VILLAGE OF WATERVILLE

WASTEWATER TREATMENT FACILITY

COMPOST ANNUAL REPORT

D.E.C. PERMIT NUMBER 6-3046-00032/00001
FACILITY NUMBER 33C03

2019 REPORT

Village of Waterville

Village Municipal Hall
122 Barton Avenue
Waterville, NY 13480
PH 315-841-4221
Fax 315-841-8007

Mr. Gary McCullouch
Region 6, Division of Materials Management
317 Washington St.
Watertown, NY 13601

February 5,2020

Dear Gary,

In accordance with Part 360 permit conditions the Village of Waterville is submitting its annual compost report. Our D.E.C. permit number is 6-3046-00032/00001 and our facility code is 33C03.

Our composting operation was again very successful in 2019. We made 9 compost piles in 2019 and all the piles made the required temperatures. Though the year we had 103 compost pickups and we gave away 202.7 cubic yards of finish compost to people in and around the Village of Waterville. We had no problems with the entire compost operation. No odor problems, no equipment failure, no problem getting free woodchips and no problem getting rid of the finish compost. Most of the summer we ran out of finish compost before the next compost pile completed its 51, day process. Cold weather is a problem when making compost. The woodchips are practically frozen and the finished compost is also frozen. In the past few years when a compost pile has finished its 51, day process we then pile it in a covered storage area and wait for warmer weather in the spring to screen it. The screening is much more efficient and goes much better in warmer weather and nobody wants compost in the winter months anyways.

The Village of Waterville runs a good clean composting operation and is very proud that we are doing something beneficial with our green waste and our biosolids and not just filling up valuable and costly land fill space.

Enclosed in this report are the completed D.E.C. forms that are required by our permit to be filled out each year. Also enclosed is: (9) compost temperature sheets, (3) part 360 sludge analysis, (2) finish compost part 360 analysis and (3) finish compost salmonella analysis.

If you have any questions please contact me at 315-841-4445 or watpstp2@villageofwaterville.org.

Michael Kelly, Plant Operator

Michael Kelly

Cc. Sally J. Rowland
Ruben Ostrander, Mayor Village of Waterville

New York State Department of Environmental Conservation
Division of Materials Management
Albany, New York 12233-7253

2019

PERMITTED FACILITY ANNUAL REPORT BIOSOLIDS

COMPOSTING/OTHER PROCESSING

6 NYCRR Part 361-3.2

This annual report is for the year of operation from January 01, 2019 to December 31, 2019

Annual Report Form Due: No Later than March 1, 2020

This form is for biosolids composting facilities that are permitted under section 361-3.2 previously 360-5 of Part 360. Permits for existing permitted facilities prior to November 2017 remain in effect until their expiration date, unless a modification is issued. Permittees must comply with the previous Part 360 regulations and their permit's special conditions until renewal or modification.

Forms for all solid waste management facilities can be found at http://www.dec.ny.gov/chemical/52706.html. If you have any questions on this form, please e-mail organicrecycling@dec.ny.gov.

Failure to provide the required information requested is a violation of Environmental Conservation Law. Timely submission of a properly completed form to the Department's Regional Office that has jurisdiction over your facility and to the Department's Central Office is required to meet the Annual Report requirements of 6 NYCRR Part 360 series.

Attach additional sheets if space on the pages is insufficient or supplementary information is required or appropriate.

PERMITTED FACILITY NAME: Waterville Compost Facility

PERMIT NUMBER: 6-3046-00032/00001

SW FACILITY ACTIVITY NUMBER: (Ex. 02PP0099) 33C03

COUNTY WHERE FACILITY IS LOCATED: Oneida

DEC USE ONLY

Region: SWIMS:

MATRIX:

Date Reviewed:

Reviewed By:

Data Entered:

PERMITTED BIOSOLIDS COMPOSTING FACILITY ANNUAL REPORT
SECTION 1 – FACILITY INFORMATION

FACILITY INFORMATION			
FACILITY NAME: Waterville Sewage Treatment Plant			
FACILITY LOCATION ADDRESS: 1659 ST. RT. 315	**FACILITY CITY:** Waterville	**STATE:** NY	**ZIP CODE:** 13480
FACILITY TOWN: Marshall	**FACILITY COUNTY:** Oneida	**FACILITY PHONE NUMBER:** 315-841-4445	
NYSDEC REGION #: 6			
FACILITY CONTACT: Michael Kelly	**CONTACT PHONE NUMBER:** 315-841-4445		
CONTACT EMAIL ADDRESS: watstp2@villageofwaterville.org			
OWNER INFORMATION			
OWNER NAME: Village of Waterville	**OWNER PHONE NUMBER:** 315-841-4221		
OWNER ADDRESS: 122 Barton Ave	**OWNER CITY:** Waterville	**STATE:** NY	**ZIP CODE:** 13480
OWNER CONTACT: Michael Kelly	**OWNER CONTACT EMAIL ADDRESS:** watstp2@villageofwaterville.org		
OPERATOR INFORMATION			
OPERATOR NAME: ☑ *Same as owner* Michael Kelly			
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* ○ *Owner Contact* ○ *Other (provide):*			

Did you operate in 2019? ◉ **Yes; Complete this form.**

○ **No; Complete and submit Sections 1 and 13.** If you no longer plan to operate and wish to relinquish your permit/registration associated with this solid waste management activity, please notify the regional office of your intent. See attachment for Regional Office addresses and contacts.

SECTION 2 – QUANTITY OF MATERIAL RECEIVED

Please report quantities received from January 01, 2019 to December 31, 2019

Compost Input	Quantity	Unit	% Solids	Source
Biosolids (Sewage Sludge)	19.7	Dry Tons	100	Waterville aerobic digestor
Bulking Agent/Amendment Specify: woodchips	184	Dry Tons	100	V/O Waterville Local tree service
Other: _____		Choose Units		

SECTION 3 – COMPOST PRODUCTION

WHAT IS THE PROCESS DETENTION TIME? *Note: Total time material is processed, not Including storage time*	51	**days**
COMPOST PRODUCED DURING THE YEAR:	202.11	**cubic yards** ***or***
	134.4	**tons**
COMPOST DISTRIBUTED DURING THE YEAR:	202.7	**cubic yards or**
	135	**tons**
QUANTITY CURRENTLY STOCKPILED: *Note: Finished product stockpiled*	27	**cubic yards** ***or***
	18.1	**tons**
AGE OF OLDEST PRODUCT ON SITE:	4	**months**

SECTION 4 – COMPOST DISTRIBUTION

Quantity Distributed (cubic yards)		Use of Compost (landscaping, agriculture, highway, onsite, bagged, etc.)
Ed Abbe	21	landscaping/grass
Bob Smith	18.7	flowers
John Lincon Lovely	17	flowers
Town Of Marshall	15.9	landscaping/ flowers
Village Of Waterville	15.5	grass
Mike Tower	12.6	grass
Chad Welch	12	landscaping/grass
Tim Bartlet	11.9	grass
Maureen Wartten	10.7	landscaping/flowers

SECTION 5 – BIOSOLIDS ANALYSES

Please attach sampling analyses and laboratory reports as required under Part 360 or your permit. Copies of original laboratory results must be attached. All results, except pH and Total Solids, must be on a dry weight basis.

Summarize data in table below or attached document.
Print additional pages as needed.

