# VILLAGE OF WATERVILLE



# WASTEWATER TREATMENT FACILITY

# **COMPOST ANNUAL REPORT**

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

2020 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 1,2021

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 2020. We made 8 compost piles in 2020 and all the piles made the required temperatures. Though the year we had 118 compost pickups and we gave away 235.44 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: (8) compost temperature sheets, (2) part 360 sludge analysis, (2) finish compost part 360 analysis and (2) finish compost salmonella analysis.

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

Michael Kelly, Plant Operator

mechael (ally 2-1-21

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

2020

#### 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, 2020 to December 31, 2020

### Annual Report Form Due: No Later than March 1, 2021

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 <a href="http://www.dec.ny.gov/chemical/52706.html">http://www.dec.ny.gov/chemical/52706.html</a>. If you have any questions on this form, please e-mail <a href="mailto:organicrecycling@dec.ny.gov">organicrecycling@dec.ny.gov</a>.

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)
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 Treatme	ent Plant					
FACILITY LOCATION ADDRESS:	FACILITY CITY:	•	STATE:	ZIP CODE:		
1659 ST.RT.315	Waterville		ny	13480		
FACILITY TOWN:	FACILITY COUNTY:	FACII	LITY PHON	IE NUMBER:		
Marshall	Oneida 315-841-4445					
NYSDEC REGION #: 6	And the second					
FACILITY CONTACT:	CONTACT PHONE NUMBER:					
	315-841-4445					
CONTACT EMAIL ADDRESS:	@villageofwaterville.c	ora				
	OWNER INFORMATION	J. 3				
OWNER NAME:	OWNER PHONE NUMBER:					
Village of Waterville	315-841-4221					
OWNER ADDRESS:	OWNER CITY: STATE: ZIP CODE:					
122 Barton Ave	Waterville		NY	13480		
OWNER CONTACT: OWNER CONTACT EMAIL ADDRESS:  Watstn2@villageofwaterville.org						
Michael Kelly Watstp2@villageofwaterville.org						
OPERATOR NAME:  Same as owner Michael Kelly	OPERATOR INFORMATION  Y			7		
	PREFERENCES					
Preferred address to receive correspondence: Other (provide):	Facility location address	<b>O</b> 0	wner address			
Preferred email address: Facility Contact	Owner Contact					
Other (provide):						
Preferred individual to receive correspondence Other (provide):	e:	wner	Owner	r Contact		
Did you operate in 2020? Yes; Complet  No; Complet to relinquish your permit/registration associate of your intent. See attachment for Regional Of	e and submit Sections 1 and 13. d with this solid waste managemen					

### SECTION 2 - QUANTITY OF MATERIAL RECEIVED

Please report quantities received from <u>January 01, 2020</u> to <u>December 31, 2020</u>

Compost Input	Quantity	Unit	% Solids	Source
Biosolids (Sewage Sludge)	14.6	Dry Tons	100	Waterville aerobic digestor
Bulking Agent/Amendment Specify:	193.6	Dry Tons	100	Village of Waterville local tree sevice
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:	159.6	Tons
COMPOST DISTRIBUTED DURING THE YEAR:	159.67	Tons
QUANTITY CURRENTLY STOCKPILED:  Note: Finished product stockpiled	0.88	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.)	
Bill Humphery 17.6	flowers	
Chade Welch 17.2	grass	
Bob Smith 13.2	flowers	
Waterville School 12.8	flowers / grass	
Robert Hamelie 12.8	flowers	
Mike Kelly 10.7	flowers	
Elizabeth Wagner 9.6	grass	
Bill Getman 9.6	flowers	
Village of Waterville 8.8	grass	

### 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 ====>	2/20/20	6/16/20	Permit Pre 2017 Regs. Monthly Conc. (mg/kg)	Permit Post 2017 Regs. Max. Conc. (mg/kg)
Arsenic (mg/kg)	nd	nd	41	41
Cadmium (mg/kg)	nd	nd	21	10
Chromium (mg/kg)	35	26	1,000	1,000
Copper (mg/kg)	490	470	1,500	1,500
Lead (mg/kg)	59	39	300	300
Mercury (mg/kg)	1.1	nd	10	10
Molybdenum (mg/kg)	nd	nd	40	40
Nickel (mg/kg)	21	18	200	200
Selenium (mg/kg)	nd	nd	100	100
Zinc (mg/kg)	520	480	2,500	2,500
TKN (mg/kg)	60000	13000		
Ammonia Nitrogen (mg/kg)	2500	920		
Nitrate (mg/kg)	46	<38		
Total Phosphorus (mg/kg)	11000	2400		and it a linear mark
Total Potassium (mg/kg)	4100	2400		100
pH (s.u.)	6.9	7.2		•
Total Solids( %)	11	13		
Total Volatile Solids (%)	78	80		B

### 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)

### **IMPORTANT NOTE**

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 ===>	6/16/20	6/16/20	11/9/20	11/9/20	Permit Pre 2017 Regs. Monthly Conc. (mg/kg)	Permit Post 2017 Regs. Max. Conc. (mg/kg)
Arsenic (mg/kg)	2.7		2.2		41	41
Cadmium (mg/kg)	nd		nd		10	10
Chromium (mg/kg)	18		15		1,000	1,000
Copper (mg/kg)	250		260		1,500	1,500
Lead (mg/kg)	32		24		300	300
Mercury (mg/kg)	.44		.37		10	10
Molybdenum (mg/kg)	2.7		3.9		40	40
Nickel (mg/kg)	12		11		200	200
Selenium (mg/kg)	3.0		3.4		100	100
Zinc (mg/kg)	290		270		2,500	2,500
TKN (mg/kg)	24000		23000			The water through the same of
Ammonia Nitrogen (mg/kg)	990		2200			and youngs, the entire type of the same of
Nitrate (mg/kg)	620		1000			The state of the s
Total Phosphorus (mg/kg)	6600		3700		The state of the s	and the second s
Total Potassium (mg/kg)	5000		5600			and another than the state of t
pH (s.u.)	5.9		6.1			
Total Solids ( %)	72	69	85	88		
Total Volatile Solids (%)	80		86		Semigroup on exhausing the branch gargerings. Orings	and the second of the second o
Fecal Coliform (MPN/g)					<1,000	MPN/g
Salmonella sp. (MPN/4g)		<3		<3	<3MP	N/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 digram of input biosolids collected directly off the press just before being mixed with woodchips. Sample consists of 6-8 grab sample.

