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:			
Chemung County Landfill			
FACILITY LOCATION ADDRESS:	**FACILITY CITY:**	**STATE:**	**ZIP CODE:**
1488 County Road 60	Elmira	NY	14861
FACILITY TOWN:	**FACILITY COUNTY:**	**FACILITY PHONE NUMBER:**	
Lowman	Chemung	1-800-CASELLA	
FACILITY NYS PLANNING UNIT: (A list of NYS Planning Units can be found at the end of this report). Chemung County		**NYSDEC REGION #:** 8	

360 PERMIT #:	DATE ISSUED:	DATE EXPIRES:	NYS DEC ACTIVITY CODE OR REGISTRATION NUMBER:
8-0728-0004/00013	06/02/2016	06/01/2026	08S02

FACILITY CONTACT:	☐ public ☒ private	CONTACT PHONE NUMBER:	CONTACT FAX NUMBER:
Larry Shilling		(716)560-7915	

CONTACT EMAIL ADDRESS: larry.shilling@casella.com

OWNER INFORMATION

OWNER NAME:	OWNER PHONE NUMBER:	OWNER FAX NUMBER:	
Chemung County	(607)737-2031		
OWNER ADDRESS:	**OWNER CITY:**	**STATE:**	**ZIP CODE:**
203 Lake Street	Elmira	NY	14901
OWNER CONTACT:	**OWNER CONTACT EMAIL ADDRESS:**		
Michael Krusen	mkrusen@co.chemung.ny.us		

OPERATOR INFORMATION

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

Chemung Landfill, LLC

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?

   253,991 Cubic Yards of Airspace

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

   0.85 Tons/Cubic Yard

   Please do not report units as pounds per cubic yard

2. Remaining Constructed Capacity

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

   239,585 Cubic Yards of Airspace

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

   1 Years 1 Months

   at 191,872 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):

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

   x 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?

   6,992,295 Cubic Yards of Airspace

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

   31 Years 0 Months

   at 191,872 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):

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

   x 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?

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 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?

N/A _____ Cubic Yards of Airspace

SECTION 3 - PRIMARY LEACHATE

Name of off-site leachate treatment facility(s) utilized Chemung County 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	440,893						440,893					
February	429,954						429,954					
March	339,779						339,779					
April	448,054						448,054					
May	394,451						394,451					
June	288,191						288,191					
July	368,392						368,392					
August	954,957						954,957					
September	0						0					
October	246,450						246,450					
November	386,754						386,754					
December	356,506						356,506					
ANNUAL	4,654,382						4,654,382					

	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		No leachate was recirculated at the site.						No leachate was treated on-site.				
July												
August												
September												
October												
November												
December												
ANNUAL												

*Leachate represents the commingled volume of leachate hauled from the site less the volume collected from the C&D/Area 3 Landfills and volume collected from the secondary leachate collection system.

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:

Annual leachate line cleaning logs included in the attachments.

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:

The above reference information is included in the Quarterly Environmental Monitoring Reports, submitted to the NYSDEC 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:

The above reference information is included in the Quarterly Environmental Monitoring Reports, submitted to the NYSDEC 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: $ *

Total quantity treated: ** 4,751,504 gal

*This information is proprietary to our business. The requested information is available on-site for NYSDEC review.

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**:

**Includes both primary and secondary leachate treated off-site.

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

	SECONDARY LEACHATE COLLECTED (GALLONS)						SECONDARY LEACHATE TREATED OFF SITE (GALLONS)					
	Cells I-III* 19.1 ac.	Cell IV 9.4 ac.	Cell V 7.9 ac.	Lagoon 0.75 ac.	Cell 5 ___Acres	Cell 6 ___Acres	Cells I-III* 19.1 ac.	Cell IV 9.4 ac.	Cell V 7.9 ac.	Lagoon 0.75 ac.	Cell 5 ___Acres	Cell 6 ___Acres
January	120	22	0	3			120	22	0	3		
February	372	31	0	2			372	31	0	2		
March	270	28	0	2			270	28	0	2		
April	291	55	0	0			291	55	0	0		
May	182	43	0	0			182	43	0	0		
June	193	13	83,990	6			193	13	83,990	6		
July	53	13	5,270	13			53	13	5,270	13		
August	116	17	1,625	0			116	17	1,625	0		
September	210	15	954	0			210	15	954	0		
October	148	16	900	0			148	16	900	0		
November	131	15	935	0			131	15	935	0		
December	43	7	1,015	0			43	7	1,015	0		
ANNUAL	2,129	275	94,689	25			2,129	275	94,689	25		

	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		No leachate was recirculated at the site.						No leachate was treated on-site.				
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	1,715.97	cover				
Foundry Sand	14,839.56	cover				
Glass	369.59	cover				
De-watered Sludge	4,991.20	cover				
Filter Cake	1,168.59	cover				
Core Room Sand	2,390.87	cover				
Belt Press Sludge	59.81	cover				
Paper Mill Sludge						
Waste Garnat	63.48	cover				
Shredder Fluff	15,957.40	cover				
Sewage Sludge Grit	224.17	cover				
Wood/Wood Chips						
Other (specify)						
Uncontaminated Glass Cullet	7,622.42	cover				
Total ADC	49,403.06	*This information is proprietary to our business. It is available on-site for NYSDEC review.				
Total Beneficial Use Determination Materials	49,403.06					

