-17	3	130	6	0.86	0.29	0.04		
19-Sep-17	1	130	0	0.00	0.00	0.04		
20-Sep-17	1	138	8	1.14	1.14	0.08		
21-Sep-17	1	138	0	0.00	0.00	0.08		
22-Sep-17	1	138	0	0.00	0.00	0.07		
23-Sep-17		Saturday		0.00	0.00	0.07		
24-Sep-17		Sunday		0.00	0.00	0.07		
25-Sep-17	3	223	85	12.14	4.05	0.22		
26-Sep-17	1	399	176	25.14	25.14	1.12		
27-Sep-17	1	425	26	3.71	3.71	1.25		
28-Sep-17	1	461	36	5.14	5.14	1.43		
29-Sep-17	1	461	0	0.00	0.00	1.43		
30-Sep-17		Saturday		0.00	0.00	1.43	343	Month End

Secondary Leachate Collection/Detection
Flow Rate Chart
Bristol Hill Landfill 1996 Cell
2017

2017 Date	Time Since Prior Reading	Meter Readings (Gal)	Volume Pumped Since Prior Reading (Gal)	Volume Pumped Divided by Acres 7.0	Leakage Rate (Gal/Acre/Day)	30 - Day Average Leakage Rate	Total Gals Pumped Per Month	Comments	
1-Oct-17		Sunday		0.00	0.00	1.43			
2-Oct-17	3	461	0	0.00	0.00	1.43			
3-Oct-17	1	465	4	0.57	0.57	1.45			
4-Oct-17	1	470	5	0.71	0.71	1.48			
5-Oct-17	1	474	4	0.57	0.57	1.49			
6-Oct-17	1	474	0	0.00	0.00	1.49			
7-Oct-17		Saturday		0.00	0.00	1.49			
8-Oct-17		Sunday		0.00	0.00	1.49			
9-Oct-17	3	477	3	0.43	0.14	1.49			
10-Oct-17	1	477	0	0.00	0.00	1.48			
11-Oct-17	1	480	3	0.43	0.43	1.50			
12-Oct-17	1	480	0	0.00	0.00	1.50			
13-Oct-17	1	480	0	0.00	0.00	1.50			
14-Oct-17		Saturday		0.00	0.00	1.50			
15-Oct-17		Sunday		0.00	0.00	1.50			
16-Oct-17	3	481	1	0.14	0.05	1.49			
17-Oct-17	1	481	0	0.00	0.00	1.49			
18-Oct-17	1	481	0	0.00	0.00	1.45			
19-Oct-17	1	481	0	0.00	0.00	1.45			
20-Oct-17	1	481	0	0.00	0.00	1.45			
21-Oct-17		Saturday		0.00	0.00	1.45			
22-Oct-17		Sunday		0.00	0.00	1.45			
23-Oct-17	3	482	1	0.14	0.05	1.30			
24-Oct-17	1	482	0	0.00	0.00	0.41			
25-Oct-17	1	482	0	0.00	0.00	0.27			
26-Oct-17	1	482	0	0.00	0.00	0.09			
27-Oct-17	1	482	0	0.00	0.00	0.09			
28-Oct-17		Saturday		0.00	0.00	0.09			
29-Oct-17		Sunday		0.00	0.00	0.09			
30-Oct-17	3	482	0	0.00	0.00	0.09			
31-Oct-17	1	484	2	0.29	0.29	0.08	23	Month End	

Secondary Leachate Collection/Detection
Flow Rate Chart
Bristol Hill Landfill 1996 Cell
2017