\*\*\*\*\* Attachments #3 Finish compost sampling location. Samples consists of 6-8 grab samples mixed into one samples.

### **SECTION 9 – ATTACHMENTS**

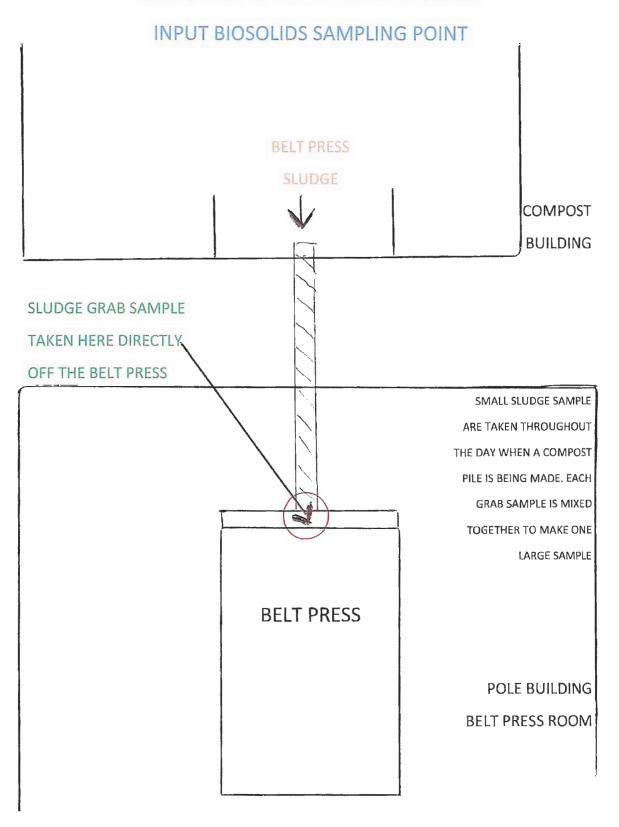
#### Please attach:

If yes, please explain.

- 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

## **SECTION 8 ATTACHMENT #2**



# **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 a 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	2/1/2021
Signature	Date
Michael Kelly	Plant Operator
Name (Print)	Title (Print)
watstp2@villageofwate	rville.org
Email (F	rint)
122 Barton Ave.	Waterville
Address	City
13480	<sub>(</sub> 315 <sub>)</sub> 841 <sub>-</sub> <b>4445</b>
State and Zip	Phone Number
ATTACHMENTS: ONO YES (IF YES, LIST ATTA	ACHMENTS)
#2 sampling location of input materical	
#3 sampling location of finished compost	

# New York State Department of Environmental Conservation Division of Materials Management Bureau of Waste Reduction and Recycling

#### MATERIAL MANAGEMENT PROGRAM CONTACTS

#### **CENTRAL OFFICE**

Bureau of Waste Reduction and Recycling 625 Broadway Albany, NY 12233-7253

Phone: (518) 402-8706

For Submission of Organics Recycling Annual Reports only:

Fax: (518) 402-9024

Email: organicrecycling@dec.ny.gov

#### **REGIONAL OFFICE ADDRESS & LEAD CONTACT PERSON**

#### REGION 1 (Nassau, Suffolk)

Syed Rahman/David Gibb SUNY @ Stony Brook 50 Circle Road Stony Brook, NY 11790 Phone: (631) 444-0375 SWMFannualreportR1@dec.ny.gov

REGION 2 (Bronx, Kings, New York, Queens,

## REGION 2 (Bronx, Kings, New York, Queens Richmond)

Joseph O'Connell 47-40 21st Street Long Island City, NY 11101-5407 Phone: (718) 482-4896 SWMFannualreportR2@dec.ny.gov

# REGION 3 (Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester)

James Lansing 21 South Putt Corners Road New Paltz, NY 12561 Phone: (845) 256-3123 SWMFannualreportR3@dec.ny.gov

REGION 4 (Albany, Columbia, Delaware, Greene, Montgomery, Otsego, Rensselaer, Schenectady, Schoharie)

Victoria Schmitt 1130 North Westcott Road Schenectady, NY 12306 Phone: (518) 357-2243 SWMFannualreportR4@dec.ny.gov

# REGION 5 (Clinton, Essex, Franklin, Fulton, Hamilton, Saratoga, Warren, Washington)

Jessie Sangster 1115 State Route 86, PO Box 296 Ray Brook, NY 12977 Phone: (518) 897-1266 SWMFannualreportR5@dec.ny.gov

# REGION 6 (Herkimer, Jefferson, Lewis, Oneida, St. Lawrence)

Gary McCullouch 317 Washington Street Watertown, NY 13601 Phone: (315) 785-2513 SWMFannualreportR6@dec.ny.gov

#### REGION 7 (Broome, Cayuga, Chenango, Cortland, Madison, Onondaga, Oswego, Tioga, Tompkins)

Thomas Annal 615 Erie Boulevard West Syracuse, NY 13204 Phone: (315) 426-7419

SWMFannualreportR7@dec.ny.gov

#### REGION 8 (Chemung, Genesee, Livingston, Monroe, Ontario, Orleans, Schuyler, Seneca, Steuben, Wayne, Yates)

Greg MacLean 6274 East Avon-Lima Road Avon, NY 14414 Phone: (585) 226-5411 SWMFannualreportR8@dec.ny.gov

# REGION 9 (Allegany, Cattaraugus, Chautaugua, Erie, Niagara, Wyoming)

Peter Grasso 270 Michigan Avenue Buffalo, NY 14203 Phone: (716) 851-7220

SWMFannualreportR9@dec.ny.gov

September 2020

Waterville, Village of Waterville, NY

Sample ID: Compo

Compost # 201

LSL Sample ID:

2008702-001

Location:

Sampled:

03/31/20 13:00

Sampled By: mk

Sample Matrix: SHW Dry Wt, Compost

Analytical Method	Prep Method	Prep	Analysis	Analyst
Analyte	Result Units Date	Date & Time	Initials	
(1) To be composited for inorganic analysis				
Sample Composited in Lab		6/22/20		
Sample Composited in Lab		6/22/20		
Sample Composited in Lab		6/22/20		
(1) To Be composited for inorganic analysis.				
Sample Composited in Lab				MT
(1) To be composited for Mercury analysis				
Sample Composited in Lab				MT
(1) To be composited for Metals analysis				
Sample Composited in Lab				MT