Percent Alternative Daily Cover (ADC) Calculation

ADC Calculations: Total Tons ADC/Total Tons Waste Disposed x 100 = 22.88%

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							
Ash (Coal)							
Ash (MSW Energy Recovery)							
Construction & Demolition Debris (mixed)	0	0	0	0	34.79	0	0
Industrial Waste (Including Industrial Process Sludges)	1217.45	887.74	1122.32	1000.86	1510.07	1213.05	995.09
Mixed Municipal Solid Waste (Residential, Institutional & Commercial)	10553.98	11765.75	13722.22	17013.14	18544.44	18123.48	13536.67
Oil/Gas Drilling Waste	1065.52	2226.24	2603.93	2104.02	707.78	0	1222.67
Petroleum Contaminated Soil							
Sewage Treatment Plant Sludge	346.41	417.80	424.30	447.40	581.04	745.56	576.21
Treated Regulated Medical Waste							
Emergency Authorization Waste (Storm Debris)							
Other (specify)							
Total Tons Disposed	13183.36	15297.53	17872.77	20565.42	21378.12	20082.09	16330.64

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)								
Ash (MSW Energy Recovery)								
Construction & Demolition Debris (mixed)		34.49	881.95	3,438.72	2,975.73	3,341.22	10706.90	40.87
Industrial Waste (Including Industrial Process Sludges)		1166.52	1297.12	1,244.92	913.78	1,404.74	13973.66	53.33
Mixed Municipal Solid Waste (Residential, Institutional & Commercial)		15290.98	12052.33	15,245.27	12,525.34	10,251.06	168624.66	643.61
Oil/Gas Drilling Waste		81.40	350.00	1,399.26			11760.82	44.89
Petroleum Contaminated Soil								
Sewage Treatment Plant Sludge		788.87	936.81	1,574.58	1,864.15	2,122.76	10825.89	41.32
Treated Regulated Medical Waste								
Emergency Authorization Waste (Storm Debris)								
Other (specify)								
Total Tons Disposed		17362.26	15518.21	22,902.75	18,279.00	17,119.78	215891.93	824.02

The requested information is proprietary to our business. Tip fee information is available at the facility for NYSDEC review.

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					
Ash (Coal)					
	See Attachment				
Ash (MSW Energy Recovery)					
Construction & Demolition Debris (mixed)					

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)					
Mixed Municipal Solid Waste (Residential, Institutional & Commercial)					
	See Attachment				
Oil/Gas Drilling Waste					
Petroleum Contaminated Soil					
Sewage Treatment Plant Sludge					
Treated Regulated Medical Waste (TRMW)*					
Emergency Authorization Waste (Storm Debris)					
Other (specify)					
				TOTAL RECEIVED (tons):	

* 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 generetor (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)					
	Not Applicable				
Brush, Branches, Trees, & Stumps					
Food Scraps					
Yard Waste (curbside)					
Other (specify)					
				TOTAL RECEIVED (tons):	0

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	Not Applicable				
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)	Not Applicable				
				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)	Not Applicable				
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	Not Applicable				
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	Not Applicable				
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 Ludlum and Model 375 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

See Attachment for Radiation Alarm Triggers.

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
WIP Cumulative Total										

See Attachment for Waste in Place Information

Overall in place volume _____ cubic yards

Method for determining waste composition, if known. _____

Explain if closed landfills are included above _____

Waste Summary by Landfill Section

Provide waste in place information for all landfill sections.

Number of landfill sections: 3

Original* section used (years) from 1974 to 1988

Section Footprint 36.8 acres

Capped with approved final cover system Yes ■ No ____

Percent capped 100%

Waste in Place: 816,748 Tons ____ Cubic Yards, if known

Includes sections 1 and 2.

Next* section used (years) from 1989 to present

Section Footprint 37.6 acres

Capped with approved final cover system Yes ____ No ■

Percent capped 0%

Waste in Place: 3,136,323 Tons ____ Cubic Yards, if known

Includes section 3.

* 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: 33

Total landfill footprint acreage 85.4 Section 1 & 2 = 36.8 acres, Section 3 = 37.6 acres, C&D landfill = 11 acres

Total landfill acreage from which gas is collected 76.8

Landfill sections from which gas is collected Existing Cell I, Cell II, Cell III-A&B, Cell IV-A&B, Area 5 Landfill

Landfill acreage from which gas is collected for energy recovery 0

Measured Methane Generation Rate*, k 0.04

Measured Potential Methane Generation Capacity*, L_o 100 m^3/Mg

NMOC Concentration* 114 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: N/A

* 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: 2 — 2 flares on-site, only 1 operational

Type of Flare: Opened Flare 2 Enclosed Flare _____

Please report units in cubic feet

Quantity of Gas Collected and Flared Annually 347,233,179 cubic feet
Flare Hours of Operation per Year 8528 hours/year
Methane Percentage in Landfill Gas before flaring 44.2 %
Methane Destruction efficiency 99 %

Candlestick Flares:

Number of Candlestick Flares 4
Estimate of Gas Flared Candlestick Flare 0 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: _____

Reprinted (12/17)

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:

Condensate is pumped to the C&D pump station where it is transported to leachate lagoon.

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	N/A					
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:

The requested information is included in the Environmental Monitoring Reports, submitted to the NYSDEC under a 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:

The requested information is included in the Environmental Monitoring Reports, submitted to the NYSDEC under a separate cover.

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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 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:

The requested information is included in the Environmental Monitoring Reports, submitted to the NYSDEC under a 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:

The requested information is included in the Environmental Monitoring Reports, submitted to the NYSDEC under a 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:

The requested information is included in the Environmental Monitoring Reports, submitted to the NYSDEC under a 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.