2017 Date	Time Since Prior Reading	Meter Readings (Gal)	Volume Pumped Since Prior Reading (Gal)	Volume Pumped Divided by Acres 7.0	Leakage Rate (Gal/Acre/Day)	30 - Day Average Leakage Rate	Total Gals Pumped Per Month	Comments	
1-Nov-17	1	484	0	0.00	0.00	0.05			
2-Nov-17	1	485	1	0.14	0.14	0.04			
3-Nov-17	1	486	1	0.14	0.14	0.04			
4-Nov-17		Saturday		0.00	0.00	0.04			
5-Nov-17		Sunday		0.00	0.00	0.04			
6-Nov-17	3	491	5	0.71	0.24	0.05			
7-Nov-17	1	494	3	0.43	0.43	0.06			
8-Nov-17	1	494	0	0.00	0.00	0.05			
9-Nov-17	1	495	1	0.14	0.14	0.05			
10-Nov-17		Holiday		0.00	0.00	0.05			
11-Nov-17		Saturday		0.00	0.00	0.05			
12-Nov-17		Sunday		0.00	0.00	0.05			
13-Nov-17	4	499	4	0.57	0.14	0.06			
14-Nov-17	1	499	0	0.00	0.00	0.06			
15-Nov-17	1	499	0	0.00	0.00	0.06			
16-Nov-17	1	499	0	0.00	0.00	0.06			
17-Nov-17	1	500	1	0.14	0.14	0.06			
18-Nov-17		Saturday		0.00	0.00	0.06			
19-Nov-17		Sunday		0.00	0.00	0.06			
20-Nov-17	3	503	3	0.43	0.14	0.06			
21-Nov-17	1	503	0	0.00	0.00	0.06			
22-Nov-17	1	503	0	0.00	0.00	0.06			
23-Nov-17		Holiday		0.00	0.00	0.06			
24-Nov-17		Holiday		0.00	0.00	0.06			
25-Nov-17		Saturday		0.00	0.00	0.06			
26-Nov-17		Sunday		0.00	0.00	0.06			
27-Nov-17	5	506	3	0.43	0.09	0.07			
28-Nov-17	1	506	0	0.00	0.00	0.06			
29-Nov-17	1	506	0	0.00	0.00	0.06			
30-Nov-17	1	506	0	0.00	0.00	0.05	22.00	Month End	

Secondary Leachate Collection/Detection
Flow Rate Chart
Bristol Hill Landfill 1996 Cell
2017

2017 Date	Time Since Prior Reading	Meter Readings (Gal)	Volume Pumped Since Prior Reading (Gal)	Volume Pumped Divided by Acres 7.0	Leakage Rate (Gal/Acre/Day)	30 - Day Average Leakage Rate	Total Gals Pumped Per Month	Comments
1-Dec-17	1	506	0	0.00	0.00	0.05		
2-Dec-17		Saturday		0.00	0.00	0.05		
3-Dec-17		Sunday		0.00	0.00	0.05		
4-Dec-17	3	509	3	0.43	0.14	0.04		
5-Dec-17	1	509	0	0.00	0.00	0.03		
6-Dec-17	1	509	0	0.00	0.00	0.03		
7-Dec-17	1	509	0	0.00	0.00	0.02		
8-Dec-17	1	509	0	0.00	0.00	0.02		
9-Dec-17		Saturday		0.00	0.00	0.02		
10-Dec-17		Sunday		0.00	0.00	0.02		
11-Dec-17	3	509	0	0.00	0.00	0.02		
12-Dec-17	1	511	2	0.29	0.29	0.03		
13-Dec-17	1	511	0	0.00	0.00	0.03		
14-Dec-17	1	511	0	0.00	0.00	0.03		
15-Dec-17	1	511	0	0.00	0.00	0.02		
16-Dec-17		Saturday		0.00	0.00	0.02		
17-Dec-17		Sunday		0.00	0.00	0.02		
18-Dec-17	3	511	0	0.00	0.00	0.02		
19-Dec-17	1	511	0	0.00	0.00	0.02		
20-Dec-17	1	511	0	0.00	0.00	0.02		
21-Dec-17	1	511	0	0.00	0.00	0.02		
22-Dec-17	1	511	0	0.00	0.00	0.02		
23-Dec-17		Saturday		0.00	0.00	0.02		
24-Dec-17		Sunday		0.00	0.00	0.02		
25-Dec-17		Holiday		0.00	0.00	0.02		
26-Dec-17	4	511	0	0.00	0.00	0.02		
27-Dec-17	1	511	0	0.00	0.00	0.02		
28-Dec-17	1	511	0	0.00	0.00	0.02		
29-Dec-17	1	511	0	0.00	0.00	0.02		
30-Dec-17	1	511	0	0.00	0.00	0.02		
31-Dec-17		Saturday	0	0.00	0.00	0.02	5	Month End