Analysis Date =====>	3/20/19	7/26/19	11/20/19		Permit Pre 2017 Regs. Monthly Conc. (mg/kg)	Permit Post 2017 Regs. Max. Conc. (mg/kg)
Arsenic (mg/kg)	nd	nd	nd		41	41
Cadmium (mg/kg)	nd	nd	nd		21	10
Chromium (mg/kg)	53	62	46		1,000	1,000
Copper (mg/kg)	420	660	700		1,500	1,500
Lead (mg/kg)	37	49	97		300	300
Mercury (mg/kg)	nd	nd	nd		10	10
Molybdenum (mg/kg)	nd	nd	nd		40	40
Nickel (mg/kg)	18	24	28		200	200
Selenium (mg/kg)	nd	8.2	nd		100	100
Zinc (mg/kg)	460	65	810		2,500	2,500
TKN (mg/kg)	58000	53000	62000			
Ammonia Nitrogen (mg/kg)	5600	5000	3600			
Nitrate (mg/kg)	<42	<42	<42			
Total Phosphorus (mg/kg)	12000	18000	12000			
Total Potassium (mg/kg)	43000	37000	35000			
pH (s.u.)	7.2	6.8	6.6			
Total Solids(%)	12%	12%	12%			
Total Volatile Solids (%)	79%	77%	75%			

SECTION 6 – PATHOGEN REDUCTION & VECTOR ATTRACTION REDUCTION

Check one method for each:

Pathogen Reduction 361-3.7(a)

- ○ Windrow Composting
- ◉ Aerated Static Pile Composting
- ○ In-vessel Composting
- ○ Other (specify): _____

Vector Attraction Reduction 361-3.7(b)

- ○ 38% Volatile Solids Reduction
- ○ Bench Scale Anaerobic Digestion
- ○ Bench Scale Aerobic Digestion
- ○ SOUR
- ◉ Aerobic Process 14 days, >40 °C, >45 °C avg.
- ○ pH raised to ≥12 for 2 hours and ≥11.5 for 22 hours
- ○ 75% solids
- ○ 90% solids (untreated solids)

Attach operating and monitoring data to show compliance with methods chosen. Temperature data records should indicate when a pile was created, pile was moved, additional material was added and/or pile was turned.

SECTION 6 ATTACHMENT #1

THE TEMPERATURE PROBE IS INSERTED INTO THE PILE, AT THE INLET END OF THE PILE, APPROX. 2 FT. ABOVE THE AERATION PIPE. THIS IS THE COLDEST PART OF THE PILE. RECORDINGS ARE MADE DAILY.

SECTION 7 – FINISHED COMPOST ANALYSIS

Please attach sampling analyses and laboratory reports as required under Part 360 or your permit. Copies of original laboratory results must be attached. All results, except pH and Total Solids, must be on a dry weight basis.

Summarize data in table below or attached document. Print additional pages as needed.

Analysis Date ===>	4/8/19	7/22/19	7/15/19	12/3/19	Permit Pre 2017 Regs. Monthly Conc. (mg/kg)	Permit Post 2017 Regs. Max. Conc. (mg/kg)
Arsenic (mg/kg)		2.9		nd	41	41
Cadmium (mg/kg)		nd		nd	10	10
Chromium (mg/kg)		23		13	1,000	1,000
Copper (mg/kg)		260		150	1,500	1,500
Lead (mg/kg)		23		12	300	300
Mercury (mg/kg)		.33		.30	10	10
Molybdenum (mg/kg)		2.6		1.5	40	40
Nickel (mg/kg)		1.3		5.4	200	200
Selenium (mg/kg)		2.3		1.8	100	100
Zinc (mg/kg)		310		160	2,500	2,500
TKN (mg/kg)		20000		23000		
Ammonia Nitrogen (mg/kg)		1500		1800		
Nitrate (mg/kg)		990		1100		
Total Phosphorus (mg/kg)		6900		8600		
Total Potassium (mg/kg)		4700		3600		
pH (s.u.)		5.3		5.4		
Total Solids (%)		82		71		
Total Volatile Solids (%)		79%		79%		
Fecal Coliform (MPN/g)					<1,000 MPN/g	
Salmonella sp. (MPN/4g)	<3		<3	<3	<3MPN/4g	
Other _____						

SECTION 8 – SAMPLE MANAGEMENT

Describe the number, frequency and location of samples taken. Include a diagram showing all sampling locations.

**** Attachments #2 Sampling diagram of input biosolids collected directly off the press just before being mixed with woodchips. Sample consists of 6-8 grab samples.
****Attachments #3 Finish compost sampling location. Samples consists of 6-8 grab samples mixed into one samples.

SECTION 9 – ATTACHMENTS

Please attach:

- Temperature monitoring and detention time data.
- Sample analyses laboratory reports.
- Any additional reporting requirements.

Do you have a variance to the Part 360 permit requirements? ◯ Yes ◉ No

If yes, please describe:

SECTION 10 – UNAUTHORIZED WASTE

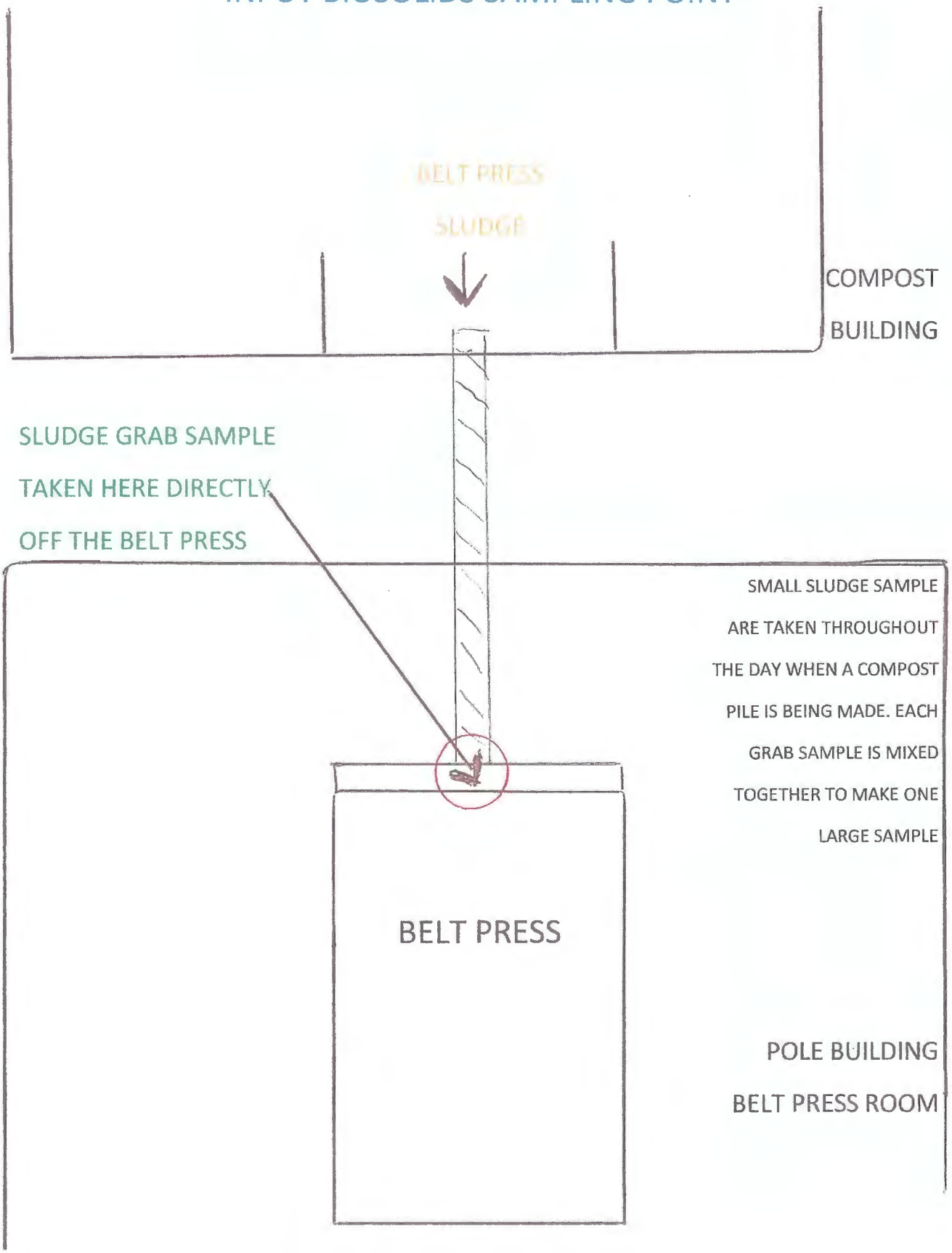
Has unauthorized solid waste been received at the Processing Facility during the reporting period?