Reprinted (12/17)

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	Date: 2-27-18
Andrea Kuntz Name (Print or Type)	Environmental Analyst Title (Print or Type)
andrea.kuntz@casella.com Email (Print or Type)	
1488 County Route 60 Address	Elmira City
NY 14901 State and Zip	(585) 797-4501 Phone Number

ATTACHMENTS: • YES ____ NO
(Please check appropriate line)

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Section 3 – Primary Leachate

Annual Leachate Cleaning Logs

JAMKO
932 Sohn Alloway Road
Lyons, New York 14489
(315) 871-4420 tel
(315) 871-4430 fax
www.jamkocorp.com

Daily Line Cleaning Record

Project No.: 6176 | Site Location: Chemung Co Landfill | Date: 9/6/17

Client: Casella Waste Systems | Jamko Technician(s): Bade, Brandon | Weather:

Location Cell / Street	Line Segment MH # to MH #		Pipe Diameter	Pipe Type	Total Length Linear Footage	Total Linear Footage Cleaned	No. of Passes	Water Used Total Gallons	Total Gallons Leachate Vac.
Cell 3A	MH-6	C/O	6"	HDPE	1189'	280' elbow	1	Jet	N/A
Cell 2	MH-4	C/O	6"	HDPE	1337'	700'	1	Jet	N/A
Cell 2	MH-4	MH-6	6"	HDPE	191'	191'	1	Jet	N/A
Cell 2	MH-4	MH-2	6"	HDPE	261'	261'	1	Jet	N/A
Area 5	MH-2	C/O	6"	HDPE	1496'	500' Vault	1	Jet	N/A
Area 5	MH-2	MH-1	6"	HDPE	461'	461'	1	Jet	N/A
Area 5	Leachate lagoon	MH-1	6"	HDPE	261'	261'	1	Jet	N/A
Section 5	secondary C/O	Into hill	8"	HDPE	780'	780'	1	Jet	N/A
Section 5	Primary C/O	Into hill	8"	HDPE	780'	780'	1	Jet	N/A
Section 5	Leachate lagoon	Check valve	6"	HDPE	500'	500'	2	Jet	N/A
					Total Cleaned-	4714 LF			

JAMKO
932 Sohn Alloway Road
Lyons, New York 14489
(315) 871-4420 tel
(315) 871-4430 fax
www.jamkocorp.com

Daily Line Cleaning Record

Project No.: 6176 Site Location: Chemung Co Landfill Date: 9/7/17

Client: Casella Waste Systems Jamko Technician(s): Bade, Brandon Weather:

Location Cell / Street	Line Segment MH # to MH #		Pipe Diameter	Pipe Type	Total Length Linear Footage	Total Linear Footage Cleaned	No. of Passes	Water Used Total Gallons	Total Gallons Leachate Vac.
Cell 4 riserhouse	primary sump		18"	HDPE	140'	140'	3	Jet	Vacuumed
Cell 5 riserhouse	primary sump A		24"	HDPE	85'	85'	6	Jet	Vacuumed
	primary sump B		24"	HDPE	85'	85'	6	Jet	Vacuumed

Section 7 – Quantity of Solid Waste Disposal

B. Quantity Disposed by Facility's Service Area

CHEMUNG COUNTY LANDFILL
2017 Facility Service Area

Waste Type	County	State	Tonnage	
Mixed Municipal Solid Waste	Bronx	NY	532.92	0.32%
Mixed Municipal Solid Waste	Broome	NY	7.15	0.00%
Mixed Municipal Solid Waste	Chemung	NY	5734.73	3.40%
Mixed Municipal Solid Waste	Greene	NY	26.81	0.02%
Mixed Municipal Solid Waste	Orange	NY	6472.01	3.84%
Mixed Municipal Solid Waste	Otsego	NY	2522.6	1.50%
Mixed Municipal Solid Waste	Rockland	NY	6170.72	3.66%
Mixed Municipal Solid Waste	Schoharie	NY	1438.81	0.85%
Mixed Municipal Solid Waste	Schuyler	NY	153.45	0.09%
Mixed Municipal Solid Waste	Steuben	NY	186.53	0.11%
Mixed Municipal Solid Waste	Tioga	NY	39094.93	23.18%
Mixed Municipal Solid Waste	Tompkins	NY	447.38	0.27%
Mixed Municipal Solid Waste	Ulster	NY	33867.23	20.08%
Mixed Municipal Solid Waste	Westchester	NY	68609.6	40.69%
Mixed Municipal Solid Waste		PA	3359.79	1.99%
		TOTAL:	168624.66	100.00%

CHEMUNG COUNTY LANDFILL
2017 Facility Service Area

Waste Type	County	State	Tonnage	
Construction & Demolition	Bronx	NY	1966.74	18.37%
Construction & Demolition	Broome	NY	1	0.01%
Construction & Demolition	Chemung	NY	236.01	2.20%
Construction & Demolition	Delaware	NY	22.35	0.21%
Construction & Demolition	Kings	NY	2324.8	21.71%
Construction & Demolition	Orange	NY	34.79	0.32%
Construction & Demolition	Queens	NY	36.5	0.34%
Construction & Demolition	Steuben	NY	38.51	0.36%
Construction & Demolition	Tioga	NY	144.99	1.35%
Construction & Demolition	Tompkins	NY	1405.34	13.13%
Construction & Demolition	Westchester	NY	4194.13	39.17%
Construction & Demolition		PA	301.74	2.82%
		TOTAL:	10706.90	100.00%

CHEMUNG COUNTY LANDFILL
2017 Facility Service Area

Waste Type	County	State	Tonnage	
Industrial Waste	Broome	NY	190.76	1.37%
Industrial Waste	Chemung	NY	8616.75	61.66%
Industrial Waste	Chenango	NY	297.87	2.13%
Industrial Waste	Cortland	NY	76.47	0.55%
Industrial Waste	Delaware	NY	53.57	0.38%
Industrial Waste	Otsego	NY	2.6	0.02%
Industrial Waste	Schuyler	NY	63.53	0.45%
Industrial Waste	Tioga	NY	137.01	0.98%
Industrial Waste	Tompkins	NY	1716.87	12.29%
Industrial Waste	Ulster	NY	28	0.20%
Industrial Waste	Westchester	NY	99.43	0.71%
Industrial Waste	Wyoming	NY	199.36	1.43%
Industrial Waste	Yates	NY	1.76	0.01%
Industrial Waste		MA	51.02	0.37%
Industrial Waste		PA	2438.66	17.45%
		TOTAL:	13973.66	100.00%