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	1,789	AOC	Oswego County	Oswego	NY	Direct Haul
Foundry Sand						
Glass						
Industrial Waste (specify)						
MSW/Wood Ash	16,295	AOC	Oswego County	Oswego	NY	Oswego Cty ERF, 2801 St Rte 481, Fulton NY
Paper Mill Sludge						
Processed C&D						
Shredder Fluff						
Tire Chips						
Wood/Wood Chips						
Other (specify)						
Total ADC	18084					
Total Beneficial Use Determination Materials	18084					

Percent Alternative Daily Cover (ADC) Calculation

ADC Calculations: Total Tons ADC/Total Tons Waste Disposed x 100 = 25%

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 quantities 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	37.7	61.24	215.13	31.92	1042.57	3979.64	8423.74
Ash (Coal)	0	0	0	0	0	0	0
Ash (MSW Energy Recovery)	351.21	323.68	183.95	617.97	835.80	829.09	630.40
Construction & Demolition Debris (mixed)	565.15	263.57	610.24	571.74	1792.51	4937.57	4972.46
Industrial Waste (Including Industrial Process Sludges)	524.87	839.74	1100.20	896.09	989.67	1073.16	814.04
Mixed Municipal Solid Waste (Residential, Institutional & Commercial)	445.41	93.61	175.34	550.89	861.32	916.90	986.35
Oil/Gas Drilling Waste	0	0	0	0	0	0	0
Petroleum Contaminated Soil	0	0	0	0	0	0	0
Sewage Treatment Plant Sludge	257.90	296.33	330.60	221.06	418.18	326.48	307.41
Treated Regulated Medical Waste	0	0	0	0	0	0	0
Emergency Authorization Waste (Storm Debris)	0	0	0	0	0	0	0
Other (specify) Fish	0	0	0	0	0	0	0
Failed Compost	0	0	0	0	0	0	0
Total Tons Disposed	2182.2	1878.2	2615.5	2889.7	5940	12063	11620

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	100	8423.74	786.97	271.25	265.74	607.43	19632.59	74.93
Ash (Coal)	0	0	0	0	0	0	0	0
Ash (MSW Energy Recovery)	0	766.06	272.57	583.14	262.69	225.14	5881.67	22.45
Construction & Demolition Debris (mixed)	60	2223.89	4648.61	1368.56	1176.27	794.70	23928.27	91.32
Industrial Waste (Including Industrial Process Sludges)	75	984.43	957.06	829.81	772.25	424.67	10205.99	38.95
Mixed Municipal Solid Waste (Residential, Institutional & Commercial)	75	796.58	1915.78	660.72	1032.61	502.04	8937.55	34.11
Oil/Gas Drilling Waste	0	0	0	0	0	0	0	0
Petroleum Contaminated Soil	30	0	0	0	0	0	0	0
Sewage Treatment Plant Sludge	75	431.68	236.41	276.74	275.62	331.12	3709.53	14.16
Treated Regulated Medical Waste	0	0	0	0	0	0	0	0
Emergency Authorization Waste (Storm Debris)	0	0	0	0	0	0	0	0
Other (specify) Fish	30	3.26	13.01	27.05	0.17	0.56	44.05	0.17
Failed Compost	0	1536	0	0	0	0	1536	5.86
Total Tons Disposed		15166	8830.4	4017.27	3785.3	2885.7	73872.65	281.95

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) Direct hauled from the generator of the waste. In the case where the waste is hauled to your facility from the generator (i.e. hauled from residences, commercial establishments, etc.), "Direct Haul" 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) Sent to your facility from another solid waste management facility. 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.