Waterville, Village of Waterville, NY

Sample ID: Compost # 202

LSL Sample ID:

2008702-002

Location:

Sampled:

04/16/20 14:00

Sampled By: mk

Sample Matrix: SHW Dry Wt, Compost

Analytical Method Analyte	Prep Method Result Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) To be composited for inorganic analysis				
Sample Composited in Lab		6/22/20		
Sample Composited in Lab		6/22/20		
Sample Composited in Lab		6/22/20		
(1) To Be composited for inorganic analysis.  Sample Composited in Lab				MT
(1) To be composited for Mercury analysis  Sample Composited in Lab				MT
(1) To be composited for Metals analysis  Sample Composited in Lab				МТ

Waterville, Village of Waterville, NY

Sample ID: Compost # 203

LSL Sample ID:

2008702-003

Location:

Sampled:

04/27/20 14:30

Sampled By: mk

Sample Matrix: SHW Dry Wt, Compost

Analytical Method	Prep Method	Prep	Analysis	Analyst
Analyte	Result Units	Date	Date & Time	Initials
(1) To be composited for inorganic analysis				-
Sample Composited in Lab		6/22/20		
Sample Composited in Lab		6/22/20		
Sample Composited in Lab		6/22/20		
(1) To Be composited for inorganic analysis.				
Sample Composited in Lab				MT
(1) To be composited for Mercury analysis				
Sample Composited in Lab				MT
(1) To be composited for Metals analysis				
Sample Composited in Lab				MT

Waterville, Village of

Waterville, NY

Sample ID:

Compost # 204

LSL Sample ID:

2008702-004

Location:

Sampled:

06/04/20 14:00

Sampled By: mk

Sample Matrix: SHW Dry Wt, Compost

Analytical Method	Prep Method	Prep	Analysis	Analyst
Analyte	Result Units	Date	Date & Time	Initials
(1) To be composited for inorganic analysis				
Sample Composited in Lab		6/22/20		
Sample Composited in Lab		6/22/20		
Sample Composited in Lab		6/22/20		
(1) To Be composited for inorganic analysis.				
Sample Composited in Lab				MT
(1) To be composited for Mercury analysis				
Sample Composited in Lab				MT
(1) To be composited for Metals analysis				
Sample Composited in Lab				MT

Waterville, Village of

Waterville, NY

Sample ID:

Composite of Composts #201 to #204

LSL Sample ID:

2008702-005

Location:

Sampled:

06/22/20 9:00

Sampled By: mk

Sample Matrix: SHW Dry Wt, Compost

Analytical Method		Prep Method	Prep	Analysis	Analyst
<u>Analyte</u>	Result	Units	Date	Date & Time	Initials
(1) EPA 160.4 Total Volatile Solids	00	04		(100100	ARJ
Total Volatile Solids @ 550 C  This analysis is not certifiable by NYS DOH ELAP.	80	%		6/22/20	AK
(1) EPA 6010C Part 360 Total Metals		EPA 3050B			
Please refer to the next page					MT
(1) EPA 9045D Water Extractable pH					
рН	5.9	Std Units		6/30/20	HKB
pH Measurement Temperature This analysis is not certifiable by NYS DOH ELAP.	25	Degrees C		6/30/20	HKB
(1) Mercury by EPA 7471B					
Please refer to the next page					MT
(1) Modified EPA 350.1, Rev. 2.0 (1993) Ammonia					
Ammonia as N  This analysis is not certifiable by NYS DOH ELAP.	990	mg/kg dry	6/30/20	6/30/20	nc
(1) Modified EPA 351.2, Rev. 2.0 (1993)TKN as N					
Total Kjeldahl Nitrogen This analysis is not certifiable by NYS DOH ELAP.	24000	mg/kg dry	6/24/20	6/24/20	ПС
(1) Modified EPA 365.3, Rev. 2.0 (1993) Total Phosphorus					
Phosphorus, Total as P The NYS DOH ELAP does not certify for this analyte in this matrix.	6600	mg/kg dry	6/30/20	7/1/20	ARJ
(1) Modified SM 18-20 2540B Total Solids					
Total Solids @ 103-105 C  This analysis is not certifiable by NYS DOH ELAP.	72	%		6/22/20	AŘJ
(1) Nitrate-N by EPA Method 9056A		EPA 300.0A			
Nitrate as N	620	mg/kg dry	6/30/20	7/1/20 16:30	MT
(1) Nitrite-N by EPA Method 9056A		EPA 300.0A			
Nitrite as N	<6.9	mg/kg dry	6/30/20	7/1/20 16:30	MT
<ol> <li>Water Extraction of Solids, EPA 300.0, Rev. 2.1 (1993)</li> </ol>		EPA 300.0A			
Water Extraction			6/30/20	6/30/20	SAB



Analyte

# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

Result Qual

## **Analytical Results**

StateCertNo: 10248

CLIENT: Life Science Labs-LIMS

Project: Waterville, Village of

W Order: 2008702 Matrix: COMPOST

2008702-005A Lab ID:

Client Sample ID: Compost 201-204 Composite

Composite

06/22/20 9:00 Collection Date:

Date Received:	06/16/20 10:27	
PQL Units	DF	Date Analyzed

MERCURY		SW7471B	(SW7471B)		
Mercury	0.44	0.14 mg/Kg-dry	1	06/25/20 12:56	
TOTAL METALS BY ICP		SW6010C	(8)	W3050B)	
Arsenic	2.7	1.4 mg/Kg-dry	1	06/29/20 13:11	
Cadmium	ND	1.4 mg/Kg-dry	1	06/29/20 13:11	
Chromium	18	1.4 mg/Kg-dry	1	06/29/20 13:11	
Copper	250	1.4 mg/Kg-dry	1	06/29/20 13:11	
Lead	32	1.4 mg/Kg-dry	1	06/29/20 13:11	
Molybdenum	2.7	1.4 mg/Kg-dry	1	06/29/20 13:11	
Nickel	12	1.4 mg/Kg-dry	1	06/29/20 13:11	
Potassium	5000	140 mg/Kg-dry	1	06/30/20 14:39	
Selenium	3.0	1.4 mg/Kg-dry	1	06/29/20 13:11	
Zinc	290	2.8 mg/Kg-dry	1	06/29/20 13:11	