CHEMUNG COUNTY LANDFILL
2017 Facility Service Area

Waste Type	County	State	Tonnage	
Sewage Treatment Plant Sludge	Bronx	NY	538.64	4.98%
Sewage Treatment Plant Sludge	Dutchess	NY	759.44	7.02%
Sewage Treatment Plant Sludge	Kings	NY	4825.04	44.57%
Sewage Treatment Plant Sludge	Orange	NY	303.12	2.80%
Sewage Treatment Plant Sludge	Otsego	NY	2.83	0.03%
Sewage Treatment Plant Sludge	Queens	NY	168.29	1.55%
Sewage Treatment Plant Sludge	Sullivan	NY	103.58	0.96%
Sewage Treatment Plant Sludge	Tompkins	NY	218.67	2.02%
Sewage Treatment Plant Sludge	Ulster	NY	3906.28	36.08%
		TOTAL:	10825.89	100.00%

CHEMUNG COUNTY LANDFILL
2017 Facility Service Area

Waste Type	County	State	Tonnage	
Drill Cuttings		PA	11760.82	100.00%
		TOTAL:	11760.82	100.00%

Section 9 – Unauthorized Solid Waste

Radiation Alarm Triggers

Radiation Monitor Alarm Record

The facility must complete this form if the radiation monitor alarms.

Initial Alarm: Date: 3/28/17 Time: 1:00 pm Scale-house Attendant: Ron Peterson

Radiation Monitor Reading: 11.8 kcps Background Reading: 3.4 kcps

Hauler: MBI Type of Truck Body: Tipper Trailer

Truck No. 1513 Trailer No.: 2835

Vehicle License Plate No.: P763918 Part 364 Permit No. IL-049

Driver: Andrew Nelson Waste Origin (Facility): Tioga, N.Y. Appalachian Transfer

Material Hauled: TMX Special Waste Number if Applicable: N/A

Notes: Mixed Load MSW (C+D)

ACTIONS:

1. Alert onsite management that the alarm has been triggered.
2. Record the radiation monitor reading and the other information shown above.
3. Instruct the driver to pull off of the scale and park the truck away from the detectors. Turn off the engine to avoid idling. Ensure that the alarm has ceased and the monitor is reading normal background.
4. If the driver has received a recent nuclear medical procedure, ask him to walk near the detector to determine if he is the source. If the driver is the source, re-measure the truck alone by using an alternate driver or have the original driver park on the scale and walk away from the truck and detectors. If the truck alone does not set off the alarm, it may pass through. There is no restriction on a driver who has had a medical procedure.
5. If the truck is determined to be the source, facility management will provide direction.
6. A trained staff member will check the type and origin of the load and perform measurements to determine the type of radioactive materials present. Ensure that the results of the investigation are written on or are attached to this form.
7. Management shall notify the NYSDEC and County immediately, and if the office is staffed, or at the earliest possible time that personnel are on duty.
   NYSDEC Region 8 Division of Materials Management: Ph (585) 226-5414 or Ph (585) 226-5510
   Chemung County Dept of Health: Ph (607) 737-2019; Fax: (607) 737-2059
   NYSDEC Radiological Sites Section : Ph (518) 402-8579; Fax (518) 402-9024
8. Notify the Hauler's dispatch or representative.
9. The truck must remain parked until the situation is resolved.
10. If the driver leaves without authorization, contact NYSDEC Region 8 at the number above.

This Section To Be Completed By Facility Management:

Trained Responder: Ron Peterson / Lance Stevens

Observations: Scanned trailer with hand held meter - 3/28/17 identified Tc-99 m as isotope - common medical isotope

Event Resolution: Date: 3/29/17 G.M. Acknowledgement: Don Sampson

Description: Trailer rescanned 3/29 - Background readings ~~at~~ Acceptable as observed - Disposed in landfill on 3/29

~~**NYSDEC Notified:** Jason Bolton and Tom Pipon notified~~

Andrea Kuntz

From: Lance Stevens
Sent: Wednesday, March 29, 2017 10:04 AM
To: Papura, Thomas R (DEC); Rice, Timothy B (DEC)
Cc: Russell Anderson; Samuel Nicolai; Larry Shilling; Andrea Kuntz; Boliver, Jason K (DEC); Maslanka, Gary M (DEC); Donald Springstead
Subject: RE: Radiation Alarm Triggered at Chemung County Landfill-3/28/17

Tom,

Thank you for your review. We will proceed with disposal.

Thanks again,

Lance Stevens, CPESC
Environmental Manager
Casella Waste Systems, Inc.