Specify transport method and percentages of total waste transported by each:

100 % Road _____% Rail _____% Water _____% Other (specify:_____)

Explain which waste types and service areas below are included in these transport methods _____

SERVICE AREA OF SOLID WASTE RECEIVED					
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	Direct Haul	NY	Oswego	Oswego County	19632.59
Ash (Coal)					
Ash (MSW Energy Recovery)	Oswego County ERF, 2801 St Rte 481, Fulton NY	NY	Oswego	Oswego County	5881.67
Construction & Demolition Debris (mixed)	Direct Haul	NY	Oswego	Oswego County	23925.27

SERVICE AREA OF SOLID WASTE RECEIVED					
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)	Direct Haul	NY	Oswego	Oswego County	10205.99
Mixed Municipal Solid Waste (Residential, Institutional & Commercial)	Direct Haul	NY	Oswego	Oswego County	8937.55
Oil/Gas Drilling Waste					
Petroleum Contaminated Soil					
Sewage Treatment Plant Sludge	Direct Haul	NY	Oswego	Oswego County	3709.53
Treated Regulated Medical Waste (TRMW)*					
Emergency Authorization Waste (Storm Debris)					
Other (specify) Fish	Direct Haul	NY	Oswego	Oswego County	44.05
Failed Compost	Oswego County Bristol Hill Compost Facility (disposed with DEC approval)	NY	Oswego	Oswego County	1536
				TOTAL RECEIVED (tons):	73827.65

* 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) Direct hauled from the generator of the recyclables. In the case where the recyclables are hauled to your facility from the generator (i.e. hauled from residences, commercial establishments, etc.), "Direct Haul" 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 RECYCLABLE 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 method and percentages of total material transported by each:

_____% Road _____% Rail _____% Water _____% Other (specify: _____)

Explain which materials and destinations below are included in these transport methods _____

PAPER 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 Paper (all grades)					
Corrugated Cardboard					
Junk Mail					
Magazines					
Newspaper					
Office Paper					
Paperboard / Boxboard					
Other Paper (specify)					
				TOTAL PAPER RECOVERED (tons):	

SECTION 8 – LANDFILL RECYCLABLE & RECOVERED MATERIALS (continued)

B. Material Recovered

GLASS 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 RECOVERED (tons):	

METAL 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)
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 RECOVERED (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 (out of facility)
Mixed Plastic (#1 - #7)					
PET (plastic #1)					
HDPE (plastic #2)					
Other Rigid Plastics (#3 - #7)					
Industrial Scrap Plastic					
Plastic Film & Bags					
Other Plastics (specify)					
TOTAL PLASTIC RECOVERED (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 MATERIAL RECOVERED (tons): _____					

SECTION 8 – LANDFILL RECYCLABLE & RECOVERED MATERIALS (continued)

B. Material Recovered

MISCELLANEOUS 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)
Electronics					
Textiles					
Brush, Branches, Trees, & Stumps					
Food Scraps					
Yard Waste (curbside)					
Other (specify)					
TOTAL MISCELLANEOUS MATERIAL 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

Has unauthorized solid waste been received at the facility during the reporting period?

☐ Yes ■ No If yes, give information below for each incident (attach additional sheets if necessary):

Date Received	Type Received	Date Disposed	Disposal Method & Location

Radiation Monitoring

Does your facility use a fixed radiation monitor? _____ Yes ___■___ No

Identify Manufacturer _____ and Model _____ of fixed unit.

Does your facility use a portable radiation monitor? _____ Yes ___■___ No

Identify Manufacturer _____ and Model _____ of portable unit.