PERCENT MOISTURE		SM 2540 G		
Percent Moisture	28.0	1.0 wt%	1	06/22/20

Qualifiers:

Print Date: 07/13/20 10:26 Project Supervisor: Admin

Page 1 of 2

<sup>\*</sup> Value may exceed the Acceptable Level

E Value exceeds the instrument calibration range

Analyte detected below the PQL

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

Waterville, Village of

Waterville, NY

Sample ID:

LSL Sample ID:

2008702-006

Location:

Sampled:

06/16/20 9:20

Sampled By:

Sample Matrix:

Analytical Method		Prep Method	Prep	Analysis	Analyst
Analyte	Result	Units	Date	Date & Time	Initials
(1) EPA 1682(2014) Salmonella by MSRV					
Salmonella	<3	MPN/4g Dry		6/16/20 13:35	DA/DA
The NYS DOH ELAP does not offer certification for this method.					
(1) SM 2540 B-2011 Total Solids					
Total Solids @ 103-105 C	69	%		6/22/20	ARJ
The NIVE DOLL ELAD does not offer consideration for this most of in a	la im ma metarian				

The NYS DOH ELAP does not offer certification for this method in this matrix.

Waterville, Village of

Sampled By:

Waterville, NY

Sample ID: Location:

Sampled:

06/16/20 8:00

LSL Sample ID:

2008702-007

Sample Matrix:							
Analytical Method		Prep Method	Prep	Analysis	Analyst		
Analyte	Result	Units	Date	Date & Time	Initials		
(1) EPA 160.4 Total Volatile Solids							
Total Volatile Solids @ 550 C	80	%		6/22/20	ARJ		
The NYS DOH ELAP does not offer certification for this me	thod in this matrix.						
(1) EPA 6010C Part 360 Total Metals		EPA 3050B					
Please refer to the next page					MT		
(1) EPA 9045D Water Extractable pH							
р <b>Н</b>	7.2	Std Units		6/30/20	HKB		
pH Measurement Temperature	25	Degrees C		6/30/20	HKB		

(1) Mercury by EPA 7471B

MT Please refer to the next page

(1) Modified EPA 350.1, Rev. 2.0 (1993)

This analysis is not certifiable by NYS DOH ELAP.

Ammonia

JJC 920 mg/kg dry 6/30/20 6/30/20 Ammonia as N

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

JJC 13000 mg/kg dry 6/24/20 6/24/20 Total Kjeldahl Nitrogen

The NYS DOH ELAP does not offer certification for this method in this matrix.

(1) Modified EPA 365.3, Rev. 2.0 (1993) Total

Phosphorus

Nitrite as N

ARJ 6/30/20 7/1/20 2400 mg/kg dry Phosphorus, Total as P

The NYS DOH ELAP does not offer certification for this method in this matrix.

(1) Modified SM 18-20 2540B Total Solids

ARJ 13 % 6/22/20 Total Solids @ 103-105 C

The NYS DOH ELAP does not offer certification for this method in this matrix.

EPA 300.0A (1) Nitrate-N by EPA 9056A MT <38 mg/kg dry 6/30/20 7/1/20 16:57 Nitrate as N (1) Nitrite-N by EPA 9056A **EPA 300.0A** 6/30/20 7/1/20 16:57 MT

EPA 300.0A

(1) Water Extraction of Solids, EPA 300.0, Rev. 2.1 (1993)

6/30/20 SAB 6/30/20 Water Extraction

<38 mg/kg dry



Project:

Matrix:

W Order: 2008702

## Life Science Laboratories, Inc.

5854 Butternut Drive

Waterville, Village of

CLIENT: Life Science Labs-LIMS

SLUDGE

East Syracuse, NY 13057

(315) 445-1900

**Analytical Results** 

StateCertNo: 10248

2008702-007A

Client Sample ID: Belt Press Sludge

**Collection Date:** 

Lab ID:

06/16/20 8:00

Date Received:

06/16/20 10:27

Analyte	Result Qual	PQL Units	DF	Date Analyzed
MERCURY		SW7471B	(SW	7471B)
Mercury	ND	0.76 mg/Kg-dry	1	06/25/20 13:02

TOTAL METALS BY ICP		SW6010C	(S	W3050B)
Arsenic	ND	7.6 mg/Kg-dry	1	06/29/20 13:16
Cadmium	ND	7.6 mg/Kg-dry	1	06/29/20 13:16
Chromium	26	7.6 mg/Kg-dry	1	06/29/20 13:16
Copper	470	7.6 mg/Kg-dry	1	06/29/20 13:16
Lead	39	7.6 mg/Kg-dry	1	06/29/20 13:16
Molybdenum	ND	7.6 mg/Kg-dry	1	06/29/20 13:16
Nickel	18	7.6 mg/Kg-dry	1	06/29/20 13:16
Potassium	2400	760 mg/Kg-dry	1	06/30/20 14:43
Selenium	ND	7.6 mg/Kg-dry	1	06/29/20 13:16
Zinc	480	15 mg/Kg-dry	1	06/29/20 13:16

PERCENT MOISTURE		SM 2540 G		
Percent Moisture	86.8	1.0 wt%	1	06/22/20

Qualifiers:

\* Value may exceed the Acceptable Level

E Value exceeds the instrument calibration range

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

Print Date: 07/02/20 13:40 Project Supervisor: Admin Page 2 of 2

Waterville, Village of Waterville, NY

Sampled By: MK

Sample ID: Compost #205 Grab

Location:

Sampled: 06/30/20 10:00

LSL Sample ID:

2018448-001

Sample Matrix: SHW Dry Wt, Compost

An	alytical Method Analyte	Prep Method Result Units	Prep Date	Analysis Date & Time	Analyst Initials
(1)	To be composited for inorganic analysis				
	Sample Composited in Lab			11/24/20	ARJ
	Sample Composited in Lab			11/24/20	ARJ
	Sample Composited in Lab			11/24/20	ARJ
(1)	To be composited for Mercury analysis				
	Sample Composited in Lab			11/24/20	ARJ
(1)	To be composited for Metals analysis				
	Sample Composited in Lab			11/24/20	ARJ