p. 814.335.5183

Learn more at www.casella.com

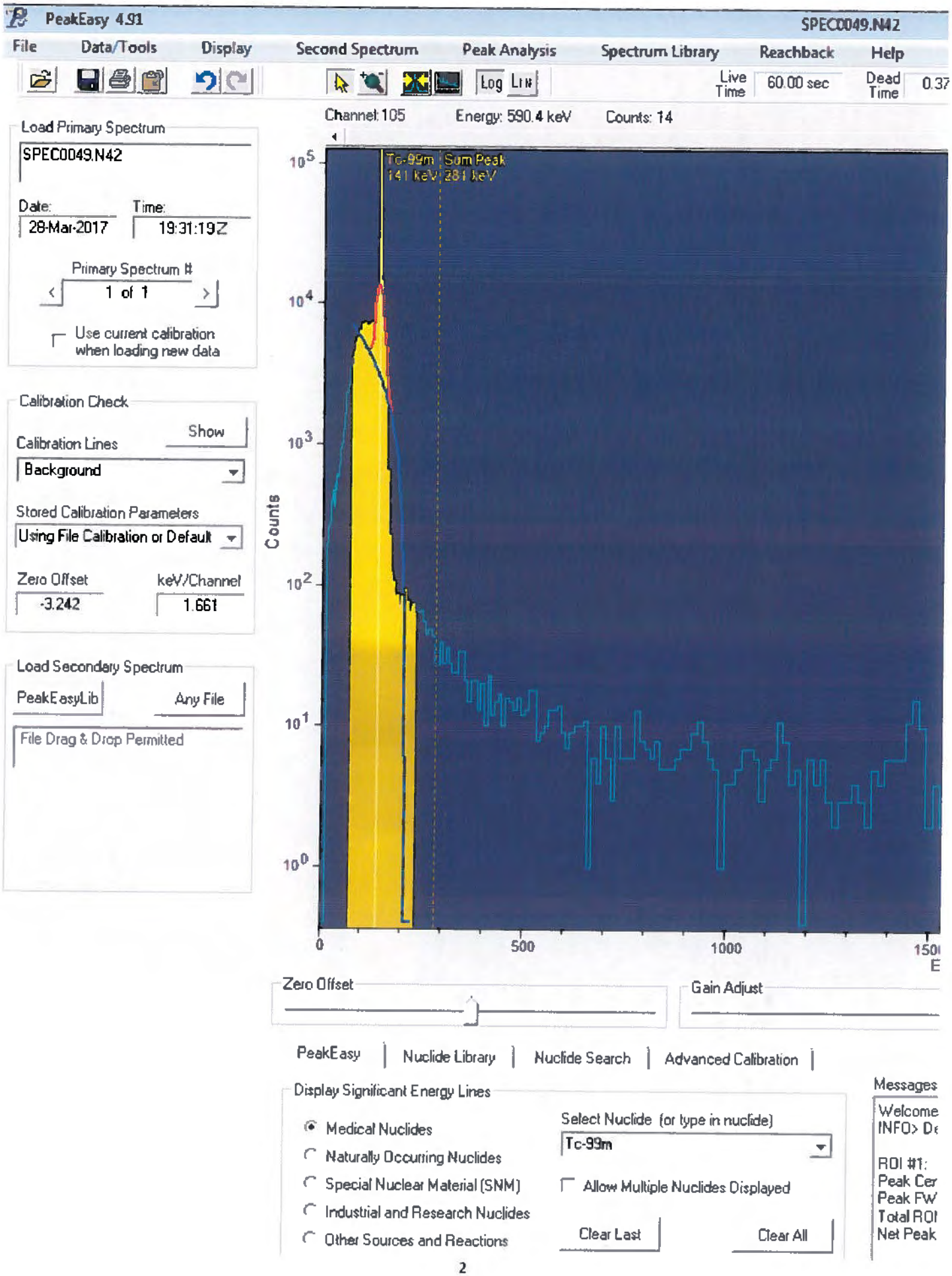
From: Papura, Thomas R (DEC) [mailto:thomas.papura@dec.ny.gov]
Sent: Wednesday, March 29, 2017 7:51 AM
To: Lance Stevens <lance.stevens@casella.com>; Rice, Timothy B (DEC) <timothy.rice@dec.ny.gov>
Cc: Russell Anderson <russell.anderson@casella.com>; Samuel Nicolai <Samuel.Nicolai@casella.com>; Larry Shilling <Larry.Shilling@casella.com>; Andrea Kuntz <Andrea.Kuntz@casella.com>; Boliver, Jason K (DEC) <jason.boliver@dec.ny.gov>; Maslanka, Gary M (DEC) <gary.maslanka@dec.ny.gov>; Donald Springstead <donald.springstead@casella.com>
Subject: RE: Radiation Alarm Triggered at Chemung County Landfill-3/28/17

Lance,

I have confirmed this is in fact Tc-99m. It is often used for stress tests and other medical diagnostic procedures. Fortunately, it has a very short half-life (approximately 6 hours). As with I-131, after it passes through a patient, it is no longer regulated. Therefore you can dispose of it without concern. It has been almost 3 half-lives since your message, so you should observe a significant decrease in dose rate from the initial alarm.

Glad to help as always.

Tom


PeakEasy 4.91
SPEC0049.N42
File
Data/Tools
Display
Second Spectrum
Peak Analysis
Spectrum Library
Reachback
Help
Log Lin
Live Time
60.00 sec
Dead Time
0.37
Load Primary Spectrum
SPEC0049.N42
Date:
28-Mar-2017
Time:
19:31:19Z
Primary Spectrum #
1 of 1
Use current calibration when loading new data
Calibration Check
Calibration Lines
Show
Background
Stored Calibration Parameters
Using File Calibration or Default
Zero Offset
-3.242
keV/Channel
1.661
Load Secondary Spectrum
PeakEasyLib
Any File
File Drag & Drop Permitted
Channel: 105
Energy: 590.4 keV
Counts: 14
Tc-99m Sum Peak
141 keV 281 keV
Counts
10^5
10^4
10^3
10^2
10^1
10^0
0
500
1000
Zero Offset
Gain Adjust
PeakEasy
Nuclide Library
Nuclide Search
Advanced Calibration
Display Significant Energy Lines
Medical Nuclides
Naturally Occurring Nuclides
Special Nuclear Material (SNM)
Industrial and Research Nuclides
Other Sources and Reactions
Select Nuclide (or type in nuclide)
Tc-99m
Allow Multiple Nuclides Displayed
Clear Last
Clear All
Messages
Welcome
INFO> D
ROI #1:
Peak Cer
Peak FW
Total ROI
Net Peak