If the radiation monitors have been triggered give information below for each incident:

Incident Number	Received		Hauler	Origin	Truck Number	Reading	Disposal Status	Removed	
	Date	Time						Date	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
See	chart	attached	next	page						
WIP Cumulative Total										

Overall in place volume _____ cubic yards

Method for determining waste composition, if known. _____

Explain if closed landfills are included above _____

Oswego County Department of Solid Waste
Bristol Hill Landfill
Total Waste Placement

YEAR	TONS	MG
1983	36,000	32,668
1984	144,000	130,672
1985	143,726	130,423
1986	142,923	129,694
1987	132,910	120,608
1988	124,926	113,363
1989	102,371	92,895
1990	80,641	73,177
1991	68,464	62,127
1992	42,904	38,933
1993	35,813	32,498
1994	49,038	44,499
1995	44,551	40,428
1996	41,434	37,599
1997	41,617	37,765
1998	67,984	61,692
1999	60,919	55,281
2000	42,963	38,986
2001	43,756	39,706
2002	42,675	38,725
2003	45,012	40,845
2004	49,748	45,143
2005	49,664	45,067
2006	53,568	48,609
2007	50,264	45,611
2008	48,806	44,289
2009	47,573	43,170
2010	57,400	52,087
2011	48,626	44,125
2012	51,003	46,282
2013	44,535	40,413
2014	58,286	52,891
2015	59,160	53,684
2016	55,093	49,994
2017	98,597	89,471
TOTAL	**2,306,950**	**2,093,421**

Note:

1. Total waste placement based on actual waste receipts
2. Total waste includes ERF ash and ADC

Waste Summary by Landfill Section

Provide waste in place information for all landfill sections.

Number of landfill sections: ____

Original* section used (years) from _____ to _____

Section Footprint _____ acres

Capped with approved final cover system Yes _____ No _____

Percent capped _____

Waste in Place: _____ Tons _____ Cubic Yards, if known

Next* section used (years) from _____ to _____

Section Footprint _____ acres

Capped with approved final cover system Yes _____ No _____

Percent capped _____

Waste in Place: _____ Tons _____ Cubic Yards, if known

* If there are additional landfill sections, phases or cells, please provide the same waste in place information on additional sheets and attach to form.

SECTION 11 - LANDFILL GAS

Does the landfill have a landfill gas collection & control system?
Yes ■ No ____ If Yes: Active ■ Passive ___

Number of gas wells: 31

Total landfill footprint acreage 41

Total landfill acreage from which gas is collected 41

Landfill sections from which gas is collected 1983:1986

Landfill acreage from which gas is collected for energy recovery 0

Measured Methane Generation Rate*, k _____

Measured Potential Methane Generation Capacity*, L_o _____ m^3/Mg

NMOC Concentration* _____ ppmv as hexane

Does the landfill require a Title V Permit? Yes _____ No ■

Name of Landfill Gas Recovery (gas to energy or other use) Facility: _____

* 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.

Flare

Open and Enclosed Flares located at the Landfill and the Landfill Gas Recovery Facility:

Number of Flares: 1

Type of Flare: Opened Flare x Enclosed Flare _____

Please report units in cubic feet

Quantity of Gas Collected and Flared Annually 28,817,990 cubic feet
Flare Hours of Operation per Year 5231 (recorded, failed hour meter) hours/year
Methane Percentage in Landfill Gas before flaring 24.6 %
Methane Destruction efficiency 95 %

Candlestick Flares:

Number of Candlestick Flares 0
Estimate of Gas Flared Candlestick Flare _____ cubic feet

Gas To Energy

Please report units in cubic feet

Number of Internal Combustion Engines: n/a

Quantity of Gas collected for Internal Combustion Engine Annually _____ cubic feet
Methane Destruction efficiency _____ %
Methane Percentage in Landfill Gas before combustion _____ %
Utility Company Receiving Electricity _____

Gas Processed for Use (Other than gas to electricity)

Quantity of Gas Collected for Processing n/a 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 n/a Phone # (____)____-____

Contact e-mail address _____ Fax # (____)____-____

Operation and maintenance cost for calendar year: $_____

Does the LGRF experience shut downs: _____Yes _____No

If yes, indicate reasons for shut downs. List required submissions that have been attached to this form or the reasons for not attaching a required piece of information:

_____

_____

_____

_____

Year landfill opened: _____ Anticipated landfill closure date: _____

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Results of Condensate Sampling

Submit (attached to this form) condensate quality monitoring results accomplished in accordance with condensate sampling. List submissions (required by this section) that have been attached to this form or the reasons for not attaching a required piece of information:

n/a

Landfill Gas Utilized For Energy Recovery

Provide the following information for the landfill gas recovered for energy. **DO NOT INCLUDE THE GAS FLARED!**

	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 where applicable.