Sample ID:

Compost #206 Grab

LSL Sample ID:

2018448-002

Location:

Sampled:

08/06/20 11:30

Sampled By: MK

Sample Matrix: SHW Dry Wt, Compost

Analytical Method			Prep Method	Prep	Analysis	Analyst
	Analyte	Result	_Units	Date	Date & Time	<u>Initials</u>
(1)	To be composited for inorganic analysis					
	Sample Composited in Lab				11/24/20	ARJ
	Sample Composited in Lab				11/24/20	ARJ
	Sample Composited in Lab				11/24/20	ARJ
(1)	To be composited for Mercury analysis					
	Sample Composited in Lab				11/24/20	ARJ
(1)	To be composited for Metals analysis					
	Sample Composited in Lab				11/24/20	ARJ

Sample ID:

Compost #207 Grab

LSL Sample ID:

2018448-003

Location:

Sampled:

09/01/20 9:00

Sampled By: MK

Sample Matrix: SHW Dry Wt, Compost

Analytical Method Analyte	Prep Method Result Units	Prep Date	Analysis Date & Time	Analyst Initials
(1) To be composited for inorganic analysis				
Sample Composited in Lab			11/24/20	ARJ
Sample Composited in Lab			11/24/20	ARJ
Sample Composited in Lab			11/24/20	ARJ
(1) To be composited for Mercury analysis				
Sample Composited in Lab			11/24/20	ARJ
(1) To be composited for Metals analysis				
Sample Composited in Lab			11/24/20	ARI

Waterville, Village of Waterville, NY

Sample ID:

Compost #208 Grab

LSL Sample ID:

2018448-004

Location:

Sampled:

09/03/20 14:00

Sampled By: MK

Sample Matrix: SHW Dry Wt, Compost

Aı	alytical Method Prep Method Analyte Result Units		Prep Date	Analysis  Date & Time	Analyst Initials
(1)	To be composited for inorganic analysis				
	Sample Composited in Lab			11/24/20	ARJ
	Sample Composited in Lab			11/24/20	ARJ
	Sample Composited in Lab			11/24/20	ARJ
(1)	To be composited for Mercury analysis				
	Sample Composited in Lab			11/24/20	ARJ
(1)	To be composited for Metals analysis				
	Sample Composited in Lab			11/24/20	ARJ

Waterville, Village of

Waterville, NY

Sample ID:

Compost Composite of Composts # 205 to #208

LSL Sample ID:

2018448-005

Location:

Sampled:

11/24/20 14:00

Sampled By: MK

Sample Matrix: SHW Dry Wt, Compost

Analytical Method		Prep Method	Prep	Analysis	Analyst
Analyte	Result	Units	Date	Date & Tir	ne Initials
(1) EPA 160.4 Total Volatile Solids  Total Volatile Solids @ 550 C  This analysis is not certifiable by NYS DOH ELAP.	86	%		11/24/20	ARJ
(1) EPA 6010C Part 360 Total Metals Please refer to the next page		EPA 3050B			MT
(1) EPA 9045D Water Extractable pH pH pH Measurement Temperature This analysis is not certifiable by NYS DOH ELAP.		Std. Units Degrees C		11/25/20 11/25/20	ARJ ARJ
(1) Mercury by EPA 7471B  Please refer to the next page					MT
(1) Modified EPA 350.1, Rev. 2.0 (1993) Ammonia Ammonia as N This analysis is not certifiable by NYS DOH ELAP.	2200	mg/kg dry	12/6/20	12/7/20	пс
(1) Modified EPA 351.2, Rev. 2.0 (1993)TKN as N Total Kjeldahl Nitrogen This result should be considered an estimate because the continuous transfer of the continuous statements analysis is not certifiable by NYS DOH ELAP.		mg/kg dry exceeded the linear range of th	12/4/20 he instrument.	12/4/20	nc
<ul> <li>(1) Modified EPA 365.3, Rev. 2.0 (1993) Total         Phosphorus         Phosphorus, Total as P     </li> <li>The NYS DOH ELAP does not certify for this analyte in this matrix.</li> </ul>	3700	mg/kg dry	12/3/20	12/7/20	ARJ
(1) Modified SM 18-20 2540B Total Solids  Total Solids @ 103-105 C  This analysis is not certifiable by NYS DOH ELAP.	85	%		11/24/20	ARJ
(1) Nitrate-N by EPA Method 9056A Nitrate as N	1000	EPA 300.0A mg/kg dry	12/1/20	12/1/20 20:	19 MT
(1) Nitrite-N by EPA Method 9056A Nitrite as N	<24	EPA 300.0A mg/kg dry	12/1/20	12/1/20 20:	19 MT
<ul><li>(1) Water Extraction of Solids, EPA 300.0, Rev.</li><li>2.1 (1993)</li></ul>		EPA 300.0A			MT
Water Extraction				12/1/20	MT



Project:

Location: Compost

W Order: 2018448

Percent Moisture

## Life Science Laboratories, Inc.

5854 Butternut Drive

Waterville, Village of

CLIENT: Life Science Labs-LIMS

East Syracuse, NY 13057

(315) 445-1900

## **Analytical Results**

11/24/20

StateCertNo: 10248

Lab ID:

2018448-001A

Client Sample ID: Compost Composite

**Collection Date:** 

11/24/20 14:00

Data Pagaiwade

11/09/20 10:55

Analyte	Result Qual	PQL Units	DF	Date Analyze
MERCURY		SW7471B	(SW7	(471B)
Mercury	0.37	0.12 mg/Kg-dry	1	11/30/20 16:24
TOTAL METALS BY ICP		SW6010C	(SW3	3050B)
Arsenic	2.2	1.2 mg/Kg-dry	1	12/03/20 19:06
Cadmium	ND	1.2 mg/Kg-dry	1	12/03/20 19:06
Chromium	15	1.2 mg/Kg-dry	1	12/03/20 19:06
Copper	260	1.2 mg/Kg-dry	1	12/03/20 19:06
Lead	24	1.2 mg/Kg-dry	1	12/03/20 19:06
Molybdenum	<b>3</b> .9	1.2 mg/Kg-dry	1	12/03/20 19:06
Nickel	11	1.2 mg/Kg-dry	1	12/03/20 19:06
Potassium	5600	120 mg/Kg-dry	1	12/04/20 14:38
Selenium	3.4	1.2 mg/Kg-dry	1	12/03/20 19:06
Zinc	270	2.4 mg/Kg-dry	1	12/03/20 19:06