◯ Yes ◉ No

If yes, please explain.

SECTION 8 ATTACHMENT #2

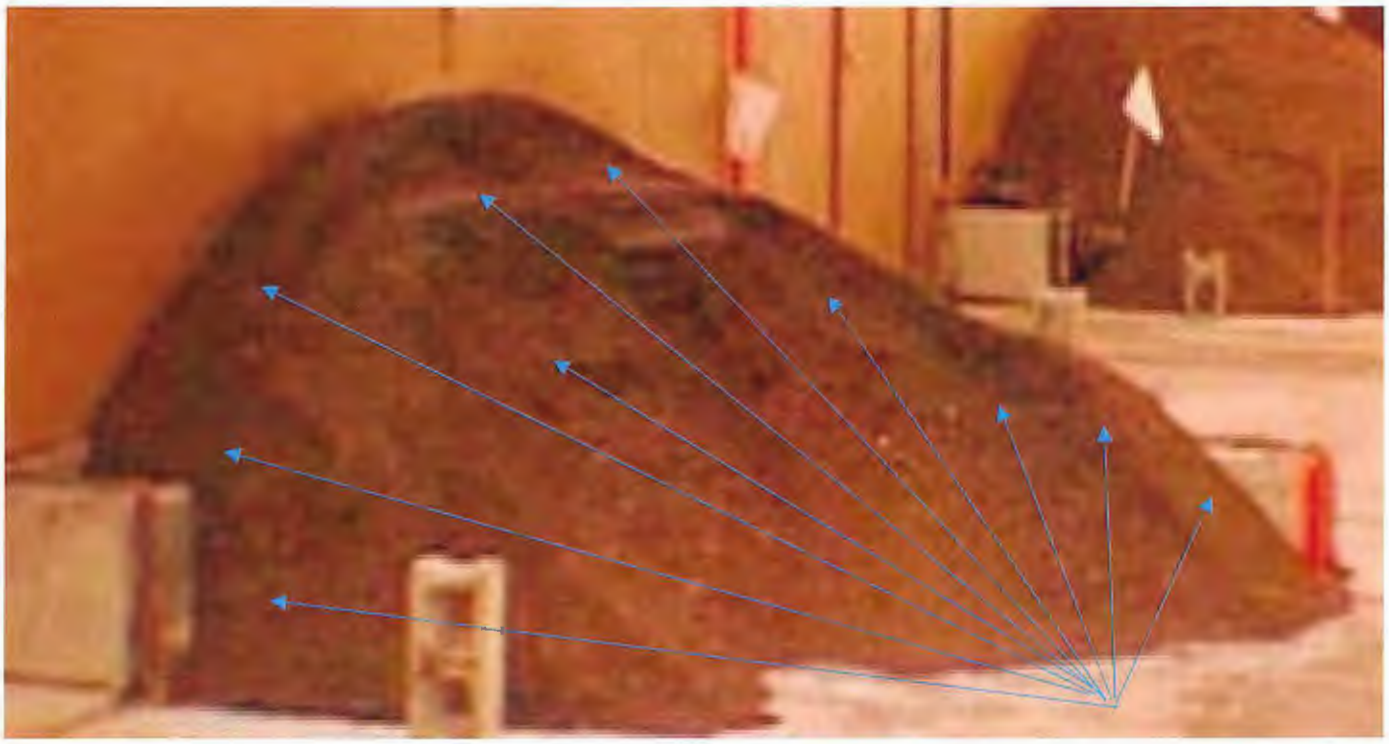
INPUT BIOSOLIDS SAMPLING POINT



SECTION 8 ATTACHMENT #3

FINISH COMPOST SAMPLING

Sampling is done on each individual compost pile after the pile has been screened. When sampling, ten (10) small grab samples are taken from the compost pile and are completely mixed together into one (1) large grab sample which is then put into one (1) glass sample bottle provided by our laboratory. This bottle is then put into our sample refrigerator. When around five (5) piles have been sampled we send all five to the laboratory where they will composite the five bottles into one and then run the part 360 analysis. Typically we sample salmonella in the same way, by taking ten (10) small samples and mixing them together into one sample and send that separate sample to the lab on the same day as sampled.



SAMPLE LOCATIONS

SECTION 11 – PROBLEMS/COMPLAINTS

Describe any operational problems or complaints arising from the composting operation and include any methods used to remedy the situations. This should include odor complaints, marketing difficulties, major equipment failure, etc.

No problem with our compost operation. No odor problem, no equipment problem or failure, no problems getting free wood chips or getting rid of our finished compost. We compost year round with the cold winter months slowing the operation down a little but we work through it so we will have plenty of compost for the spring rush. We do have a little stockpile of finish compost. We don't feel that will be any problem in the future.

Section 12 – QUESTIONS

Please identify any questions or concerns that you would like the Department to answer or consider:

None

SECTION 13 - CERTIFICATION

The Owner or Operator must sign, date and submit one completed form with an original signature to the appropriate Regional Office (See attachment for Regional Office addresses and Contacts.)

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

New York State Department of Environmental Conservation
Bureau of Waste Reduction and Recycling – Annual Report
625 Broadway – 9th Floor
Albany, New York 12233-7253

Phone: 518-402-8706
Fax 518-402-9024
Email address: organicrecycling@dec.ny.gov

Permit prior to November 2017:
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.

Permit Post November 2017:
I certify, under penalty of law, that the information that will be used to determine compliance with the requirements in Subpart 361-3 of 6 NYCRR Part 361 has been prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that false statement made herein are punishable pursuant to section 210.45 of the penal law.