Normal Weekdays of Operation _____ Normal Hours of Operation_____

Electricity Generated and used/marketed offsite _____KWH
Electricity Generated and used onsite _____ KWH
Gas Processed and used/marketed offsite _____ cubic feet
Gas Processed and used onsite _____ cubic feet

Describe the collection, storage, treatment and disposal techniques used in managing the condensate:

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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:

Please see Environmental Monitoring Plan results/analysis submitted to the Department under separate cover.

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:

Please see Environmental Monitoring Plan results/analysis submitted to the Department under separate cover.

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 analysis schedule necessary to meet the Existing, Operational and Contingency water quality monitoring requirements. List submissions (required by this section) that have been attached to this form or the reasons for not attaching a required piece of information:

Please see Environmental Monitoring Plan results/analysis submitted to the Department under separate cover.

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 of information:

Please see Environmental Monitoring Plan results/analysis submitted to the Department under separate cover.

SECTION 19 - SUMMARIES OF MONITORING DATA

Submit (attached to this form) a summary of the water quality information presented in Sections 16 and 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:

Please see Environmental Monitoring Plan results/analysis submitted to the Department under separate cover.

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 provided on this form and attached statements and exhibits was prepared by me or under my supervision and direction and is true to the best of my knowledge and belief, and that I have the authority to sign this report form pursuant to 6 NYCRR Part 360. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Signature	2-26-2018 Date
Carl Schmidt Name (Print or Type)	Operations Mgr Title (Print or Type)
carl.schmidt@oswegocounty.com Email (Print or Type)	
3125 St Rte 3 Address	Fulton City
NY 13069 State and Zip	(315) 591-9200 Phone Number

ATTACHMENTS: ☒ YES ☐ NO
(Please check appropriate line)

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Attachment 1:

2017 Bristol Hill Landfill Financial Assurance Information

Barton & Loguidice

January 30, 2018

Mark Powell, P.E.
Oswego County Department of Solid Waste
2801 State Route 481
Fulton, New York 13069

Re: Bristol Hill Landfill
Remaining Site Life and Financial Assurance Information

File: 132.277.017

Dear Mr. Powell:

In accordance with your request, Barton & Loguidice, D.P.C. has calculated the remaining site life and updated the financial assurance information for the Bristol Hill Landfill facility. A detailed description of how these values were obtained is included below. The information provided can be utilized for compliance with the Local Government Financial Test.

Remaining Capacity and Site Life

Based on the a survey completed by Costich Engineering on July11, 2017 and historical fill rates, approximately 100,595 CY of capacity remains within the active portion of the constructed landfill. Using the 10-year average annual airspace consumption rate of 54,000 CY per year, the active constructed landfill has approximately 1.9 years of remaining site life. It should be noted that the remaining site life will be greatly dependent on waste receipts and compaction effort. Cell No. 4, which is available for waste disposal but has not yet received waste, will provide approximately 600,000 additional cubic yards of disposal capacity. An additional 1.9 million cubic yards of airspace would be available upon construction of the remaining permitted landfill acreage at the site.

Financial Assurance Information

A summary of closure and post closure costs realized to date and future projections can be found on the attached Table 1. A detailed breakdown for each item has been completed and included as Tables 2a and 2b. Below is a narrative describing how the cost of each item was determined.

Closure Costs

As you are aware, approximately 21 acres of the landfill was previously capped in 1988. The County is currently placing waste in the remaining 20 acres of constructed landfill. As Cell No. 4 has yet to receive waste, it has not been included in the closure cost estimate at this time. The detailed closure construction cost breakdown for the active 20 acres has been included in Table 2a. The estimated total closure construction cost is $3,011,819.