Thomas Papura
Environmental Radiation Specialist II
Contaminated Sites Group Leader
Remedial Bureau A
518-402-8579 Option #2
thomas.papura@dec.ny.gov

From: Lance Stevens [mailto:lance.stevens@casella.com]
Sent: Tuesday, March 28, 2017 3:58 PM
To: Papura, Thomas R (DEC) <thomas.papura@dec.ny.gov>; Rice, Timothy B (DEC) <timothy.rice@dec.ny.gov>
Cc: Russell Anderson <russell.anderson@casella.com>; Samuel Nicolai <Samuel.Nicolai@casella.com>; Larry Shilling <Larry.Shilling@casella.com>; Andrea Kuntz <Andrea.Kuntz@casella.com>; Boliver, Jason K (DEC) <jason.boliver@dec.ny.gov>; Maslanka, Gary M (DEC) <gary.maslanka@dec.ny.gov>; Donald Springstead <donald.springstead@casella.com>
Subject: Radiation Alarm Triggered at Chemung County Landfill-3/28/17

Tom,

We had a mixed load of M5W & C&D from Appalachian Transfer Station (Tioga, NY) set off the radiation alarm at Chemung County Landfill today. Our handheld source identifier identified Tc-99m as the isotope. I have attached the spectra files from the scan of the trailer for your review.

The following is the radiation survey data from today. Files are as follows:

1. 46 = background
2. 47 = known Cs 137 source
3. 48 & 49 = Scan of waste trailer – identified Tc-99m

Let me know if you have any questions.

Thank you

Lance Stevens, CPESC
Environmental Manager
Casella Waste Systems, Inc.

p. 814.335.5183

Learn more at www.casella.com

Section 10 – Waste In-Place

Summary by Waste Type and Year

Chemung County Landfill
Solid Waste Disposal Summary

Year	Municipal Solid Waste	C&D Debris (tons)	Asbestos	Industrial Waste	Ash(tons)	Sludge (Tons)	Contaminated Soil (tons)	Drill Cuttings	Exempt Flood Debris	Total Tons
74-82	272,216	59,059	-	126,340	1,608	28,154	22,143			509,520
83-88	164,146	35,600	-	76,183	970	16,977	13,352			307,228
1991										68,952
1992										53,994
1993										68,505
1994										78,040
1995										81,939
1996										72,974
1997										71,389
1998										75,995
1999										87,373
2000										86,486
2001										84,247
2002										81,079
2003	56,571	2,470	-	21,716	-	4,314	2,824			87,895
2004	56,144	5,625	-	25,383	-	4,515	969			92,636
2005	79,779	-	-	24,239	-	3,078	403			107,499
2006*	101,303	6,736	-	11,532	-	16	17			119,604
2007*	103,952	1,970	-	96,001	-	-	-			201,923
2008*	94,141	8,024	-	16,190	-	-	-			118,356
2009*	80,783	3,295	-	15,472	-	-	-			99,550
2010*	59,646	11	-	11,003	-	-	-	48,225		118,885
2011*	71,481	1,254	-	25,605	-	41	-	58,741	21,370	178,492
2012*	87,432	2,201	-	23,131	-	96	-	65,903	-	178,763
2013*	92,896	182	-	16,192	-	1,944	-	55,227	-	166,440
2014*	85,538	1,735	-	19,378	-	5,417	-	67,622	-	179,690
2015*	109,174	2,002	-	19,726	-	6,968	-	41,855	-	179,726
2016*	124,945	12,484	-	12,323	-	11,455	-	18,792	-	179,999
2017*	168,625	10,707	-	13,974	-	10,826	-	11,761	-	215,892
Total	1,808,771	153,355	-	554,388	2,578	93,801	39,708	368,126	21,370	3,953,071

* Tonnage Numbers do not include material utilized as a BUD.
2006 Numbers include 16,308.5 tons of flood waste

Section 12 – Cost Estimates and Financial Assurance Documents

Table 1.
CHEMUNG LANDFILL, LLC.
CHEMUNG COUNTY LANDFILL
CLOSURE & POST CLOSURE FINANCIAL ASSURANCE COST ESTIMATE SUMMARY

Closure Cost

Description	Active Cells I - V, Active C&D, Closed Area 3, 5 and C&D Landfills
MSW Landfill Closure	$6,319,209
C&D Landfill Closure	$1,849,039
Total Closure Cost	$8,168,248
Post Closure	
Description	Active Cells I - V, Active C&D, Closed Area 3, 5 and C&D Landfills
Annual Post Closure Operation and Maintenance	30 Years @ $211,420
Leachate Treatment and Hauling	$726,025
Total Post Closure Cost	$7,068,625
Total Closure and Post Closure	$15,236,873
5% Contingency	$761,844
Total Closure and Post Closure Cost	**$15,998,716**