1.0 wt%

15.3

Qualifiers:

Print Date: 12/06/20 13:23

Page 1 of 1 Project Supervisor: Admin

<sup>\*</sup> Value may exceed the Acceptable Level

Value exceeds the instrument calibration range

Analyte detected below the PQL

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

Waterville, Village of

Waterville, NY

Sample ID:

Compost Sample Grab

LSL Sample ID:

2018448-006

Location:

Sampled:

11/09/20 9:50

Sampled By: MK

Sample Matrix: SHW Dry Wt, Compost

Analytical Method Analyte	Result	Prep Method Units	Prep Date	Anal Date &	•	Analyst Initials
(1) EPA 1682(2014) Salmonella by MSRV Salmonella The NYS DOH ELAP does not offer certification for this method.	<3	MPN/4g Dry		11/9/20	16:15	DA/DA
(1) SM 2540 B-2011 Total Solids Total Solids @ 103-105 C	88	%		11/10/20		TER

The NYS DOH ELAP does not offer certification for this method in this matrix.

Waterville, Village of

Waterville, NY

Sample ID:

Belt Press Sludge Comp.

LSL Sample ID:

2002654-001

Location:

Sampled:

02/20/20 10:00

Sampled By: MK

Sample Matrix: SHW Dry Wt, Sludge

Analytical Method	D	Prep Method	Prep	Analysis	Analyst
Analyte	Result	Units	Date	Date & Time	Initials
(1) EPA 160.4 Total Volatile Solids  Total Volatile Solids @ 550 C  The NYS DOH ELAP does not offer certification for this method in the second secon	78 his matrix.	%		2/27/20	ARJ
(1) EPA 6010C Metals Please refer to the next page		EPA 3050B			MT
(I) EPA 7471B Mercury Please refer to the next page		EPA 7471B			MT
(1) EPA 9045D Water Extractable pH					
рН	-	Std Units		2/27/20	HKB
pH Measurement Temperature This analysis is not certifiable by NYS DOH ELAP.	25	Degrees C		2/27/20	нкв
(1) Modified EPA 350.1, Rev. 2.0 (1993) Ammonia					
Ammonia as N The NYS DOH ELAP does not offer certification for this method in t	2500 his matrix.	mg/kg dry	3/14/20	3/16/20	11C
(I) Modified EPA 351.2, Rev. 2.0 (1993)TKN as N					
Total Kjeldahl Nitrogen The NYS DOH ELAP does not offer certification for this method in t		mg/kg dry	2/28/20	2/28/20	NC
(1) Modified EPA 365.1, Rev. 2.0 (1993) Total Phosphorus					
Phosphorus, Total as P The NYS DOH ELAP does not offer certification for this method in t		mg/kg dry is analysis was performed by	2/27/20 Method EPA 36	2/28/20 5.3	нкв
(1) Modified SM 18-20 2540B Total Solids					
	11 his matrix.	%		2/27/20	ARJ
(1) Nitrate-N by EPA 9056A		EPA 300.0A			
Nitrate as N	46	mg/kg dry		3/7/20 18:08	MT
(1) Nitrite-N by EPA 9056A		EPA 300.0A			
Nitrite as N	<45	mg/kg dry		3/7/20 18:08	MT
(1) Water Extraction of Solids, EPA 300.0, Rev. 2.1 (1993)		EPA 300.0A			
Water Extraction				3/4/20	CRT



# Life Science Laboratories, Inc.

5854 Butternut Drive

East Syracuse, NY 13057

(315) 445-1900

## **Analytical Results**

StateCertNo: 10248

CLIENT: Life Science Labs-LIMS

Lab ID:

2002654-001A

Project: -Waterville, Village of

Client Sample ID: Belt Press Sludge Comp.

W Order: 2002654 Matrix: SLUDGE

Collection Date:

02/20/20 10:00

02/20/20 13:26

		Date Received:	02/20/20	13:26
Analyte	Result Qual	PQL Units	DF	Date Analyze
MERCURY	·····	SW7471B	(SW7	(471B)
Mercury	1.1	0.93 mg/Kg-dry	1	02/28/20 15:53
TOTAL METALS BY ICP		SW6010C	(SW3	3050B)
Arsenic	ND	9.3 mg/Kg-dry	1 `	03/02/20 14:22
Cadmium	ND	9.3 mg/Kg-dry	1	03/02/20 14:22
Chromium	35	9.3 mg/Kg-dry	1	03/02/20 14:22
Copper	490	9.3 mg/Kg-dry	1	03/02/20 14:22
Lead	59	9.3 mg/Kg-dry	1	03/02/20 14:22
Molybdenum	ND	9.3 mg/Kg-dry	1	03/02/20 14:22
Nickel	21	9.3 mg/Kg-dry	1	03/02/20 14:22
Potassium	4100	930 mg/Kg-dry	1	03/03/20 16:17
Selenium	ND	9.3 mg/Kg-dry	1	03/02/20 14:22
Zinc	520	19 mg/Kg-dry	1	03/02/20 14:22
PERCENT MOISTURE		SM 2540 G		
Percent Moisture	89.2	1.0 wt%	1	02/27/20

Qualifiers:

Print Date: 03/04/20 10:37 Project Supervisor: Admin

<sup>\*</sup> Value may exceed the Acceptable Level

E Value exceeds the instrument calibration range

Analyte detected below the PQL

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)

Spike Recovery outside accepted recovery limits

# NEATHER

su warm

COMPOST PILE # 201

types of chip used New types of chips covered use.