Michael Kelly — Signature

2/5/2020 — Date

Michael Kelly — Name (Print)

Plant Operator — Title (Print)

watstp2@villageofwaterville.org — Email (Print)

122 Barton Ave. — Address

Watervillle — City

13480 — State and Zip

(315) 841-4445 — Phone Number

ATTACHMENTS: ○NO ◉YES (IF YES, LIST ATTACHMENTS)

- #1 location where temperature is taken
- #2 sampling location of input materical
- #3 sampling location of finished compost

- - LABORATORY ANALYSIS REPORT - -

(#1) BP

Waterville, Village Of Waterville, NY

Sample ID: **Belt Press Sludge Comp.** **LSL Sample ID:** **1903751-001**

Location:

Sampled: 03/20/19 7:00 **Sampled By:** LL

Sample Matrix: SHW Dry Wt, Sludge

Analytical Method / Analyte	Result	Units	Prep Method / Prep Date	Analysis Date & Time	Analyst Initials
(I) EPA 160.4 Total Volatile Solids					
Total Volatile Solids @ 550 C	79	%		3/25/19	MM2
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(I) EPA 6010C Metals			EPA 3050B		
Please refer to the next page					MT
(I) EPA 7471B Metals			EPA 7471B		
Please refer to the next page					EP
(I) EPA 9045D Water Extractable pH					
pH	7.2	Std. Units		3/21/19	TER
pH Measurement Temperature	25	Degrees C		3/21/19	TER
This analysis is not certifiable by NYS DOH ELAP.					
(I) Modified EPA 350.1, Rev. 2.0 (1993) Ammonia					
Ammonia as N	5600	mg/kg dry	3/30/19	4/2/19	JJC
As per NELAC regulation disclosure of the following condition is required; The result of a laboratory control sample was greater than the established limit.					
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(I) Modified EPA 351.2, Rev. 2.0 (1993)TKN as N					
Total Kjeldahl Nitrogen	58000	mg/kg dry	3/26/19	3/27/19	JJC
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(I) Modified EPA 365.1, Rev. 2.0 (1993) Total Phosphorus					
Phosphorus, Total as P	12000	mg/kg dry	3/26/19	3/27/19	EP
The NYS DOH ELAP does not offer certification for this method in this matrix. This analysis was performed by method EPA 365.3.					
(I) Modified SM 18-20 2540B Total Solids					
Total Solids @ 103-105 C	12	%		3/25/19	MM2
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(I) Nitrate-N by EPA 9056A			EPA 300.0A		
Nitrate as N	<42	mg/kg dry		4/1/19 15:15	EP
(I) Nitrite-N by EPA 9056A			EPA 300.0A		
Nitrite as N	<42	mg/kg dry		4/1/19 15:15	EP

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse , NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT: Life Science Labs-LIMS
Project: -Waterville, Village of
W Order: 1903751
Matrix: SLUDGE

Lab ID: 1903751-001A
Client Sample ID: *Belt Press Sludge Comp.*
Collection Date: 03/20/19 7:00
Date Received: 03/20/19 10:39

Analyte	Result	Qual	PQL	Units	DF	Date Analyzed
MERCURY			**SW7471B**		**(SW-846 7471B)**	
Mercury	ND		0.86	mg/Kg-dry	1	03/29/19 13:52
TOTAL METALS BY ICP			**SW6010C**		**(SW3050B)**	
Arsenic	ND		8.6	mg/Kg-dry	1	03/27/19 16:02
Cadmium	ND		8.6	mg/Kg-dry	1	03/27/19 16:02
Chromium	53		8.6	mg/Kg-dry	1	03/27/19 16:02
Copper	420		8.6	mg/Kg-dry	1	03/27/19 16:02
Lead	37		8.6	mg/Kg-dry	1	03/27/19 16:02
Molybdenum	ND		8.6	mg/Kg-dry	1	03/27/19 16:02
Nickel	18		8.6	mg/Kg-dry	1	03/27/19 16:02
Potassium	4300		860	mg/Kg-dry	1	03/28/19 15:01
Selenium	ND		8.6	mg/Kg-dry	1	03/27/19 16:02
Zinc	460		17	mg/Kg-dry	1	03/27/19 16:02
PERCENT MOISTURE			**SM 2540 G**			
Percent Moisture	88.4		1.0	wt%	1	03/25/19

Qualifiers:

*	Value may exceed the Acceptable Level	B	Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

-- LABORATORY ANALYSIS REPORT --

Waterville, Village Of Waterville, NY

Sample ID: Belt Press Sludge Comp. **LSL Sample ID:** 1912095-001

Location:

Sampled: 07/26/19 7:30 **Sampled By:** MK

Sample Matrix: SHW as Recd

Analytical Method / Analyte	Result	Units	Prep Method / Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 160.4 Total Volatile Solids					
Total Volatile Solids @ 550 C	77	%		8/1/19	CBR
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(1) EPA 6010C Metals			EPA 3050B		
Please refer to the next page					MT
(1) EPA 7471B Metals			EPA 7471B		
Please refer to the next page					EP
(1) EPA 9045D Water Extractable pH					
pH	6.8	Std Units		8/1/19	HKB
pH Measurement Temperature	25	Degrees		8/1/19	HKB
This analysis is not certifiable by NYS DOH ELAP.					
(1) Modified EPA 350.1, Rev. 2.0 (1993) Ammonia					
Ammonia as N	5000	mg/kg dry	8/3/19	8/5/19	JJC
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(1) Modified EPA 351.2, Rev. 2.0 (1993)TKN as N					
Total Kjeldahl Nitrogen	53000	mg/kg dry	8/8/19	8/8/19	JJC
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(1) Modified EPA 365.1, Rev. 2.0 (1993) Total Phosphorus					
Phosphorus, Total as P	18000	mg/kg dry	8/11/19	8/13/19	HKB
The NYS DOH ELAP does not offer certification for this method in this matrix.This analysis was performed by method EPA 365.3					
(1) Modified SM 18-20 2540B Total Solids					
Total Solids @ 103-105 C	12	%		8/1/19	CBR
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(1) Nitrate-N by EPA 9056A			EPA 300.0A		
Nitrate as N	<42	mg/kg dry		7/30/19 13:50	MT
(1) Nitrite-N by EPA 9056A			EPA 300.0A		
Nitrite as N	<42	mg/kg dry		7/30/19 13:50	MT
As per NELAC regulation, disclosure of the following condition is required; The associated matrix spike recovery was outside the method specified control limits.					

Analysis performed at: *(1) LSL Central Lab, (2) LSL North Lab, (3) LSL Finger Lakes Lab*

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse , NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT: Life Science Labs-LIMS
Project: -Waterville, Village of
W Order: 1912095
Matrix: SLUDGE

Lab ID: 1912095-001A
Client Sample ID: *Belt Press Sludge Comp.*
Collection Date: 07/26/19 7:30
Date Received: 07/26/19 8:50

Analyte	Result	Qual	PQL	Units	DF	Date Analyzed
MERCURY			**SW7471B**		**(SW7471B)**	
Mercury	ND		0.80	mg/Kg-dry	1	08/05/19 15:57
TOTAL METALS BY ICP			**SW6010C**		**(SW3050B)**	
Arsenic	ND		8.0	mg/Kg-dry	1	08/08/19 13:49
Cadmium	ND		8.0	mg/Kg-dry	1	08/08/19 13:49
Chromium	62		8.0	mg/Kg-dry	1	08/08/19 13:49
Copper	660		8.0	mg/Kg-dry	1	08/08/19 13:49
Lead	49		8.0	mg/Kg-dry	1	08/08/19 13:49
Molybdenum	ND		8.0	mg/Kg-dry	1	08/08/19 13:49
Nickel	24		8.0	mg/Kg-dry	1	08/08/19 13:49
Potassium	3700		800	mg/Kg-dry	1	07/31/19 10:59
Selenium	8.2		8.0	mg/Kg-dry	1	08/08/19 13:49
Zinc	650		16	mg/Kg-dry	1	08/08/19 13:49
PERCENT MOISTURE			**SM 2540 G**			
Percent Moisture	87.5		1.0	wt%	1	08/01/19

Qualifiers:

*	Value may exceed the Acceptable Level	B	Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