revised 1/24/2018

Table 2a.
CHEMUNG LANDFILL, LLC.
CHEMUNG COUNTY LANDFILL
MSW LANDFILL CLOSURE FINANCIAL ASSURANCE COST ESTIMATE

34.04	acres	33% slopes
3.38	acres	4% slope
	acres	Existing capped

Total Closure Acreage:	37.42

Cells I through V CLOSURE Component	Quantity	Unit	Unit Price ($)	Cost
Mobilization/Demobilization	1.00	LS	$ 120,000.00	$ 120,000
Grading	37.42	acres	$ 3,500.00	$ 130,984
Erosion Control	37.42	acres	$ 3,500.00	$ 130,984
Fertilize, Seed & Mulch	37.42	acres	$ 3,000.00	$ 112,272
Barrier Protection Layer	120,754.77	cy	$ 10.00	$ 1,207,548
Geosynthetic Clay Layer (4% Slope Only)	147,232.80	sf	$ 0.75	$ 110,425
40 MIL Textured LLDPE Geomembrane	1,630,189.44	sf	$ 0.50	$ 815,095
Composite Geonet Drainage Layer	1,630,189.44	sf	$ 0.70	$ 1,141,133
Composite Geonet Gas Venting Layer	1,630,189.44	sf	$ 0.55	$ 896,604
Topsoil Layer	30,188.69	cy	$ 14.00	$ 422,642
Vertical Gas Collection Wells	30.00	ea.	$ 15,000.00	$ 450,000
Stormwater Controls	34.90	acres	$ 4,500.00	$ 157,050
Toe Drain	1.00	LS	$ 50,000.00	$ 50,000
Design / QA/QC (10% of Construction Cost)				$ 574,474
			Cells I - V Total =	**$ 6,319,209**
			Cost Per Acre	**$ 168,854**

Table 2b.
CHEMUNG LANDFILL, LLC.
CHEMUNG COUNTY LANDFILL
C&D LANDFILL CLOSURE FINANCIAL ASSURANCE COST ESTIMATE

5.70	acres	33% slopes
5.94	acres	4% slope
---	acres	Existing capped

Total Closure Acreage	11.64

Active C&D Landfill Component	Quantity	Unit	Unit Price ($)	Cost
Mobilization/Demobilization	1.00	LS	$ 40,000.00	$ 40,000
Grading	11.64	acres	$ 3,500.00	$ 40,740
Erosion Control	11.64	acres	$ 3,500.00	$ 40,740
Fertilize, Seed & Mulch	11.64	acres	$ 3,000.00	$ 34,920
Barrier Protection Layer	37,558.40	cy	$ 10.00	$ 375,584
Geosynthetic Clay Layer (4% Slope Only)	258,746.40	sf	$ 0.75	$ 194,060
40 MIL Textured LLDPE Geomembrane	507,038.40	sf	$ 0.50	$ 253,519
Composite Geonet	507,038.40	sf	$ 0.70	$ 354,927
Topsoil Layer	9,389.60	cy	$ 14.00	$ 131,454
Vertical Gas Collection Wells	10.00	ea.	$ 15,000.00	$ 150,000
Stormwater Controls	10.00	acres	$ 4,500.00	$ 45,000
Toe Drain	1.00	LS	$ 20,000.00	$ 20,000
Design / QA/QC (10% of Construction Cost)				$ 168,094.43
			C&D Total =	**$ 1,849,039**
			Cost Per Acre	**$ 158,852**

Table 3.
CHEMUNG LANDFILL, LLC.
CHEMUNG COUNTY LANDFILL
POST CLOSURE FINANCIAL ASSURANCE COST ESTIMATE

Annual Post Closure Costs

Ops, Maint. Admin	Units	Unit Cost	Quantity/Yr	Total Cost/Yr
Cap repair (labor and equipment)	hr	$ 250.00	25.0	$ 6,250.00
General labor	hr	$ 50.00	25.0	$ 1,250.00
Seeding and fertilizing cap	acre	$ 1,500.00	1.0	$ 1,500.00
Mowing	acre	$ 125.00	65.6	$ 8,200.00
Surface water management maintenance	lump sum	$ 2,500.00	1.0	$ 2,500.00
Security and building repairs	lump sum	$ 500.00	1.0	$ 500.00
Annual inspections and reports	lump sum	$ 3,000.00	1.0	$ 3,000.00
Site Utilities (excluding gas system)	annual	$ 10,000.00	1.0	$ 10,000.00
			Operation, Maint., Admin costs:	**$ 33,200.00**

Water Monitoring	Units	Unit Cost	Quantity/Yr	Total Cost/Yr
Water Quality Sampling	lump sum	$ 12,200.00	4	$ 48,800.00
Water Quality Analysis	lump sum	$ 14,300.00	4	$ 57,200.00
Reporting	lump sum	$ 3,000.00	4	$ 12,000.00
Well replacements	each	$ 2,500.00	1	$ 2,500.00
Contingency Sampling	each	$ 1,800.00	1	$ 1,800.00
			Ground and surface water monitoring costs:	**$ 122,300.00**

Leachate Management	Units	Unit Cost	Quantity/Yr	Total Cost/Yr
Leachate management system repairs	lump sum	$ 20,000.00	1	$ 20,000.00
System operation and maintenance	lump sum	$ 10,000.00	1	$ 10,000.00
Leachate sampling and testing	lump sum	$ 2,000.00	2	$ 4,000.00
			Leachate Management Costs:	**$ 34,000.00**

Table 3.
CHEMUNG LANDFILL, LLC.
CHEMUNG COUNTY LANDFILL
POST CLOSURE FINANCIAL ASSURANCE COST ESTIMATE

Annual Post Closure Costs

Landfill Gas Management	Input data	Unit Cost	Quantity/Yr	Total Cost/Yr
Annual % repair and replacement	0.50%			
	Units			
Well Repair and Replacement	/acre	$ 15,000.00	65.6	$ 4,920.00
Blower replacements	each	$ 2,000.00	1.0	$ 2,000.00
Flare maintenance	annual	$ 2,500.00	1.0	$ 2,500.00
Electricity: blower	annual	$ 2,500.00	1.0	$ 2,500.00
System operation and inspection	LS	$ 2,500.00	1.0	$ 2,500.00
Gas probes: testing and report	annual	$ 1,000.00	1.0	$ 1,000.00
Compliance Monitoring	annual	$ 5,000.00	1.0	$ 5,000.00
Permit Fees (Title V NSPS)	annual	$ 1,500.00	1.0	$ 1,500.00
			Landfill Gas Management Costs:	**$ 21,920.00**
			Annual Post Closure Costs :	**$ 211,420.00**