MIXES 44 gallens studge 35000

DAY	DATE	TEMP.	TIME	BLOWER #	has.
1.	11-21-19		845		
2.	H-22-19	17.1	10:00	0.00	
3.	11 33-19				
4.	11-24-11		``\`		
5.	11-25-4		1 C		•
6.	11-26-1	671	16300	45	
<i>∽</i> 7.	11-77-9	501	8.15	1.68	
8.	11-28-17	56.3	845	3.10	
9.	11-29-19	7	30:	1.67	
10.	11-30-19	55.1	845	4.76	•
11.	12-1-19	53.5	45	4,76	
12.	12 2	6.5	527	5.19	
13.	12 = 3 - 19	\$ '	1100	6.82	
14.	12 4-19	541	) -	1.52	·
15.	15. 5 10	25.1		18	
16.	12 6 19		3 -	10:48	
<u> </u>	12 75 14	50.8	1, 5		
18.	12-8-19	,	1		
19.	12-4-11	7	3 5		
20.	12-10-19	64,	2 .		,
21.	12-11-19.	111.5	7 1	<b>1</b>	

# 22. REMOVE TO CURING AREA 12-12-19

		35. 25		
		36. 26		
25: 15	31. 21	37. 17	43.	49.
26. 16	32. 22	38. 25	44. 3	50. 9
27. 17	33. 23	39. 24	45.	51.
28 15	34 74	40. 30	46.	52. 1 - 1 - 2

NEATHER Show 10019

COMPOST PILE # 202

types of chips covered wew
types of chips covered u sea
WIXES 40
9allens 34 250

	DAY	DATE	TEMP.	TIME	BLOWER # ? hrs.
	1.	1-9-20	17:1	0:00	0.0
	2.	1-10-20	7,5	3 ~ 5	0.0
	3.	1-11-26	4		
7	4.	1-12-26	Z 1 <sup>77</sup>	7 .	,
5	5.	1-13-20	21.1	V 1 -	1.11
ı	6.	1-14-20	.27/	130	1,12
	7.	1-15-20	- 2		1,15
	8.	1-16-20	55. 5	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	1.67
	9.	1-17-20			
V	10.	1-18-20	L()	845	1,65
1,200	11.	1- 19-20	45		
×	12.	1- 20-20	45,0	3	1/65
* V_	13.	1-21-20	23. 2	7 3.0	
	14.	1-22-20	75.1		1.6.6
	15.	1-23-20	7 -	1 -	2 !
·	16.	1- 24-20	55	9:61	15.30
	17.	25-20	54.7	515	13,30
-	18.	1-26-26	. W. S	9.45	13.30
	19.	1-21-20	447	13.5	13.30
	20.	1-27-20	15.2	330	13.30
	21.	[- 29-20	7.	930	15 (3) , 5
		1	1		

# 22. REMOVE TO CURING AREA 1-30-20

23. 1-31-20	29.	6	35.	12	41.	18	47. 24
24 2-1-2	¢ 30.		36.	13	42.	19	48.
25	21	<	27	14	12	- ·	10 26
06 2	22	0	20	. ( )	$\Lambda \Lambda$	21	50 6 6/
27. 4	33.	10	39.	16	45.	22	51. 2 25 20
28 5	34.	11	40.	17	46.	23	52. 2-29-20

NEATHER
P. Sunny Isnow
Low 300

COMPOST PILE # 203

types of chips covered mixed

Wixes 38

9411095 36000

٠	DAY	DATE	TEMP.	TIME	BLOWER # 1	hrs. 0.0
·	1.	1-20 -20	10:1	3:00	0.0	
	2.	7-21-20	8.5	4 oe	0,0	
	3.	7-72-20	10.2	830	0,0	,
	4.	1 - 20	45,1	6 4 5	0,0	
· < /	5.	2-24-20	750	530	. 73	•
	6.	2-25-20	51,2	LI.C	2,32	
	7.	2-26-20		.ce	4.43	
	8.	2-27-20	15,5	930	6.19	
,	9.	2- 28-20	6 3	^	7,34	
9 ,	10.	2- 29-20	4.18	17	8,78	•
`	11.	3-1-20	5.5	1711	10,02	
	12.	3-2-20	15.5		11,59	•
1. /	13.	3-3-10	= (	7	12.98	
	14.	3-4 20	Č to s	1.	14.81	
	15.	7-5-15	5.1	1 1 0	16.16	
	16.	3-6-26	5.1	· C	17.44	
6	17.	3-7-20	55.9	540	18.95	v
	18.	3 - 1 - 20	55.3	840	20.30	
\	19.	1 - 1 - 44	51.2	30	21.62	
	20.	3-10-26	75.9	II.cre :	23.34	
	21.	3-11-20	59.6	8:00	25,00	
					5	•

# 22. REMOVE TO CURING AREA 3-12-20

23.3-13-2	229. 19	35. 25	41. 3 - 31	-Pc47.	6
24. 14	30. 20		42. 41-1-		
25: 15	31. 21		43. 2		
26. 16	32. 22	3825	<b>44.</b> <sup>3</sup>	50.	9
27. 17	33. 23	39. 24	45.	51.	10
28 18	34. 24	40. 30	46.	52.	4-11-26

LEATHER GOOD

COMPOST PILE # 204

types of chips covered wew types of chips covered mixed WIXES 47 47 gallons \$3,500 53500

	DAY	DATE	TEMP.	TIME	BLOWER # 2 ho	<b>§.</b>
•	1.	9-14-20	7.1.	3:15	0,0	
	2.	4-15-20	15.3	1:45	0.0	*
	3.	4-13	21.3	4.00	0.0	
	4.	4 17	26.01	81:0	٥٠٥.	
	5.	4. 15	29.3	830	0.0	
	6.	q. la	34.1	530	0.0	•
1 .	7.	bl 70	5 5	1030	0.0	
	8.	4 2	55.7	00	5,54	
	9.	U 2	5-1	3000	7.14	
	10.	4 7	54.2	8:00	7.74	•
	11.	٧' 2	55.8.		, >	
	12.	L. 24	50.0	0:70	9.17	
	13.	1. 24		. 5	9,94	
	14.	2	1 2	9 .	8	
×	15.	L)	55.7	1 -	11.07	
1	16.	-1	51,2	0:	11.78	•
	17.	- 30-20	76.3	ore	12.30	
-	18.	5- 1-10	56.6	840	13.13	
	19.	5- 2-20	35,4	120	13 97	
	20.	5 - 3 - 21	50.2	18'05	14,77	
,	21.	5 -20	56.5	10:10	1.67	