-- LABORATORY ANALYSIS REPORT --

Waterville, Village of Waterville, NY

Sample ID: Belt Press Sludge **LSL Sample ID:** 1919418-001

Location:

Sampled: 11/20/19 10:00 **Sampled By:** MK

Sample Matrix: SHW Dry Wt, Sludge

Analytical Method / Analyte	Result	Units	Prep Method / Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 160.4 Total Volatile Solids					
Total Volatile Solids @ 550 C	75	%		11/27/19	ARJ
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(1) EPA 6010C Metals			EPA 3050B		
Please refer to the next page					MT
(1) EPA 7471B Metals			EPA 7471B		
Please refer to the next page					MT
(1) EPA 9045D Water Extractable pH					
pH	6.6	Std Units		12/3/19	HKB
pH Measurement Temperature	25	Degrees C		12/3/19	HKB
This analysis is not certifiable by NYS DOH ELAP.					
(1) Modified EPA 350.1, Rev. 2.0 (1993) Ammonia					
Ammonia as N	3600	mg/kg dry	11/30/19	12/2/19	JJC
As per NELAC regulation disclosure of the following condition is required; The result of the laboratory control sample was less than the established limit.					
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(1) Modified EPA 351.2, Rev. 2.0 (1993)TKN as N					
Total Kjeldahl Nitrogen	62000	mg/kg dry	12/2/19	12/3/19	JJC
As per NELAC regulation disclosure of the following condition is required; The method blank result associated with this analysis was greater than the established limit.					
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(1) Modified EPA 365.1, Rev. 2.0 (1993) Total Phosphorus					
Phosphorus, Total as P	12000	mg/kg dry	12/11/19	12/13/19	HKB
The NYS DOH ELAP does not offer certification for this method in this matrix.This analysis was performed by Method EPA 365.3					
(1) Modified SM 18-20 2540B Total Solids					
Total Solids @ 103-105 C	12	%		11/27/19	ARJ
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(1) Nitrate-N by EPA 9056A			EPA 300.0A		
Nitrate as N	78	mg/kg dry		12/8/19 10:23	MT
*As per NELAC regulation, disclosure of the following condition is required; *The result of a quality control sample was greater than the established limit.*					
(1) Nitrite-N by EPA 9056A			EPA 300.0A		
Nitrite as N	<42	mg/kg dry		12/8/19 22:23	MT
(1) Water Extraction of Solids, EPA 300.0, Rev. 2.1 (1993)			EPA 300.0A		
Water Extraction				12/4/19	SCT

Analysis performed at: *(1) LSL Central Lab, (2) LSL North Lab, (3) LSL Finger Lakes Lab*

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse , NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT: Life Science Labs-LIMS
Project: -Waterville, Village of
W Order: 1919418
Matrix: SHW

Lab ID: 1919418-001A
Client Sample ID: *Belt Press Sludge*

Collection Date: 11/20/19 10:00
Date Received: 11/20/19 11:10

Analyte	Result	Qual	PQL	Units	DF	Date Analyzed
MERCURY			**SW7471B**		**(SW7471B)**	
Mercury	1.4		0.81	mg/Kg-dry	1	12/06/19 17:20
TOTAL METALS BY ICP			**SW6010C**		**(SW3050B)**	
Arsenic	ND		8.1	mg/Kg-dry	1	12/11/19 14:31
Cadmium	ND		8.1	mg/Kg-dry	1	12/11/19 14:31
Chromium	46		8.1	mg/Kg-dry	1	12/11/19 14:31
Copper	700		8.1	mg/Kg-dry	1	12/11/19 14:31
Lead	97		8.1	mg/Kg-dry	1	12/11/19 14:31
Molybdenum	ND		8.1	mg/Kg-dry	1	12/11/19 14:31
Nickel	28		8.1	mg/Kg-dry	1	12/11/19 14:31
Potassium	3500		810	mg/Kg-dry	1	12/12/19 15:58
Selenium	ND		8.1	mg/Kg-dry	1	12/11/19 14:31
Zinc	810		16	mg/Kg-dry	1	12/11/19 14:31
PERCENT MOISTURE			**SM 2540 G**			
Percent Moisture	87.7		1.0	wt%	1	11/27/19

Qualifiers:

*	Value may exceed the Acceptable Level	B	Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

- - LABORATORY ANALYSIS REPORT - -

Waterville, Village Of Waterville, NY

Sample ID: Compost **LSL Sample ID:** 1904791-001

Location:

Sampled: 04/08/19 10:00 **Sampled By:** LP

Sample Matrix: SHW Dry Wt, Compost

Analytical Method / Analyte	Result	Units	Prep Method	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 1682(2014) Salmonella by MSRV						
Salmonella	<3	mpn/4g Dry			4/8/19 13:35	DA
(1) SM 2540 B-2011 Total Solids						
Total Solids @ 103-105 C	80	%			4/8/19	MM2

Analysis performed at: *(1) LSL Central, (2) LSL North, (3) LSL Finger Lakes*

-- LABORATORY ANALYSIS REPORT --

Waterville, Village Of *Waterville, NY*

Sample ID: **Compost Salmonella** **LSL Sample ID:** **1911173-006**

Location:

Sampled: 07/15/19 8:40 **Sampled By:** MK

Sample Matrix: SHW Dry Wt, Compost

Analytical Method / Analyte	Result	Prep Method / Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 1682(2014) Salmonella by MSRV					
Salmonella	<3	mpn/4g Dry		7/15/19 16:05	DA
The NYS DOH ELAP does not offer certification for this method.					
(1) SM 2540 B-2011 Total Solids					
Total Solids @ 103-105 C	82	%		7/27/19	CBR
The NYS DOH ELAP does not offer certification for this method in this matrix.					

Analysis performed at: *(1) LSL Central Lab, (2) LSL North Lab, (3) LSL Finger Lakes Lab*

-- LABORATORY ANALYSIS REPORT --

Waterville, Village of *Waterville, NY*

Sample ID: **Compost Sample** **LSL Sample ID:** **1919915-005**

Location:

Sampled: 12/03/19 9:45 **Sampled By:** MK

Sample Matrix: SHW Dry Wt, Compost

Analytical Method / Analyte	Result	Prep Method / Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 1682(2014) Salmonella by MSRV					
Salmonella	<3	MPN/4g Dry		12/3/19 15:45	DA
The NYS DOH ELAP does not offer certification for this method.					
(1) SM 2540 B-2011 Total Solids					
Total Solids @ 103-105 C	89	%		12/18/19	ARJ
The NYS DOH ELAP does not offer certification for this method in this matrix.					