443 Electronics Parkway • Liverpool, NY 13088
Telephone: 315-457-5200 • Facsimile: 315-451-0052 • www.BartonandLoguidice.com

Post Closure Costs

Table 2a also provides the estimated annual post closure cost for the landfill. As with many closed landfills in New York State, leachate generation will reduce over time following closure. Table 2b was developed to account for the leachate reduction over time following capping and the average annual leachate generation rate was included in the annual post closure care costs. Over a 30-year post closure period, the post closure cost remaining to be realized has an estimated present value of $1,982,510 assuming an interest rate of 3%.

Based on the above, the combined closure and post closure cost for the Bristol Hill Landfill has been estimated at $4,994,329.

As required by Part 360, the above closure and post closure costs will be updated annually to reflect current landfill conditions and associated costs. If you have any questions or need any additional assistance, please do not hesitate to contact me.

Very truly yours,

BARTON & LOGUIDICE, D.P.C.

Jillian M. Blake, P.E.
Managing Engineer

JMB2/jms

cc: Carl Schmidt – Oswego County

Attachments: Table 1 – Closure & Post Closure Financial Assurance Cost Estimate Summary
Table 2 – Bristol Hill Landfill Financial Assurance Summary
Table 2b – Bristol Hill Landfill Post Closure Leachate Generation

Table 1

Closure & Post Closure Financial Assurance Cost Estimate Summary

Table 1

OSWEGO COUNTY - BRISTOL HILL LANDFILL
CLOSURE & POST CLOSURE FINANCIAL ASSURANCE COST ESTIMATE SUMMARY
2017

CLOSURE COST		POST CLOSURE COSTS				TOTAL
CLOSURE COST TO DATE	CLOSURE COST REMAINING (2017 Dollars)	POST-CLOSURE REMAINING (Years)	POST-CLOSURE TO DATE	POST-CLOSURE REMAINING (Annual Cost)	POST-CLOSURE REMAINING (Total) Present Value @ 3%	CLOSURE & POST CLOSURE REMAINING TO BE RECOGNIZED
$1,920,000	$3,011,819	30	$60,900	$101,146	$1,982,510	**$4,994,329**

Notes:
1. Post closure costs to date for the capped portion of the landfill include mowing costs.
2. Landfill closure costs to date based off of an estimated $120,000/acre.
3. Refer to attached Tables 2 and 2b for detailed breakdown of costs.

Table 2

Bristol Hill Landfill Financial Assurance Summary

Table 2
OSWEGO COUNTY - BRISTOL HILL LANDFILL
FINANCIAL ASSURANCE SUMMARY

CLOSURE COST BREAKDOWN

Total Developed Area with Waste Placed - January 2017: **41.00 acres**

14.5	acres	33% slopes
5.5	acres	4% slope
21.0	acres	Existing capped

Total Acreage Requiring Closure: 20.00

Notes:
1. Closure unit costs below based on 2017 pricing.

Component	Quantity	Unit	Unit Price ($)	Cost
Mobilization/Demobilization	1.00	LS	$ 80,000.00	$ 80,000
Grading	20.00	acres	$ 5,000.00	$ 100,000
Erosion Control	20.00	acres	$ 5,000.00	$ 100,000
Fertilize, Seed & Mulch	20.00	acres	$ 5,000.00	$ 100,000
Barrier Protection Layer	48,400.00	cy	$ 9.50	$ 459,800
Geosynthetic Clay Layer (4% Slope Only)	239,580.00	sf	$ 0.65	$ 155,727
40 MIL Textured LLDPE Geomembrane	871,200.00	sf	$ 0.55	$ 479,160
Composite Geonet	871,200.00	sf	$ 0.72	$ 627,264
Topsoil Layer	16,133.33	cy	$ 15.50	$ 250,067
Vertical Gas Collection Wells	14.00	ea.	$ 5,000.00	$ 70,000
Stormwater Controls	13.80	acres	$ 20,000.00	$ 276,000
Toe Drain	1.00	LS	$ 40,000.00	$ 40,000
Design / QA/QC (10% of Construction Cost)				$ 273,802
			TOTAL CLOSURE COST =	**$ 3,011,819**
			Cost Per Acre	**$ 150,591**

