

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Materials Management, Region 9
700 Delaware Avenue, Buffalo, NY 14209
P: (716) 851-7220, F: (716) 851-7226
www.dec.ny.gov

May 18, 2022

Michael McFall
Chief Operator
Wastewater Treatment Plant & Compost Facility
611 West Jackson Street
Lockport, New York 14094

Dear Michael McFall:

Lockport Compost Facility Solid Waste Facility #32PP0013

Thank you for taking the time to meet with Efrat Scharf Forgette of my staff and Robert Locey from the Department's Division of Water on May 11, 2022. Department staff had been contacted by a resident who lives in the vicinity of the Lockport Compost facility and was complaining of odors.

We know the compost facility is aging, but Chris Peacock, Chief Compost Operator has been able to maintain a high standard of operations while producing a stable product for local landscaping.

Based on our site visit and review of operations we suggest the following:

1. Exhaust Blowers:

Only 6 of the 8 exhaust blowers (to the biofilter) are currently operating. The two that are out of service need new bearings. Repairing these blowers should be a priority.

2. Overhead Doors:

None of the overhead doors are functional. Repairing these doors will enable the compost building to be closed after normal work hours which will help contain odors. With the doors closed, the exhaust blowers will maintain a negative pressure in the building and ensure that odors are processed through the biofilters. The City should consider repairing these overhead doors as soon as practicable.



Department of
Environmental
Conservation

3. Temperature:

Maintaining optimum temperature and oxygen levels are critical. You shared that meeting pathogen reduction requirements, by measuring the density of salmonella sp. bacteria in the product were a challenge last year. Salmonella is killed off by time and temperature and (potentially) by competition with other thermophilic organisms that are not pathogenic. It is important to keep the temperature above 55°C (during pathogen reduction- the first 3 days in the bay) and below 65°C (always).

4. Oxygen:

Adding oxygen to the compost is important because it inhibits odor producing anaerobic bacteria. Additional oxygen will also promote beneficial microbes that are potentially helping to kill pathogens like Salmonella. These good microbes will die if gets too hot for them in the biosolids, therefore the blowers should be run in the specified temperature range between 55°C and 65°C. The amount of time the blowers need to be on will depend on the blower, piping configuration, and the porosity of the mass. The City may want to consider variable speed blowers to achieve sufficient air flow without too much cooling. **The blowers must be operational and used.**

Landfilling of Sludge

We understand that the City of Lockport is considering landfill disposal of the sludge and has issued a Request for Proposal for landfill services with a response due date of May 19, 2022. In deciding how to dispose of the sludge, the City should be aware of sludge stabilization requirements per the Department's Solid Waste Regulations, 6 NYCRR Part 360 Series, including:

Subpart 363-7.1(j) Biosolids:

All biosolids accepted for disposal must be stabilized, dewatered to 20 percent solids, and exhibit no free liquid as defined by SW-846 Method 9095 - Paint Filter Liquids Test, incorporated by reference in section 360.3 of this Title. Biosolids that are disposed of must meet the following stabilization criteria, except if it can be demonstrated to the department's satisfaction that the equivalent level of odor reduction can be achieved through alternative methods:

- (1) The biosolids must be either digested or lime stabilized. If lime is used, sufficient lime must be added to raise the pH of the sludge to 12 for at least 30 minutes. The level of treatment must be adequate to reasonably prevent nuisance conditions.*

- (2) *Biosolids cannot be accepted for disposal from a sewage treatment plant that has a biosolids treatment process other than digestion or lime stabilization unless one of the following criteria is satisfied:*
- (i) the mass of volatile solids in the biosolids has been reduced by a minimum of 38 percent*
 - (ii) for biosolids treated in an aerobic process, the specific oxygen uptake rate (SOUR) is equal to or less than 1.5 milligrams of oxygen per hour per gram of total solids (dry weight basis), at a temperature of 20°C*
 - (iii) the biosolids are composted for a minimum of 14 days. Throughout that treatment time, the temperature of the biosolids must remain higher than 40°C, and the average temperature of the biosolids must be higher than 45°C*
 - (iv) the percent solids of the biosolids are equal to or greater than 75*

In addition, Section 27-0106 of the Environmental Conservation Law (ECL) sets forth the State's statutory solid waste management policy to "*reuse material for the purpose for which it was originally intended or to recycle material that cannot be reused (For this purpose, composting and anaerobic digestion is considered a form of recycling.)*" At the City of Lockport WWTP, the biosolids are being belt pressed and then are ready for composting. The Department prefers to have biosolids reused and made into a product that can be beneficially reused by the residents, rather than disposed.

The compost has always been distributed and reused and has had many repeat customers. The facility was always well operated, and the finished product has met the Department's requirements. The wood chips were screened out of the product and reused.

In addition, the Department does have grants for recycling capital projects including equipment at composting facilities. The grant information can be found at: <https://www.dec.ny.gov/chemical/105603.html>

We are requesting that the City conduct a cost/benefit calculation including operator's time, transportation and landfill disposal costs, versus compost and distribution, for a fee before deciding to stop composting

Michael McFall
May 18, 2022
Page 4

Please call Ms. Efrat Forgette of my staff should you have any questions at 716-851-7220. We look forward to hearing back from you and hope that you will advocate for the continuation of compost operations.

Sincerely,

Peter
Grasso

Digitally signed
by Peter Grasso
Date: 2022.05.18
14:38:03 -04'00'

Peter Grasso, P.E.
Regional Materials Management Engineer

PG:EF:lm

ec: Chad Staniszewski, P.E, Acting Regional Director, Region 9 DEC, Buffalo
Rob Locey, Environmental Engineer, Division of Water, Region 9 DEC, Buffalo
David Vitale, P.E. Division Director, Division of Materials Management, Albany
Richard Clarkson, P.E., Asst. Division Director, Division of Materials
Management, Albany
Sally Rowland, P.E., Ph.D., Chief, Reduction and Recycling Section, Albany
Michelle Roman, Mayor, City of Lockport
Steven Pump, Director of Engineering, City of Lockport,
Dawn Timm, Director of the Environmental/Solid Waste Management, Niagara
County