Analysis performed at: *(1) LSL Central Lab, (2) LSL North Lab, (3) LSL Finger Lakes Lab*

-- LABORATORY ANALYSIS REPORT --

Waterville, Village Of Waterville, NY

Sample ID: Compost #192,193,194,195,196 Comp. **LSL Sample ID:** 1911173-007

Location:

Sampled: 07/22/19 10:00 **Sampled By:** MK

Sample Matrix: SHW Dry Wt, Compost

Analytical Method / Analyte	Result	Units	Prep Method / Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 160.4 Total Volatile Solids					
Total Volatile Solids @ 550 C	79	%		7/27/19	CBR
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(1) EPA 6010C Metals			EPA 3050B		
Please refer to the next page					MT
(1) EPA 7471B Metals			EPA 7471B		
Please refer to the next page					EP
(1) EPA 9045D Water Extractable pH					
pH	5.3	Std Units		7/29/19	HKB
pH Measurement Temperature	25	Degrees C		7/29/19	HKB
This analysis is not certifiable by NYS DOH ELAP.					
(1) Modified EPA 350.1, Rev. 2.0 (1993) Ammonia					
Ammonia as N	1500	mg/kg dry	8/3/19	8/5/19	JJC
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(1) Modified EPA 351.2, Rev. 2.0 (1993)TKN as N					
Total Kjeldahl Nitrogen	20000	mg/kg dry	7/31/19	7/31/19	JJC
As per NELAC regulation disclosure of the following condition is required; The method blank result associated with this analysis was greater than the established limit.					
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(1) Modified EPA 365.1, Rev. 2.0 (1993) Total Phosphorus					
Phosphorus, Total as P	6900	mg/kg dry	8/2/19	8/5/19	HKB
This analysis was performed by EPA Method 365.3.					
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(1) Modified SM 18-20 2540B Total Solids					
Total Solids @ 103-105 C	82	%		7/27/19	CBR
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(1) Nitrate-N by EPA 9056A			EPA 300.0A		
Nitrate as N	990	mg/kg dry		7/22/19 20:35	EP
(1) Nitrite-N by EPA 9056A			EPA 300.0A		
Nitrite as N	33	mg/kg dry		7/22/19 20:35	EP
(1) Water Extraction of Solids, EPA 300.0, Rev. 2.1 (1993)			EPA 300.0A		
Water Extraction				7/22/19	EP

Analysis performed at: *(1) LSL Central Lab, (2) LSL North Lab, (3) LSL Finger Lakes Lab*

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse , NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT: Life Science Labs-LIMS
Project: -Waterville, Village of
W Order: 1911173
Matrix: COMPOST

Lab ID: 1911173-007A
Client Sample ID: *Compost #192,193,194,195,196 Comp.*
Collection Date: 07/22/19 10:00
Date Received: 07/15/19 9:40

Analyte	Result	Qual	PQL	Units	DF	Date Analyzed
MERCURY			**SW7471B**		**(SW7471B)**	
Mercury	0.33		0.12	mg/Kg-dry	1	08/05/19 15:55
TOTAL METALS BY ICP			**SW6010C**		**(SW3050B)**	
Arsenic	2.9		1.2	mg/Kg-dry	1	07/23/19 11:56
Cadmium	ND		1.2	mg/Kg-dry	1	07/23/19 11:56
Chromium	23		1.2	mg/Kg-dry	1	07/23/19 11:56
Copper	260		1.2	mg/Kg-dry	1	07/23/19 11:56
Lead	23		1.2	mg/Kg-dry	1	07/23/19 11:56
Molybdenum	2.6		1.2	mg/Kg-dry	1	07/23/19 11:56
Nickel	13		1.2	mg/Kg-dry	1	07/23/19 11:56
Potassium	4700		120	mg/Kg-dry	1	07/24/19 12:06
Selenium	2.3		1.2	mg/Kg-dry	1	07/23/19 11:56
Zinc	310		2.4	mg/Kg-dry	1	07/23/19 11:56
PERCENT MOISTURE			**SM 2540 G**			
Percent Moisture	18.0		1.0	wt%	1	07/27/19

Qualifiers:

- * Value may exceed the Acceptable Level
- E Value exceeds the instrument calibration range
- J Analyte detected below the PQL
- P Prim./Conf. column %D or RPD exceeds limit
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Practical Quantitation Limit (PQL)
- S Spike Recovery outside accepted recovery limits

-- LABORATORY ANALYSIS REPORT --

Waterville, Village of Waterville, NY

Sample ID: Compost Comp. of #197,198,199,200 **LSL Sample ID:** 1919915-006

Location:

Sampled: 12/17/19 10:22 **Sampled By:** MK

Sample Matrix: SHW Dry Wt, Compost

Analytical Method / Analyte	Result	Units	Prep Method / Prep Date	Analysis Date & Time	Analyst Initials
(1) EPA 160.4 Total Volatile Solids					
Total Volatile Solids @ 550 C	79	%		12/18/19	ARJ
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(1) EPA 6010C Metals			EPA 3050B		
Please refer to the next page					MT
(1) EPA 7471B Metals			EPA 7471B		
Please refer to the next page					EP
(1) EPA 9045D Water Extractable pH					
pH	5.4	Std Units		12/18/19	HKB
pH Measurement Temperature	25	Degrees C		12/18/19	HKB
This analysis is not certifiable by NYS DOH ELAP.					
(1) Modified EPA 350.1, Rev. 2.0 (1993) Ammonia					
Ammonia as N	1800	mg/kg dry	12/21/19	12/23/19	JJC
As per NELAC regulation, disclosure of the following condition is required; The result of the laboratory control sample for this analyte was less than the established limit.					
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(1) Modified EPA 351.2, Rev. 2.0 (1993)TKN as N					
Total Kjeldahl Nitrogen	23000	mg/kg dry	12/19/19	12/19/19	JJC
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(1) Modified EPA 365.1, Rev. 2.0 (1993) Total Phosphorus					
Phosphorus, Total as P	8600	mg/kg dry	12/20/19	12/26/19	HKB
This analysis was performed by Method EPA 365.3					
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(1) Modified SM 18-20 2540B Total Solids					
Total Solids @ 103-105 C	71	%		12/18/19	ARJ
The NYS DOH ELAP does not offer certification for this method in this matrix.					
(1) Nitrate-N by EPA 9056A			EPA 300.0A		
Nitrate as N	1100	mg/kg dry		12/23/19 13:31	EP
(1) Nitrite-N by EPA 9056A			EPA 300.0A		
Nitrite as N	<14	mg/kg dry		12/23/19 13:31	EP
(1) Water Extraction of Solids, EPA 300.0, Rev. 2.1 (1993)			EPA 300.0A		
Water Extraction				12/22/19	EP

Analysis performed at: *(1) LSL Central Lab, (2) LSL North Lab, (3) LSL Finger Lakes Lab*

Life Science Laboratories, Inc.
5854 Butternut Drive
East Syracuse , NY 13057 (315) 445-1900

Analytical Results

StateCertNo: 10248

CLIENT: Life Science Labs-LIMS
Project: -Waterville, Village of
W Order: 1919915
Matrix: SHW

Lab ID: 1919915-006A
Client Sample ID: *Compost #197,198,199,200*
Collection Date: 12/17/19 10:22
Date Received: 12/03/19 10:45

Analyte	Result	Qual	PQL	Units	DF	Date Analyzed
MERCURY			**SW7471B**		**(SW7471B)**	
Mercury	0.30		0.14	mg/Kg-dry	1	12/30/19 18:16

NOTES:
As per NELAC regulation, disclosure of the following condition is required; The result of an associated QC sample was outside of the established limit.