Annual Post Closure Costs

Ops, Maint. Admin*	Units	Unit Cost	Quantity/Yr	Total Cost/Yr
Cap/gas vent repair (labor and equipment)	hr	$ 200	16.0	$ 3,200
General labor	hr	$ 50	8.0	$ 400
Seeding and fertilizing cap	acre	$ 1,500	0.5	$ 750
Mowing	acre	$ 100	20.7	$ 2,070
Surface water management maintenance	lump sum	$ 2,500	1.0	$ 2,500
Security and building repairs	lump sum	$ 1,000	1.0	$ 1,000
Annual inspections and reports	lump sum	$ 2,000	1.0	$ 2,000
Site Utilities	annual	$ 1,500	1.0	$ 1,500
			Operation, Maint., Admin costs:	**$ 13,420**

Water Monitoring	Units	Unit Cost	Quantity/Yr	Total Cost/Yr
Well Sampling, Analysis & Reporting	each	$ 2,100	16	$ 33,600
Surface Water Sampling, Analysis & Reporting	each	$ 550	7	$ 3,850
Well Replacements	each	$ 500	1	$ 500
			Ground and surface water monitoring costs:	**$ 37,950**

Leachate Management	Units	Unit Cost	Quantity/Yr	Total Cost/Yr
Leachate management system repairs	lump sum	$ 10,000	1	$ 10,000
Leachate Treatment per Year (from Table 2b)	lump sum	$ 27,460	1	$ 27,460
Leachate sampling and testing	lump sum	$ 7,500	1	$ 7,500
			Leachate Management Costs:	**$ 44,960**

Annual Post Closure Costs Subtotal :	$ 96,330
Contingency (5%):	$ 4,816
Total Annual Post Closure Costs :	**$ 101,146**

*Post closure costs for the active landfill gas collection system are not included as the system is operated on a voluntary basis and would likely be reverted to a passive venting system upon an emergency closure of the site.

Table 2b

Bristol Hill Landfill Post Closure Leachate Generation

Table 2b
OSWEGO COUNTY - BRISTOL HILL LANDFILL
POST CLOSURE LEACHATE GENERATION
POST CLOSURE FINANCIAL ASSURANCE COST ESTIMATE

Post Closure Year	Leachate Generated (Gal.)	Cost *
Year 1**	10,792,767	$215,855
Year 2	8,094,575	$97,135
Year 3	6,070,931	$72,851
Year 4	4,553,199	$54,638
Year 5	3,414,899	$40,979
Year 6	3,073,409	$36,881
Year 7	2,766,068	$33,193
Year 8	2,489,461	$29,874
Year 9	2,240,515	$26,886
Year 10	2,016,464	$24,198
Year 11	1,814,817	$21,778
Year 12	1,633,336	$19,600
Year 13	1,470,002	$17,640
Year 14	1,323,002	$15,876
Year 15	1,190,702	$14,288
Year 16	1,071,631	$12,860
Year 17	964,468	$11,574
Year 18	868,021	$10,416
Year 19	781,219	$9,375
Year 20	703,097	$8,437
Year 21	632,788	$7,593
Year 22	569,509	$6,834
Year 23	512,558	$6,151
Year 24	461,302	$5,536
Year 25	415,172	$4,982
Year 26	373,655	$4,484
Year 27	336,289	$4,035
Year 28	302,660	$3,632
Year 29	272,394	$3,269
Year 30	245,155	$2,942
Totals Post Closure:	61,454,067	$823,791

Average Annual Cost over the 30 year period (see Table 2): **$27,460**

* - Leachate Disposal Estimated at $0.02/gallon (Includes Hauling and Treatment)

** - Year 1 leachate generation based on average generation 2005-2017