# 22. REMOVE TO CURING AREA 5-5-20

23. 5-6		35. 18	41. 24	<b>47.</b> 3 <sup>6</sup>
24. 5-7	30. \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	36. 14	42. 25	48. 5-31-20
25:5-8	31.	37. 20	43. 26	49. 6-1-20
26.5-0		3821	44, 27	50. 6 -2 -20
27.5-10	33. 16	39. 22	45. 25	51. 6-3-20
28. 5-11	•	40. 23	46. 29	52. 6-4-20

NEATHER COOP MED 400F

COMPOST PILE # 20)

types of chips covered used

types of chips covered used

WIXES 30

quitons 37500

	DAY	DATE	TEMP.	TIME	BLOWER #2 hrs.
,	1.	5-12-20	17.0	ive	0.0
	2.	13	25.9	7:00	ر <sup>ج</sup> ،
	3.	14	341	12:45	0,0
	4.	15	44.1	5 1	. 8
	5.	16	56.4	1.00	1, 12
:-	6.	1.7	T6.0	`&	.> '
(	7.	1 5	6.7	. 8	7,91
2	8.	( 6	15.1	53	3.35
	9.	4)	55.8	9:00	3.64
	10.	2 ;	56,7	2:35	-,97
ł	11.	7.2	56,	1:4	4,05
	12.	, 1	7.		:15
	13.	2 11	51.7	945	$G_{ij}$
	14.	2.9	r+,5	d 1 ^	
, J	15.	Cal.	# ( 7	100	41.28
	16.	7.7	5.7	^	4,39
	17.	11/2		`.	46
	18.	2.9	56.1	845	4,50
1	19.		.54.9	340	4.53
	20.	5 -3 1 -20	the soul !	840	4,53
	21.	6-1-20	50.1	9 - C	4.53
				1	4

# 22. REMOVE TO CURING AREA 6-2-20

23.6-3 -20	29. 9	35.	41.	47.
24. 4	30. 10	<b>36.</b> <i>6</i>	42.	48.
25: 5	31. 11	37. 17	43. 23	49. <i>4</i>
26. 6	32. 12	38. 15	44. 24	50.630 - 28
27. 7	33. 13	39. 19	45.	51. 7-1-20
28. 8	•	40. 20		

NEATHER

COMPOST PILE # 206

types of chips covered used types of chips covered used wixes 34 gallons 39000

٠.	DAY	DATE	TEMP.	TIME	BLOWER # 2 hrs. 0.0
7	1.	6-16-26	( )	4.	0,0
	2.	approximately survive professional and a second survive professional and a	25.1	9:64	
	3. :		356	104.5	0.0
	4.		(1 = , )	1:15	0,0
	5.		0,3	; .: 0	3,7
1	6.	7	55,1	8.0.0	0,0
	7.	. 3.2	56.0	10.35	• 60
and the	8.	7.4	56.8.	7:	2.85
	9.		41.7	. 7:0-c	11,13
	10.	2	T : . 7	7.5	- 9,
/	11.	2 /	55 7	1.7:1	19,99
	12.		55.5	1.45	23,04
	13.		Sen, I.	17 16	5. (
	14.		55,	11.10	28,46
	15.		~	, , ,	30, 2
	16.		5 4.	7.	33.75
	17.		56.1	2.30	35.68
	18.		55.)	830	37.20
	19.		56.7	845	== 00
	20.		56.1.	850	
	21.	3	50.4	20	41.95
		32.	•	41. 42. 43. 44.	47. 48. 49. 50. 51. 52. 6.20

NEATHER Sunny Hot

COMPOST PILE # 207

Mix Ratio 2:1

types of chip used used

types of chips covered used

WIXES 43

9 a 11 cms 3 6 5 000

	DAY	DATE	TEMP.	TIME	BLOWER #	hrs.		
	1.	7-8-20	40.0	2:00		0,0		
	2.	- (1	4	7:ce				
	3.	7-18	73.6	8:00	16.65		•	
	4.	,	56.7	8:00	37.79			
	5.		55.9	800	51,46			
	6.	1 ?	-6.0	7.00	6 (1,34			
	7.			0:36	72.41			
	8.	15	55.6	(35	84.			
	9.	1.5	5 7, -		4.50			
	10.	17	56.4	3:15	941.67			
	11.		17.7	1	1 3,125			
0	12.	1.1	C	1610	105.13			
	13.	7.0	55.3	7:15	111:74			
	14.		J F . W	7: -	7.34	•		
	15.	2 =	56.6	1	12			
	16.	3	56,11	720	131.26			
	17.		50.16	7:0	134,17			
	18.	1	56.2	P.	141			
	19.		1/2	173	149,12			
	20.	7-10	5	1:46 :	1526.60			
	21.	- C - 0	561	730	158.27			

23.	7-30	29.	9	35.		41.	1	47.
	- 1		3	36.		42.	_	48.
25:		31.		37.		43.	) .	49.
26.		32.	A	38.	1	44.	, "	50.
27.		33.	a	39.	-	45.		51.
28.		34.	•	40.	11.6	46.		52.

VEATHER

COMPOST PILE # 208

types of chips covered new type of chips covered new Wixes 25

٠,	DAY	DATE	TEMP.	TIME	BLOWER # 2 hrs.
	1.	7-16-20	51.1	2:00	1,3.7
3	2.	7-17-2	0 1 6	217	2.0.8
	3.	15	51.5	\$ 30	275
	4.	1/4	56.7	8:15	34.3
	5.	7.7	56.1	7:15	41.4
	6.	71	56.0	7 15	4.81
	7.	7	5 6.2	7 15	5,37
	8. •	7.3	1 - C 1 - C	7:24	5- ',
1 8	9.	24	050	7, =	· - , ·
	10.	25	55.7	1	-46
n /	11.	76	547	930	,61
6	12.	77	53.5		P
1	13.	75	4	. 3 -	0.61
	14.	1-V	5 1.3	, I am	5,01
	15.	C	1		6, 5 /
	16.	7-31-10	37.4	830	6.61
,	17.	9-1-20	76.9	830	6.61
	18.	2	\$5.6	830	6.61
	19.	j j	36.6	7:02	6.61
	20.		40	736	6.61
	21.	6-9-70	41.1	7:00	6.61

# 22. REMOVE TO CURING AREA 8 5 9 5

23. 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.