TOTAL METALS BY ICP			SW6010C		(SW3050B)	
Arsenic	ND		1.4	mg/Kg-dry	1	01/02/20 15:26
Cadmium	ND		1.4	mg/Kg-dry	1	01/02/20 15:26
Chromium	13		1.4	mg/Kg-dry	1	01/02/20 15:26
Copper	150		1.4	mg/Kg-dry	1	01/02/20 15:26
Lead	12		1.4	mg/Kg-dry	1	01/02/20 15:26
Molybdenum	1.5		1.4	mg/Kg-dry	1	01/02/20 15:26
Nickel	5.4		1.4	mg/Kg-dry	1	01/02/20 15:26
Potassium	3600		140	mg/Kg-dry	1	01/04/20 10:59
Selenium	1.8		1.4	mg/Kg-dry	1	01/02/20 15:26
Zinc	160		2.8	mg/Kg-dry	1	01/02/20 15:26

PERCENT MOISTURE			SM 2540 G			
Percent Moisture	29.1		1.0	wt%	1	12/18/19

Qualifiers:

*	Value may exceed the Acceptable Level	B	Analyte detected in the associated Method Blank
E	Value exceeds the instrument calibration range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below the PQL	ND	Not Detected at the Practical Quantitation Limit (PQL)
P	Prim./Conf. column %D or RPD exceeds limit	S	Spike Recovery outside accepted recovery limits

WEATHER
cold

COMPOST PILE # 192

Mix Ratio 2:1
types of chip used NEW + USED
type of chips covered USED
MIXES 28
27,500 GALLONS

DAY	DATE	TEMP.	TIME	BLOWER # hrs.
1.	12/6/18	12.8	11:20	0.0
2.	12/7	17.5	11 oc	0.0
3.	12/8	22.2	8:10	0.0
4.	12/9	31.0	8:30	0.0
5.	12/10	43.8	8:10	
6.	12/11	56.6	9:15	12.72
7.	12/12	56.4	900	17.53
8.	12/13	56.1	10:00	19.41
9.	12/14	56.0	830	21.36
10.	12/15	56.7	8:45	25.04
11.	12/16	55.6	8:45	27.85
12.	12/17	55.2	10.30	3160
13.	12/18	55.3	830	34.30
14.	12/19	56.2	900	36.96
15.	12/20	56.7	8:30	39.31
16.	12/21	56.1	845	42 14
17.	12/22	56.5	815	44 37
18.	12/23	54.7	815	46.71
19.	12/24	56.3	900	48.86
20.	12/25	56.6	840	50.36
21.	12/26	56.4	900	51.71

3 days @ 50 C
11 days @ 40 C

22. REMOVE TO CURING AREA 12/27/18

23. 12/27	29.	35.	41.	47.
24.	30.	36.	42.	48.
25.	31.	37.	43.	49.
26.	32.	38.	44.	50.
27.	33.	39.	45.	51.
28.	34.	40.	46.	52. 1/25/19

WEATHER
VERY COLD

Mix Ratio 2:1
types of chip used NEW
type of chips covered USED
MIXES

COMPOST PILE # 193

DAY	DATE	TEMP.	TIME	BLOWER # hrs.
1.	1/18/19	13.7	~~0:00~~ 9:10	0.00
2.	1/19	19.3	8:30	
3.	1/20	30.1	8:30	
4.	1/21	47.8	8:45	0.00
5.	1/22	56.2	9:30	1.98
6.	1/23	55.7	9:00	3.17
7.	1/24	55.3	9:00	5.05
8.	1/25	56.5	9:00	6.67
9.	1/26	56.1	8:30	7.46
10.	1/27	55.3	8:30	9.21
11.	1/28	56.4	9:00	10.18
12.	1/29	55.3	8:00	10.93
13.	1/30	55.6	9:00	11.54
14.	1/31	55.3	8:00	11.84
15.	2/1	55.5	8:00	12.13
16.	2/2	56.0	8:20	12.42
17.	2/3	56.3	8:15	12.84
18.	2/4	55.7	10:00	13.55
19.	2/5	55.6	10:00	14.26
20.	2/6	45.0	9:00	19.54
21.	2/7	28.7	8:00	19.[illegible]

22. REMOVE TO CURING AREA 2/8/19 (FRI)

23. 2/8	29.	35.	41.	47.
24.	30.	36.	42.	48.
25.	31.	37.	43.	49.
26.	32.	38.	44.	50.
27.	33.	39.	45.	51.
28.	34.	40.	46.	52. 3/9/19

WEATHER
cold/cloudy

COMPOST PILE # 194

Mix Ratio 2:1
types of chip used NEW
type of chips covered USED
MIXES 33
25000 gallons

DAY	DATE	TEMP.	TIME	BLOWER # 1 hrs.
1.	2/21/19	3.8	200	000
2.	2/22	10.7	10:10	000
3.	2/23	13.4	8:40	0,00
4.	2/24	18.7	8:40	0,00
5.	2/25	22.5	11:00	000
6.	2/26	23.2	9:10	0000
7.	2/27	56.6	12:30	0,01
8.	2/28	51.2	9:30	4,52
9.	3/1	60.5	5:45	5.54
10.	3/2	56.6	5:45	7.69
11.	3/3	56.2	7:15	8.90
12.	3/4	54.7	9:05	10.51
13.	3/5	54.6	9:05	11.71
14.	3/6	54.8	1000	13.08
15.	3/7	54.5	9:35	13.0*
16.	3/8	54.3	8:30	14.48
17.	3/9	56.6	7:30	14.48
18.	3/10	54.3	8:30	14.4
19.	3/11	53.0	9:15	11.7
20.	3/12	52	2:45	10.7
21.	3/13	50.3	8:45	18,06

22. REMOVE TO CURING AREA 3/14/19

23. 3/14/19	29.	35.	41.	47.
24.	30.	36.	42.	48.
25.	31.	37.	43.	49.
26.	32.	38.	44.	50.
27.	33.	39.	45.	51.
28.	34.	40.	46.	52. 4/12/19

WEATHER
warm/dry

COMPOST PILE # 195

Mix Ratio 2:1
types of chip used NEW
type of chips covered USED
MIXES 29
30,500 gal/lots

DAY	DATE	TEMP.	TIME	BLOWER #2 hrs.
1.	3/21/19	13.0	1:00	0.00
2.	3/22	16.1	9:00	0.00
3.	3/23	17.1	8:30	1.00
4.	3/24	20.3	8:30	2.00
5.	3/25	25.8	9:15	2.00
6.	3/26	44.0	9:15	0.00
7.	3/27	56.5	8:30	3.18
8.	3/28	56.4	8:00	5.16
9.	3/29	56.0	8:30	6.76
10.	3/30	53.7	9:00	8.03
11.	3/31	55.2	8:45	9.27
12.	4/1	56.6	9:00	10.24
13.	4/2	55.4	8:30	11.12
14.	4/3	55.5	8:45	12.56
15.	4/4	56.3	9:00	13.33
16.	4/5	56.3	9:00	14.63
17.	4/6	56.0	8:30	15.57
18.	4/7	55.7	8:30	16.7
19.	4/8	55.8	8:30	17.98
20.	4/9	55.1	8:30	19.17
21.	4/10	53.3	8:30	22.00

22. REMOVE TO CURING AREA 4/11/19

23. 4/11/19	29.	35.	41.	47.
24.	30.	36.	42.	48.
25.	31.	37.	43.	49.
26.	32.	38.	44.	50.
27.	33.	39.	45.	51.
28.	34.	40.	46.	52. 5/10/19

THER
ARM

COMPOST PILE # 196

mix ratio 2:1
types of chip used NEW
type of chips covered? US.
MIXES 27
35,250 gallons

DAY	DATE	TEMP.	TIME	BLOWER # 1 hrs.
1.	4/24/19	18.0	200	0.00
2.	4/25	29.1	10:35	.5
3.	4/26	5	9	
4.	4/27	5	8:15	1.42
5.	4/28	5	8:30	3.51
6.	4/29			
7.	4/30			7.17
8.	5/1			1.14
9.	5/2			
10.	5/3	55.6		12.3
11.	5/4		7:20	14.18
12.	5/5	56.1	8:20	15.17
13.	5/6	55.9	9:00	11.40
14.	5/7			
15.	5/8	55.5		
16.	5/9	56.0	7:00	21.24
17.	5/10	56.1	8:15	22.39
18.	5/11	55.2	8:45	23.54
19.	5/12	56.5	8:40	24.29
20.	5/13	55.1	7:00	25.10
21.	5/14	55.0	900	25.16