Figure 1

Chemung County Landfill Post Closure Leachate Regression

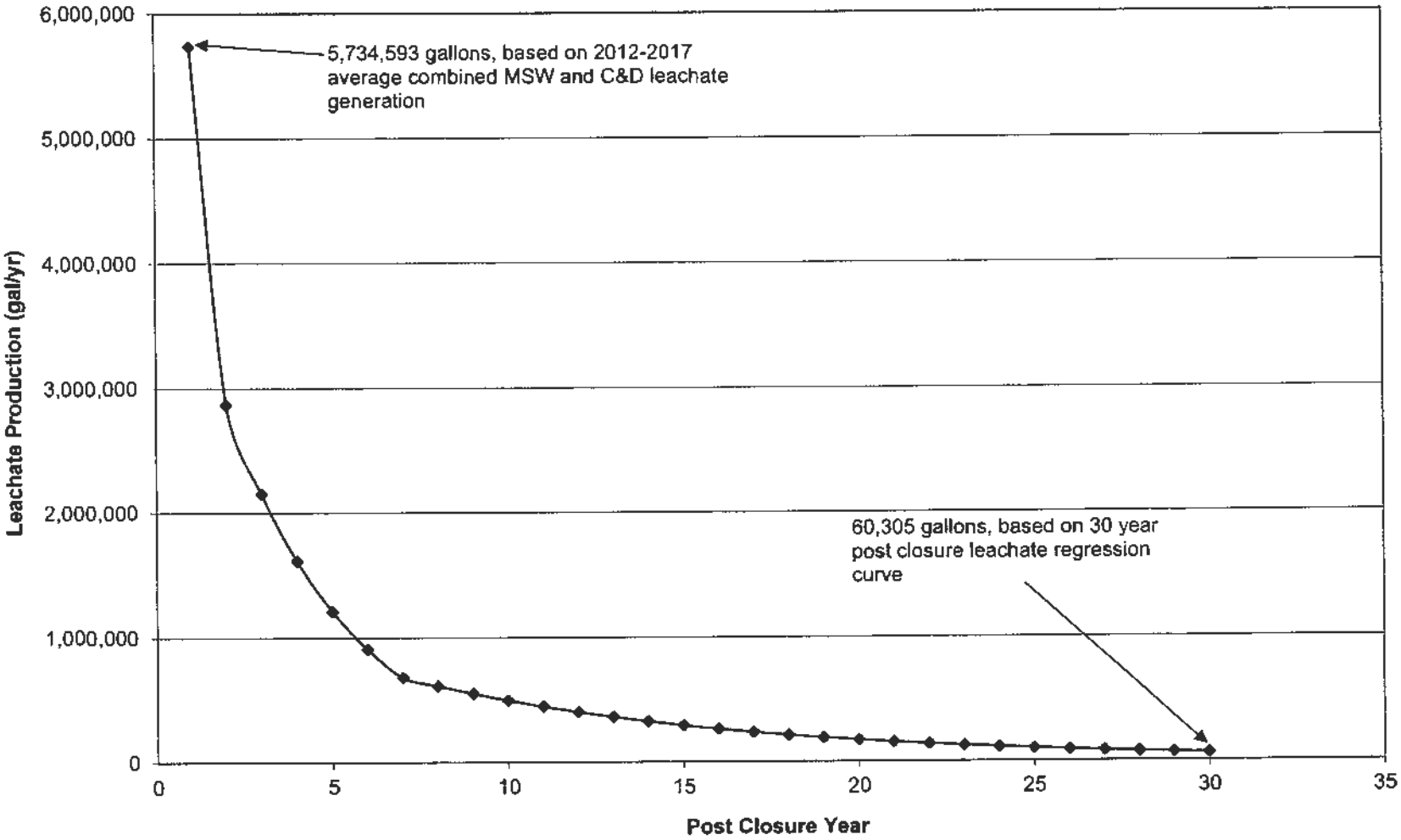


Table 4.
CHEMUNG LANDFILL, LLC.
CHEMUNG COUNTY LANDFILL
POST CLOSURE FINANCIAL ASSURANCE COST ESTIMATE

Post Closure Year	Leachate Generated (Gal.)	Cost *
Year 1**	5,734,593	$200,711
Year 2	2,867,297	$100,355
Year 3	2,150,472	$75,267
Year 4	1,612,854	$56,450
Year 5	1,209,641	$42,337
Year 6	907,231	$31,753
Year 7	680,423	$23,815
Year 8	612,381	$21,433
Year 9	551,143	$19,290
Year 10	496,028	$17,361
Year 11	446,425	$15,625
Year 12	401,783	$14,062
Year 13	361,605	$12,656
Year 14	325,444	$11,391
Year 15	292,900	$10,251
Year 16	263,610	$9,226
Year 17	237,249	$8,304
Year 18	213,524	$7,473
Year 19	192,172	$6,726
Year 20	172,954	$6,053
Year 21	155,659	$5,448
Year 22	140,093	$4,903
Year 23	126,084	$4,413
Year 24	113,475	$3,972
Year 25	102,128	$3,574
Year 26	91,915	$3,217
Year 27	82,724	$2,895
Year 28	74,451	$2,606
Year 29	67,006	$2,345
Year 30	60,305	$2,111
Totals	20,743,568	$726,025

* - Leachate Disposal Cost = $0.035/gallon (Includes Hauling and Treatment)
** - Leachate generation based on 2012-2017 average of MSW leachate generation plus C&D leachate generation. 2012 Leachate data includes a projected December generation based on an average of the actual December 2011, 2013 and 2014 generation.