3 days 155°C
days 145°C

22. REMOVE TO CURING AREA 5/15/19

23. 5/15	29.	35.	41.	47.
24.	30.	36.	42.	48.
25.	31.	37.	43.	49.
26.	32.	38.	44.	50.
27.	33.	39.	45.	51.
28.	34.	40.	46.	52. 6/13/19

WEATHER
Rainy/wet

COMPOST PILE # 197

Mix Ratio 2:1
types of chip used NEW
type of chips covered/ USED
MIXES 28
38,000 gallons

DAY	DATE	TEMP.	TIME	BLOWER # 2 hrs.
1.	5/16/19	26.9	8:00	0.00
2.	5/17	32.0	7:45	0.00
3.	5/18	37.1	8:45	0.00
4.	5/19	44.2	8:15	0.00
5.	5/20	53.6	11:30	0.00
6.	5/21	53.6	8:30	0.00
7.	5/22	56.0	9:30	0.01
8.	5/23	56.7	8:30	2.11
9.	5/24	56.7	9:00	3.26
10.	5/25	56.9	8:50	3.99
11.	5/26	56.2	8:35	4.80
12.	5/27	56.4	8:00	5.46
13.	5/28	56.3	9:00	6.28
14.	5/29	56.2	7:45	7.02
15.	5/30	56.3	8:10	7.96
16.	5/31	56.1	8:15	9.00
17.	6/1	56.7	8:20	9.93
18.	6/2	56.7	8:20	11.06
19.	6/3	56.7	9:20	12.06
20.	6/4	56.2	8:50	13.04
21.	6/5	56.6	9:30	14.04

22. REMOVE TO CURING AREA 6/6/19

23. 6/6/19	29.	35.	41.	47.
24.	30.	36.	42.	48.
25.	31.	37.	43.	49.
26.	32.	38.	44.	50.
27.	33.	39.	45.	51.
28.	34.	40.	46.	52. 7/5/19 (FRI)

NEATHER
sunny

COMPOST PILE # 198

Mix Ratio 2:1
types of chip used used
type of chips covered used
MIXES 34
gallons 34250

DAY		DATE	TEMP.	TIME	BLOWER # 1 hrs.
6-19-19	1.	6-19-19	30.1	8:45	0.0
	2.	6-20	35.7	8:00	0.0
	3.	6-21	44.7	9:00	0.0
	4.	6-22	56.8	8:15	1.5
	5.	6-23	55.1	8:10	4.5
	6.	6-24	55.5	8:30	7.0
	7.	6-25	56.4	7:30	9.
	8.	6-26	56.2	2 pc	11.89
	9.	6-27	56.2	9:15	13.1
	10.	6-28	56.6	8:00	15
	11.	6-29	56.8	8:15	17.63
	12.	6-30	53.6	9:00	19.88
	13.	7-1	56.0	11:30	21.98
	14.	7-2	56.1	9:00	23.49
	15.	7-3	55.5	11:11	25.56
	16.	7-4	56.9	8:30	27.03
	17.	7-5	56.5	8:30	28.89
	18.	7-6	55.3	8:45	30.74
	19.	7-7	56.5	8:30	32.21
	20.	7-8	56.8	10:00	33.60
	21.	7-9	55.1	11:30	34.71

22. REMOVE TO CURING AREA 7-10

23. 7-11	29. 17	35. 23	41. 29	47. 4
24. 12	30. 18	36. 24	42. 30	48. 5
25. 13	31. 19	37. 25	43. 31	49. 6
26. 14	32. 20	38. 26	44. 8-1	50. 7
27. 15	33. 21	39. 27	45. 2	51. 8
28. 16	34. 22	40. 28	46. 3	52. 8-9-19

WEATHER
hot / sunny

COMPOST PILE # 194

Mix Ratio 2:1
types of chip used used
type of chips covered used
MIXES 35
gallons 42000

DAY	DATE	TEMP.	TIME	BLOWER # 2 hrs.
1.	7-26-19	31.1	7:00	0.0
2.	7-27	32.7	8:45	0.0
3.	7-28	43.4	8:15	0.0
4.	7-29	[illegible]	7:45	0.0
5.	7-30	55.5	8:00	4.96
6.	7-31	55.3	[illegible]	
7.	8-1	56.2	[illegible]	7.13
8.	8-2	56.3	[illegible]	
9.	8-3	56.1	[illegible]	
10.	8-4	56.2	[illegible]	
11.	8-5	54.5	[illegible]	8.87
12.	8-6	55.3	9:30	8.87
13.	8-7	55.6	11:30	9.70
14.	8-8	54.7	8:00	9.70
15.	8-9	55.1	7:45	[illegible]
16.	8-10	55.5	8:40	10.25
17.	8-11	55.0	8:45	10.25
18.	8-12	55.1	7:50	10.25
19.	8-13	55.2	8:30	10.25
20.	8-14	55.4	8:00	10.25
21.	8-15	55.1	7:40	10.26

22. REMOVE TO CURING AREA 8-16

23. 17	29. 23	35. 29	41. 4	47. 10
24. 18	30. 24	36. 30	42. 5	48. 11
25. 19	31. 25	37. 31	43. 6	49. 12
26. 20	32. 26	38. 9-1	44. 7	50. 13
27. 21	33. 27	39. 2	45. 8	51. 14
28. 22	34. 28	40. 3	46. 9	52. 9-15

WEATHER cloudy/Rain

145" out of digest

COMPOST PILE # 200

Mix Ratio 2:1
types of chip used used
type of chips covered used
MIXES 42
gallons 36250

DAY	DATE	TEMP.	TIME	BLOWER #	hrs.
1.	9-25-19	28.1	130	#1	0.00
2.	9-26-19	32.5	9 am	#1	0.0
3.	9-27-19	36.2		#1	
4.	9/28-19	55.8	830	#1	0.00
5.	9-29	55.9	830	#1	0.97
6.	9/30	56.4	9 am	#1	1.14
7.	10/1	56.7	8 15	#1	1.79
8.	10/2	55.2	10 am	#1	2.3
9.	10/3	56.5	9 30	#1	2.40
10.	10/4	56.3	7 30	#1	2.48
11.	10/5	53.8	820	#1	256
12.	10/6	55.0	840	#1	2.56
13.	10/7	56.5	10:20	#1	2.56
14.	10/8	55.7	10 am	#1	
15.	10/9	54.2	10 25	#1	2.56
16.	10/10	53.0	10 am	#1	2.
17.	10/11	51.3	10 am	#1	
18.	10/11	50.8	7 am	#1	
19.	10/12	50.2	8 20	#1	2.5
20.	10/13	49.7	9 15	#1	2.56
21.	10/14	47.1	10.30	#1	2.56

22. REMOVE TO CURING AREA 10/15

23. 10/16	29. 22	35. 28	41. 3	47. 9
24. 17	30. 23	36. 29	42. 4	48. 10
25. 18	31. 24	37. 30	43. 5	49. 11
26. 19	32. 25	38. 31	44. 6	50. 12
27. 20	33. 26	39. 11/1	45. 7	51. 13
28. 21	34. 27	40. 2	46. 8	52. 11/14/19